HITACHI
Inspire the Next

Unified Compute Platform 3.5.1
UCP Director CLI Reference

Hitachi Data Systems

Contents

Preface

This guide explains how to use the **Hitachi Unified Compute Platform (UCP) Director** CLI.

Intended audience

This guide is intended for system administrators who use the CLI to administer UCP Director.

Product version

This guide applies to UCP version 3.5.1.

Document organization

This guide contains three chapters.

Chapter/Appendix	Description
Chapter 1, Introducing the Director CLI	Contains an overview of the UCP Director CLI.
Chapter 2, UCP Director data types	Explains the data types that are used by UCP Director CLI commands when using a command or as returned by commands.
Chapter 3, Commands	Explains the commands that are used to control the UCP Director and UCP DOC CLI.

UCP document set

The following documents contain information about UCP version 3.5.1:

- *UCP Pre-Installation Requirements and Configuration* — Contains information and procedures you need to be aware of for a successful UCP installation.

- *UCP Administration Manual* — Contains technical and usage information for UCP and UCP Director. Describes how to administer UCP Director through UCP Director Console with both VMware vCenter and Microsoft SCVMM.

- *UCP Director API Reference* — Describes how to use the UCP Director API.

- *UCP Director CLI Reference* — Describes how to use the UCP Director CLI.

- *UCP Director Third-Party Copyrights and Licences* — Contains copyright and license information for the third-party software distributed with or embedded in UCP Director.

- *UCP DOC Administration Manual* — Contains technical and usage information for Unified Compute Platform Director Operations Center (UCP DOC). Describes how to administer UCP DOC through UCP DOC Console.

- *UCP DOC API Reference* — Describes how to use the UCP DOC API.

- *UCP DOC CLI Reference* — Describes how to use the UCP DOC CLI.

Getting help

If you need to call the Hitachi Data Systems® support center, please have your site ID and provide as much information about the problem as possible, including:

- The circumstances surrounding the error or failure

- The exact content of any returned messages

The Hitachi Data Systems customer support staff is available 24 hours a day, seven days a week. If you need technical support, please call:

- United States: (800) 446-0744

- Outside the United States: (858) 547-4526

Comments

Please send us your comments on this document:

UCPDocumentationFeedback@hds.com

Include the document title, number, and revision, and refer to specific sections and paragraphs whenever possible.

Thank you! (All comments become the property of Hitachi Data Systems.)

Comments

1

Introducing the Director CLI

UCP Director is designed to cohesively orchestrate the Ethernet, Fibre Channel, storage and server resources in the datacenter. The UCP DirectorCLI provides full access to these features and has been designed to coexist with VMware PowerShell CLI commands. Together, these tools provide a powerful scripting language that can be used to automate tasks. They can also be used to integrate UCP Director into in-house and 3rd party tools that support PowerShell.

Installation

The UCP Director CLI installer can be downloaded and installed from the help menu in UCP Director Console. For more information on UCP Director Console, see Administering UCP Pro for VMware vSphere.

Connecting to UCP Director

Before any commands may be used with this PowerShell CLI, the Hitachi.UCP.CLI snapin must be added to your runspace and a connection to UCP Director must be established. You may add the snapin as follows:

```
Import-module Hitachi.UCP.CLI
```

Once the snapin is added to your runspace you may establish a connection to the UCP Director as follows:

```
Get-UCPDirector ucpmanagement.ucp.local
```

Jobs

UCP Director uses jobs to report progress and any errors while handling requests that modify managed elements. This CLI monitors these jobs until they complete before returning control to the caller. If the job fails, the job details are reported in the error. In addition, the job's ID and the first error event are reported to standard output. That ID can be used with the Get-UCPEvents command to get all events reported by the jobs.

Access and Authentication

UCP Director leverages vCenter roles and privileges to manage security. During platform registration, the following privileges are added to vCenter:

- UCP View

- UCP System Administration

- UCP Server Administration

- UCP Storage Administration

- UCP Network Administration

- UCP Server Console Access Privilege

- UCP Storage Console Access

- UCP Network Console Access Privilege

- UCP Reset VLAN Access Privilege

- UCP Service Access Privilege

Each command in the CLI requires one or more of these privileges and a caller must be granted the appropriate privilege in vCenter to use the command. The privilege required for each use of a resource is identified in the Notes section of the command.

_2_

UCP Director data types

The data types used by commands are created when using Get and New commands. They can be modified and piped into commands that initiate jobs, such as Set, Expand, or Remove. Updated versions of these data types are returned at the command line after the job is executed.

Common attributes

Most UCP Director CLI data structures have the following common properties. These are mentioned here once rather than repeating for each data structure. Unless otherwise stated, the below listed attributes are a part of all data structures.

Name	Type	Notes
Id	String	Resource identifier. Use this ID in parameters to specify this resource
InstanceId	String	The Id of the UCP Director instance. Example: "inst.v2ProductionB-123-456-789"
ResourceType	String	Type of resource or object
GlobalResourceId	String	Unique resource identifier across all objects in UCP Director and UCP Director Operations Center. This Id specifies the Instance Id, resource type and the Id of the resource and is structured as Instance.Type.Id. Example: inst.v2ProductionB-123-456-789.hostprofile.hostprofile-59

AllocatedIdentityIds

The contents of this data type are detailed in the following table.

Name	Type	Notes
value__	String	List of identities that have been assigned to server profiles. Used by all identity types.

AuthenticationProtocol

The contents of this data type are detailed in the following table.

Name	Type	Notes
value__	String	

ChannelSpeed

The contents of this data type are detailed in the following table. It does not have the common properties.

Name	Type	Notes
Value_	String	The channel speed of the storage port. Values: • NotApplicable • Auto • OneGbps • TwoGbps • FourGbps • EightGbps • TenGbps

Chassis

The contents of this data type are detailed in the following table.

Name	Type	Notes
AvailableDictionaryVersion	String	Version of dictionary firmware that UCP has available to update the chassis SVP
AvailableFirmwareVersion	String	Version SVP firmware that UCP has available to update to the chassis.
AvailableParameterVersion	String	Version of equipment parameter that UCP has available to update the chassis SVP
BladeInformationList	Collection of blades	List of blades, up to eight, each with their own collection of properties.
ChassisHealth	String	Health state of the chassis overall.
ChassisId	String	Id of the chassis.
ChassisLIDState	String	State of the chassis location indicator light.
ChassisName	String	Chassis name.
ChassisPowerState	String	Chassis power state.

Name	Type	Notes
Connectivity	Boolean	Connectivity of the chassis.
ErrorCount	Int32	Number of error level messages.
FanInformationList	Collection	Collection of fans, each with their own list of properties.
HostInformationList	Collection	Collection of hosts, up to eight, each with their own list of properties.
InformationCount	Int32	Number of unconfirmed information level messages.
LastRefreshed	DateTime	The date and time server element manager information was last refreshed.
LIDColor	String	Color of Location Indicating light.
MaintenanceMode	Boolean	Whether chassis is in maintenance mode.
ManagementModuleInformationList	Collection	List of management modules in the chassis.
ModelName	String	Model of chassis.
ModelNumber	String	Model number of chassis.
ModelType	String	Chassis' model type.
PowerSupplyModuleInformationList	Collection	List of power supplies in the chassis.
SerialNumber	String	Serial number of the chassis.
SvpDefaultGateway	String	Gateway IP used by the chassis SVP.
SvpIp	String	IP address used by the chassis SVP.
SvpSubnetMask	String	Subnet mask used by the chassis SVP.
SvpWebconsoleUrl	Uri	Web URL used for connecting with the chassis SVP.
SwitchInformationList	Collection	List of switches in the chassis.
WarningCount	Int32	Number of warning level messages.

Cluster

The contents of this data type are detailed in the following table.

Name	Type	Notes
ClusterId	String	The ID of the cluster.
ClusterName	String	Cluster Name

Name	Type	Notes
ServerUuids	Collection of servers	Server blades in chassis, up to eight, listed by Uuid.

ClusterUplinkConfigurations

The contents of this data type are detailed in the following table. This data structure does not contain the common attributes.

Name	Type	Notes
ClusterId	String	The ID of the cluster.
HostUplinkConfigurations	Collection of HostUplinkConfiguration objects	See HostUplinkConfigurations.

ConnectedDevice

The contents of this data type are detailed in the following table. This data structure does not contain the common attributes.

Name	Type	Notes
DeviceId	String	Identifies the connected device.
DeviceType	String	Identifies the type of the connected device. Values: • EthernetSwitch • Server • Unknown
PortId	String	Identifies the port of the connected device. When connected to a host, this is the name of the host's uplink to this port on the switch. When connected to another switch, this is the port on the other switch.

ConnectedEthernetSwitchPort

The contents of this data type are detailed in the following table. This data structure does not contain the common attributes.

Name	Type	Notes
PortId	String	Identifies the access switch port.
SwitchId	String	Identifies the access switch.
Vlans	String	The comma separated list of VLANs on the connected switch port.

CreateVdsSpecification

The contents of this data type are detailed in the following table. This data structure does not contain the common attributes.

Name	Type	Notes
ComputeVlanIds	String	Compute VlanIds to use when CreateVdsSpecification dictates to make a new virtual distributed switch. Takes a single number or a comma separated list or a range.
VmotionVlanId	Int32	vMotion VlanId to use when CreateVdsSpecification dictates to make a new virtual distributed switch. Takes a single number

DdrVoltageLevel

The contents of this data type are detailed in the following table.

Name	Type	Notes
Name	String	Name of the DDR voltage level setting.

UCPDirectorConfiguration

The contents of this data type are detailed in the following table.

Name	Type	Notes
AmqpUsername	String	The AMQP user name. AMQP is a message bus service.
ManagementVLanId	String	VLAN ID used by UCP as native. All hardware components and management virtual machines in the UCP ecosystem must use this VLAN ID for communicating with each other. Profiles designed for hypervisor hosts will configure this native VLAN ID to the Ethernet switch ports used by the applied server.
RaidcomUsername	String	
ResourceType	String	This resource type is Configuration.
ScpServerIpAddress	String	IP address of the secure copy server. (UCPUtility VM).
ScpServerUserName	String	Username used for secure copy.
UcpManagementIpAddress	String	IP address of the UCPManagement server.
WdsManagementIpAddress	String	IP address of the WDS server.

DisasterRecoveryManager

The contents of this data type are detailed in the following table.

Name	Type	Notes
ServiceUrl	String	URL of the Disaster Recovery Manager
Username	String	Username to connect to the Disaster Recovery manager

EfiSetting

The contents of this data type are detailed in the following table. This data type does not have the common properties.

Name	Type	Notes
DDRVoltageLevel	String	DDR voltage level option for server profile EFI setting.
MemoryMode	String	Memory mode option for server profile EFI setting.
MemorySpeed	String	Memory speed option for server profile EFI setting.
NodeInterleaveMode	String	NUMA node interleaving option for server profile EFI setting.
ProcessorHardwarePrefetcher	String	Processor hardware prefetcher option for server profile EFI setting.
ProcessorHyperThreading	String	Processor hyper-threading option for server profile EFI setting.
ProcessorTurboMode	String	Processor turbo mode option for server profile EFI setting.
RASDeconfiguredMode	String	RAS Deconfigured mode option for server profile EFI setting.

ESXiImage

The contents of this data type are detailed in the following table.

Name	Type	Notes
AcceptanceLevel	String	Identifies who created the image and the level of testing and verification that has been done on the image. Values: • VMwareCertified: VIBs created and tested by VMware. VMware Certified VIBs undergo thorough testing by VMware. • VMwareAccepted: VIBs created by a VMware partners that are approved by VMware. VMware relies on partners to perform the testing, but VMware verifies the results. • PartnerSupported: VIBs created and tested by a trusted VMware partner. The partner performs all testing. VMware does not verify the results. • CommunitySupported: VIBs created by individuals or partners outside of the VMware partner program. These VIBs do not undergo any VMware or trusted partner testing and are not supported by VMware or its partners.
AssociatedServerType	String	Identifies the server type associated with the image. For example: "Compute Blade 520HB1" when the image is the default image for that server type. Applicable to ESXi images only.
ServerCount	Int64	Number of servers associated with this image either individually or by serer type The default ESXi image has a quantity of servers using it. Also non-default ESXi images, if in use, will display the number of servers using it.
CreatedDate	DateTime	Date and time the image was created. Creation date of an image does not change when one clones an image. The cloned image gets the same creation date as the image it's being cloned from.
Description	String	Brief description about the image. For ESXi images, this field is populated with a value that comes from VMware.

Name	Type	Notes
ImageType	String	Type of image For Esxi images, this value is always EsxiStateless.
InUse	Boolean	Indicates if the image is currently being used by any servers. True if it's a default image for a server type or targeted by an individual server.
IsUcpImage	Boolean	Indicates if the image was created using UCP. Images directly copied to the user defined repository do show up in UCP but are non-UCP Images. IsUcpImage is set to false for such images.
Name	String	Name of the image. Applicable to all image types.
Packages	Collection of Package objects	See Package for details.
ServerCount	Int64	Number of servers using this ESXi image. Describes the number of servers using this image.
StatelessReady	Boolean	Indicates whether the image is meant for use with Auto Deploy. Images that are not stateless ready can be used. However, each reboot is treated like a fresh install and configuration data is not available across reboots like it is with a stateless ready image.
UpdatedDate	DateTime	Date and time the image was last updated. Updated date of an image does not change when one clones an image.
Vendor	String	Vendor of the image. All images created in UCP will have vendor set to: "Hitachi, Ltd."

EthernetFeatures

The contents of this data type are detailed in the following table.

Name	Type	Notes
HostNetworkConfigurationFeatureEnabled	Boolean	Enabled or disabled status of the host network configuration feature.

EthernetSwitch

The contents of this data type are detailed in the following table.

Name	Type	Notes
AvailableFirmwareVersion	String	Firmware version within UCP available for updating the switch.
IPAddress	String	The management IP address for the switch.
UserName	String	The username used by UCP to manage the switch.
Make	String	The Ethernet switch's manufacturer.
Model	String	The Ethernet switch's model number.
Name	String	Friendly name of the Ethernet switch.
OSVersion	String	Version of the OS on the Ethernet switch.
Ports	Collection of EthernetSwitchPort objects	
SerialNumber	String	
Status	String	Identifies the switch status. Values: • Initializing • Active • Unreachable • Unsupported
Type	String	Identifies the type of the switch. Values: • Access • Aggregate

EthernetSwitchBackup

The contents of this data type are detailed in the following table.

Name	Type	Notes
BackupId	String	The Id of the Ethernet switch configuration backup.

Name	Type	Notes
Content	EthernetSwitchBackupContent	The content of the Ethernet switch configuration backup. This data type is intended for internal use only, and is opaque to clients.
CreatedBy	String	The user that created the configuration backup.
CreatedDate	DateTime	The date and time the configuration was backed up.
Description	String	The description of the backup.
SwitchOSVersion	String	The operating system version that was installed on the switch when the configuration backup was created.
Pinned	Boolean	Whether or not the backup is pinned.
SwitchId	Int32	Identifies the switch from which the backup was created.

EthernetSwitchBackupContent

The contents of this data type are detailed in the following table. This data structure does not contain the common attributes.

Name	Type	Notes
Configuration	String	Ethernet switch configuration backup content.

EthernetSwitchBackupRetentionPolicy

The contents of this data type are detailed in the following table. This data structure does not contain the common attributes.

Name	Type	Notes
NumberOfPinnedBackupsPerSwitch	Int32	The number of backups whose Pinned property is True, which will be retained for each switch.
TotalNumberOfBackupsPerSwitch	Int32	The total number of backups which will be retained for each switch, including both pinned and unpinned backups.

EthernetSwitchPort

The contents of this data type are detailed in the following table. This data structure does not contain the common attributes.

Name	Type	Notes
ConnectedTo	ConnectedDevice	Reports information about the device (host or switch) connected on the port. Null when not connected to a host or a switch.
DeviceId	String	
NativeVlanId	String	The native VLAN ID configured on the port.
IsUnmanaged	Boolean	Identifies if UCP does not manage it. When the port is not managed, True (an option for ports on aggregate switches). Otherwise, False (managed).
PortChannelId	Int32	Identifies the Port Channel the port is a part of.
PortId	String	Identifies the port.
Vlans	String	The comma delimited list of VLANs configured on the port. Each element is either a number or a range of numbers specified with a dash. For e.g. "101-105, 500".

EthernetSwitchUnmanagedPorts

The contents of this data type are detailed in the following table.

Name	Type	Notes
UnmanagedPorts	Collection of Strings	The ports that are unmanaged.

ExistingVdsSpecification

The contents of this data type are detailed in the following table. This data structure does not contain the common attributes.

Name	Type	Notes
DistributedSwitchId	String	Property of VirtualDistributedSwitch. It names the existing switch to use. Exists when New-UCPVirtualDistributedSwitch instructs service template to use existing VDS.
ManagementPortGroupName	String	Property of VirtualDistributedSwitch. It names the port group for management. Must match that of the specified VDS. Exists when New-UCPVirtualDistributedSwitch instructs service template to use existing VDS.
VmotionPortGroupName	String	Property of VirtualDistributedSwitch. It names the port group for vMotion. Must match that of the specified VDS. Exists when New-UCPVirtualDistributedSwitch instructs service template to use existing VDS.

Fabric

The contents of this data type are detailed in the following table.

Name	Type	Notes
ActiveZonesetName	String	The name of active zoneset for the fabric.
FabricName	String	The name of the fabric.
FcPorts	Collection of FibreChannel Port objects	The Fibre Channel ports in the fabric.

FanInformation

The contents of this data type are detailed in the following table. This data structure does not contain the common attributes.

Name	Type	Notes
ChassisSerialNumber	String	The serial number of the chassis where the fan resides.

Name	Type	Notes
ChassisId		The ID of the chassis where the fan resides.
FanSlot	Int32	The slot number of the fan
Health	String	The fan's health status. Values: • Healthy • Warning • Critical • Unknown
InstallStatus	String	The installation status of the fan. Values: • Installed • NotInstalled • Unknown
PowerState	String	The state of fan power. Values: • On • Off • Unknown

FibreChannelPort

The contents of this data type are detailed in the following table. This data structure does not contain the common attributes.

Name	Type	Notes
DeviceName	String	The name of the device connected to the Fibre Channel port.
FcPortType	FcPortType	The type of the Fibre Channel port. Values: • Initiator • Target • Unknown
PortAlias	String	The alias of the Fibre Channel port.

Name	Type	Notes
PortName	String	The name of the Fibre Channel port.

FibreChannelSwitch

The contents of this data type are detailed in the following table.

Name	Type	Notes
FabricId	String	The ID of the fabric that the switch participates in.
FirmwareVersion	String	The firmware version of the switch.
Manufacturer	String	The manufacturer of the switch.
Model	String	The model of the switch.
Name	String	The name of the switch.
SerialNumber	String	The serial number of the switch.
Status	Enum	The status of the switch. Values: • Initializing • Active • Unreachable • Unsupported • Inconsistent
SwitchIpAddress	String	The management IP address of the switch.
SwitchPorts	Collection of SwitchPort objects	The ports on the switch.
SwitchTopologyRole	Enum	The role of the switch in the topology. Values: • Core • Edge
Username	String	The username used to manage in to the switch.

HbaInformation

The contents of this data type are detailed in the following table. This data structure does not contain the common attributes.

Name	Type	Notes
CardName	String	The detailed name of the HBA.
CardSlot	Number	The slot number in the server where the HBA resides.
CardType	String	The HBA's model name.
DeviceId	String	The physical device identifier.
FunctionNumber	Number	The port number.
Model	String	The simple model name.
PortNumber	Number	The port number.
ServerBladeNumber	Number	The chassis slot number of the server to which the HBA belongs.
WorldWideNodeName	String	World Wide Node Name.
WorldWideNodeNameChangeFromDefault	Boolean	Reserved for future use. Always false.
WorldWideNodeNameDuplication	Boolean	Reserved for future use. Always false.
WorldWidePortName	String	World Wide Port Name.
WorldWidePortNameChangeFromDefault	Boolean	Reserved for future use. Always false.
WorldWidePortNameDuplication	Boolean	Reserved for future use. Always false.

HighAvailabilityCluster

This data structure does not contain the common attributes.

Name	Type	Notes
FailoverCpuPercentage	Int32	Percent of CPU resources to reserve for vMotion events Use vSphere best practices to decide the percentage
FailoverRamPercentage	Int32	Percent of CPU resources to reserve for vMotion events Use vSphere best practices to decide the percentage

HostInformation

The contents of this data type are detailed in the following table.

Name	Type	Notes
ApplyingTemplate	Boolean	Whether the host is currently applying a service template. If applying a service template, other actions on the host are blocked.
ClusterId	String	The ID of the cluster.
ClusterName	String	The name of the cluster.
CurrentImageName	String	The name of the current image on the server. Applies to any ESXi image deployed by Auto Deploy .
CurrentImageType	String	The type of image used by the host.
HostId	String	The ID of the host.
HostName	String	The name of the host.
HostUuid	String	The UUID of the host.
InMaintenanceMode	Boolean	Whether or not the server is in maintenance mode.

HostProfile

The contents of this data type are detailed in the following table.

Name	Type	Notes
Name	String	Name of the host profile

HostUplinkConfigurations

The contents of this data type are detailed in the following table. This data structure does not contain the common attributes.

Name	Type	Notes
HostId	String	Id of the host
ServerId	String	Id of the server

Name	Type	Notes
UplinkConfigurations	Collection of UplinkConfiguration	Each host has up to two uplinks

Identity

The contents of this data type are detailed in the following table. This data structure does not contain the common attributes.

Name	Type	Notes
DateAssigned	String	Date the identity was assigned to a server profile.
DateCreated	String	Date the identity was assigned to a server profile.
IdentityPoolRangeId	String	ID of the identity pool that this identity comes from.
ServerProfileId	String	ID of the server profile that the identity was assigned to, if any.
Type	String	Type of identity.
Value	String	Actual value, such as the actual MAC address or IP address, etc.

IpAddressSettings

The contents of this data type are detailed in the following table. This data structure does not contain the common attributes.

Name	Type	Notes
DefaultGateway	String	IP address of the default gateway used by a server profile.
DnsAddress	String	IP address of the DNS server that is used by a server profile.
IdentityPoolId	String	Id of the identity pool from which the IP address was taken.
IdentityPoolRange	String	Id of the IP range that this IP address was taken.

Name	Type	Notes
SubnetMask	String	Subnet mask used by the IP address in a server profile.
UsePool	Boolean	If true, the IP address for the server profile was taken from a UCP IP pool. If false, the user typed an IP address (and accompanying values) into the server profile.

LinuxImage

The contents of this data type are detailed in the following table.

Name	Type	Notes
Architecture	String	Architecture of the Linux image. Values: • x64 • x86
Description	String	Brief description about the image.
Group	String	WDS group where the image is categorized
ImageSizeInBytes	Double	Size of the boot image.
ImageType	String	Type of image. For Linux images, this value is always Linux.
KickstartFilePaths	Collection of string values	File name and location of the kickstart file for this windows image. There may be more than one kickstart file that could be used by a Linux image.
Language	String	The language of the Linux image
Name	String	Name of the image.
Path	String	Path to the Linux image.
Version	String	Version of this Linux image.

MacAddressIdentityPool

The contents of this data type are detailed in the following table.

Name	Type	Notes
Name	String	Name for the MAC address pool.
Ranges	Collection	Collection of string. The MAC address ranges are listed by this property.
Type	String	Type of pool, in this case MacAddress.

MacAddressIdentityPoolRange

The contents of this data type are detailed in the following table.

Name	Type	Notes
AllocatedIdentityIds	Collection	Collection of AllocatedIdentityIds
Available	Int32	Quantity of unassigned IDs left in the range.
EndAddress	String	Ending address in the range.
IdentityPoolId	String	Id of the pool which has this range.
StartAddress	String	Starting address in the range.
Total	Int32	Total quantity of IDs in this range.

MacAddressSetting

The contents of this data type are detailed in the following table.

Name	Type	Notes
MacAddress	String	Actual MAC address used by the server profile
MacNumber	String	Port Number that the MAC address will be assigned to on associated server.

ManagementModuleInformation

The contents of this data type are detailed in the following table.

Name	Type	Notes
Active	Boolean	Whether or not the management module is active. When not active (true), the SVP is in standby mode.
ChassisSerialNumber	String	The serial number of the chassis where the management module resides.
ChassisId	String	The ID of the chassis where the management module resides.
DictionaryVersion	String	The version of the dictionary file.
FirmwareVersion	String	The version of management module firmware.
Health	String	The health status of the management module. Values: • Healthy • Warning • Critical • Unknown
InstallStatus	String	Whether or not the management module is installed. Values: • Installed • NotInstalled • Unknown
LidColor	String	The color of the LID on the front of the management module. Values: • Blue • Unknown

Name	Type	Notes
LidState	String	The state of the LID on the front of the management module. Values: • On • Off • Unknown
MaintenanceDefaultGateway	String	The default gateway for the management port.
MaintenanceIp	String	The IP address of the maintenance port.
MaintenanceMode	Boolean	Whether or not the management module is in maintenance mode.
MaintenanceSubnetMask	String	The subnet mask of the management module maintenance port.
ManagementModuleSlot	Int32	The management module slot number.
ModelNumber	String	The model number of the management module.
ParameterVersion	String	The version of the parameter file used by the management module.
PowerState	String	The state of management module power. Values: • On • Off • Unknown
SvpDefaultGateway	String	The default gateway for the SVP.
SvpIp	String	The IP address of the SVP.
SvpSubnetMask	String	The subnet mask used by the SVP.

MemoryMode

The contents of this data type are detailed in the following table.

Name	Type	Notes
Name	String	Name of the memory mode setting.

MemorySpeeds

The contents of this data type are detailed in the following table.

Name	Type	Notes
Name	String	Name of the memory speed setting.

MonitorIndicator

The contents of this data type are detailed in the following table. This data structure does not contain the common attributes.

Name	Type	Notes
DisplayName	String	The display name of the monitor indicator
IndicatorState	String	State of the indicator.
IndicatorType	String	Type of the indicator.
Name	String	Name of the indicator.
SubGlobalResourceIds	Collection of string	Collection of global resource Ids of the sub resources, if there are any.
SubResourceType	Collection of string	Resource type of the sub resource, if any.

MonitorResourceType

The contents of this data type are detailed in the following table. This data structure does not contain the common attributes.

Name	Type	Notes
MonitorMode	String	The current mode of monitoring for the resource type. Values: • Report: Events will be monitored, logged, and reported to the virtual platform. • Monitor: Events will be monitored and logged but not reported to the virtual platform. • Off: Events will not be monitored, logged, or reported to the virtual platform. The MonitorMode is only changeable for Ethernet, FibreChannel, Storage, Compute, EthernetSwitchPort, FibreChannelSwitchPort.
PerformanceCounters	Collection of string	Collection of performance counters that are measured for the monitored resource type.
ResourceType	String	The monitored resource type.
SnmpConfiguration	Collection of UCP.Orchestr atorServiceCo ntracts.UcpM onitor.SnmpC onfiguration	The monitoring service handles the configuration of SNMP protocols, IDs and passwords. See SnmpSetting.
SupportedAuthenticationProtocols	String	A string list of SNMP protocols supported by the resource type.
SupportedPrivacyProtocols	String	A string list of privacy protocols supported by the resource type.

MonitorState

The contents of this data type are detailed in the following table. This data structure does not contain the common attributes.

Name	Type	Notes
MonitorIndicators	Collection of Ucp.OrchestratorServiceContracts.UcpMonitor.MonitorIndicator	Collection of monitor indicators. See MonitorIndicator.
NumErrors	Int32	Number of errors totaled from SubGlobalResourceIds.
NumOks	Int32	Number of Oks totaled from SubGlobalResourceIds.
NumUnknowns	Int32	Number of unknowns totaled from SubGlobalResourceIds.
NumWarnings	Int32	Number of warnings totaled from SubGlobalResourceIds.
State	String	State of the monitor indicator.
UpdatedDateTime	String	Date and time of the last time UCP collected and aggregated the data required for reporting the monitor indicator state.

NicInformation

The contents of this data type are detailed in the following table. This data structure does not contain the common attributes.

Name	Type	Notes
CardName	String	The detailed name of the NIC.
CardSlot	Int32	The slot number in the server where the NIC resides.
CardType	String	The NIC's model name.
ChangedFromDefault	Boolean	Reserved for future use. Always false.
DeviceId	String	The physical device identifier.
Duplication	Boolean	Reserved for future use. Always false.
FunctionNumber	Int32	The port number.

Name	Type	Notes
MacAddress	String	The MAC address.
Model	String	The simple model name.
PortNumber	Int32	The port number.
ServerBladeNumber	Int32	The slot number of the server to which the NIC belongs.

NodeInterleaveMode

The contents of this data type are detailed in the following table.

Name	Type	Notes
Name	String	Name of the NUMA node interleave setting.

Package

The contents of this data type are detailed in the following table.

Name	Type	Notes
AcceptanceLevel	String	Acceptance level of the package (VIB). Values: • VMwareCertified: VIBs created and tested by VMware. VMware Certified VIBs undergo thorough testing by VMware. • VMwareAccepted: VIBs created by a VMware partners that are approved by VMware. VMware relies on partners to perform the testing, but VMware verifies the results. • PartnerSupported: VIBs created and tested by a trusted VMware partner. The partner performs all testing. VMware does not verify the results. • CommunitySupported: VIBs created by individuals or partners outside of the VMware partner program. These VIBs do not undergo any VMware or trusted partner testing and are not supported by VMware or its partners.
Description	String	Description of the package.
Name	String	Name of the package.
ReleaseDate	DateTime	Date and time the package was released.
StatelessReady	Boolean	Indicates if the package is ready for use with a stateless image. Images containing packages that are not stateless ready can be used. However, each reboot is treated like a fresh install and configuration data is not available across reboots like it is with a stateless ready image.
Summary	String	Brief summary describing the package.
Vendor	String	Vendor of the package.
Version	String	Version of the package.

PerformanceCounter

The contents of this data type are detailed in the following table. This data structure does not contain the common attributes.

Name	Type	Notes
DisplayName	String	Display name of the performance counter.
MetricUnit	String	Type of measurement that will be taken by the performance counter.
Name	String	Name of performance counter.
PerformanceCounterThreshold	PerformanceCounterThreshold	Threshold value for performance measurements.

PerformanceData

The contents of this data type are detailed in the following table. The common attributes of this data type are GlobalResourceId and ResourceType. It does not have Id or InstanceId.

Name	Type	Notes
Offset	Long	The starting point for using performance data.
PerformanceCounterData	Collection of string	Collection of performance data for the resource type.

PerformanceCounterThreshold

The contents of this data type are detailed in the following table.

Name	Type	Notes
DampingHistory	Int32	The number of measurement results to keep in history.
DampingThreshold	Int32	If the threshold is exceeded this number of times, report to UCP.
IsThresholdEnabled	Boolean	Whether or not UCP should collect data based on performance counter threshold rules.

Name	Type	Notes
PerformanceCounterThresholdRules	Collection of values	The health and performance of the specified resource is checked by UCP at regular intervals. The measurement will be reported only if the measurement exceeds the value set by the user with -PerformanceCounterThresholdRules for a particular performance counter. Rules that may be set are: • TooLowError • TooLowWarning • TooHighWarning • TooHighError

PowerSupplyModuleInformation

The contents of this data type are detailed in the following table. This data structure does not contain the common attributes.

Name	Type	Notes
ChassisId	String	The ID of the chassis where the power supply module resides.
ChassisSerialNumber	String	The serial number of the chassis where the management module is installed.
Health	String	The health status of the management module. Values: • Healthy • Warning • Critical • Unknown

Name	Type	Notes
InstallStatus	String	Whether or not the management module is installed. Values: • Installed • NotInstalled • Unknown
ModelNumber	String	The management module's model number.
PowerState	String	The state of management module power. Values: • On • Off • Unknown
PowerSupplyModuleSlot	Int32	The power supply module slot number.
ProductName	String	The name of the product.
SerialNumber	String	The serial number of the power supply.

PortRole

The contents of this data type are detailed in the following table.

Name	Type	Notes
Value_	?	The role for this storage port. Values: • Target • RcuTarget • Initiator • External • Ignore

PortType

The contents of this data type are detailed in the following table.

Name	Type	Notes
Value_	Int32	The type of the storage port. Values: • Lcp • Fibre • Scsi • Ficon • Nas • Iscsi • Fcoe

ProcessorHardwarePrefetcherMode

The contents of this data type are detailed in the following table.

Name	Type	Notes
Name	String	Name of the hardware processor prefetcher mode setting for server profiles.

ProcessorHyperThreadingMode

The contents of this data type are detailed in the following table.

Name	Type	Notes
Name	String	Name of the processor hyper-threading mode setting for server profiles.

ProcessorTurboMode

The contents of this data type are detailed in the following table.

Name	Type	Notes
Name	String	Name of the processor turbo mode setting for server profiles.

ProtectedVolume

The contents of this data type are detailed in the following table.

Name	Type	Notes
StorageSystemId	String	The ID of the storage system
VolumeID	String	The ID of protected volume

RasDeconfiguredMode

The contents of this data type are detailed in the following table.

Name	Type	Notes
Name	String	Name of the RAS Deconfigured mode setting for server profiles.

ScheduledUcpJob

The contents of this data type are detailed in the following table. This data structure does not contain the common attributes.

Name	Type	Notes
Name	String	The name of the job. Value: ImageUpdate
JobType	String	Identifies the scheduled job. Value: ImageUpdate
IntervalType	String	The type of interval to be used for scheduling. Values: Never, Daily, Weekly, or Monthly

Name	Type	Notes
IntervalValue	Int32	When to schedule the job to run again (based on IntervalType). Values depend on IntervalType: • Never – Value is ignored • Daily – Number of days to wait until next run (1-365, use 1 to run every day, 2 for every other day, etc.) • Weekly –1 for Sundays, 2 for Mondays, etc. • Monthly –1 for the first day of the month, 15 for the 15th day of the month (if greater than the number of days in month, run on last day of month)
RunAt	DateTime	The time of day the job will be run. The date component is ignored, only time of day is used.

Server

The contents of this data type are detailed in the following table.

Name	Type	Notes
AvailableFirmwareVersion	String	The firmware version UCP has available for upgrading this server.
BmcDefaultGateway	String	The default gateway IP address for the BMC.
BmcDhcpEnabled	Boolean	Whether or not DHCP is enabled for BMC network configuration.
BmcFirmwareVersionCurrent	String	The current version of BMC firmware.
BmcFirmwareVersionPending	String	The pending version of BMC firmware. Has a value when the server is in the middle of an upgrade.
BmcIp	String	The BMC IP address.
BmcSubnetMask	String	The BMC subnet mask.

Name	Type	Notes
BootType	String	Boot type of the server. Values: • Custom • ESXiStateless
ChassisSerialNumber	String	The serial number of the chassis where the server is installed.
ConsoleUri	Uri	The URL to use to connect to the remote console of the server.
CoresPerCPU	Int32	The number of CPU cores in the server.
CpuCacheSizeInMB	Double	The size of the CPU cache in megabytes.
CpuFrequencyInGHz	Double	The clock frequency of the CPU in gigahertz.
CpuType	String	The model name of the CPU.
CurrentFirmwareVersion	String	Current firmware bundle used by the server. Includes EFI and BMC in a combined bundle.
EfiFirmwareVersionCurrent	String	The current version of EFI firmware.
EfiFirmwareVersionPending	String	The pending version of EFI firmware.
ErrorCount	Int32	The number of unconfirmed error messages.
HardwareMaintenanceMode	String	Whether the server is in maintenance mode. This is a chassis-based maintenance mode, not vSphere
HbaInformationList	Collection of HbaInformation objects	HBA details for the server.
Health	String	The health status of the server. Values: • Healthy • Warning • Critical • Unknown
HostInformation	Collection of HostInformation	
InformationCount	Int32	The number of unconfirmed information events.
LastRefreshed	DateTime	The date and time server element manager information was last refreshed.

Name	Type	Notes
LIDColor	String	The color of the LID on the front of the server. Values: • Blue • Unknown
LIDState	String	The state of the LID on the front of the server. Values: • On • Off • Unknown
MacType	String	Whether chassis is using original or additional MAC address for this blade slot. Values: • Original • Additional
Manufacturer	String	The manufacturer name of the server.
MemoryAmountInGB	Double	The total size of memory in the server in gigabytes.
Model	String	The server's model name.
ModelNumber	String	The server's model number.
NicInformationList	Collection of NicInformation objects	NIC details for the server.
NumberOfCpus	Int32	Quantity of CPUs in the server
OperatingMode	String	Whether Logical Partitioning is possible on the server. HVM mode enables LPAR. Values: • Basic • HVM • Unknown
PartitionNumber	Int32	Partition number of blade. Refer to HCSM document for an explanation of partitions.
PartitionValid	Boolean	Partition validation status.
PartitionWidth	Int32	The width of partition.

Name	Type	Notes
PendingFirmwareVersion	String	Version of firmware bundle available from UCP. EFI and BMC are included in a single bundle.
PowerState	String	The state of server power. Values: • On • Off • Unknown
PrimarySlot	Int32	The slot number where the blade is installed.
SerialNumber	String	The server's serial number.
ServerDeploymentInformation	ServerDeployment object	Deployment information.
ServerId	String	The ID of the server. Use this ID in parameters to specify this server.
ServerUuid	String	The UUID of the server.
WarningCount	Int32	The number of unconfirmed warning messages.
WwnType	String	Whether chassis is using Original or Additional Wwn for this blade slot. The use of "Additional" allows for blade replacement without the Wwn changing.

ServerDeploymentInformation

The contents of this data type are detailed in the following table. This data structure does not contain the common attributes.

Name	Type	Notes
DefaultImageId	Int64	The ID of the default image for the server.
DefaultImageName	String	The name of the default image for this server.
IsLocked	Boolean	Overrides server type default image.
PendingImageId	Int64	The ID of next image that will be deployed to the server.
PendingImageName	String	The name of the next image that will be deployed to the server.
Uuid	String	The UUID of the server.

ServerElementManager

The contents of this data type are detailed in the following table.

Name	Type	Notes
ApplicationUrl	Uri	The URL used by UCP to launch the server element manager's user interface.
ServiceUrl	Uri	The URL used by UCP to manager the server element manager.
Username	String	The user name used by UCP to manage the server element manager.

ServerInformation

The contents of this data type are detailed in the following table. This data structure does not contain the common attributes. This data type is returned when collecting servers for cluster.

Name	Type	Notes
AvailableFirmwareVersion	String	Available firmware from UCP.
BmcDefaultGateway	String	The default gateway for the BMC.
BmcDhcpEnabled	Boolean	Whether or not DHCP is enabled for BMC network configuration.
BmcFirmwareVersionCurrent	String	The current version of BMC firmware.
BmcFirmwareVersionPending	String	The pending version of BMC firmware.
BmcIp	String	The BMC's IP address.
BmcSubnetMask	String	The BMC's subnet mask.
BootType	String	Boot type of the blade. Only servers in boot type ESXiStateless will be returned.
ChassisSerialNumber	String	The serial number of the chassis where the server is installed.
ConsoleUri	Uri	The URL to use to connect to the remote console of the server.
CoresPerCPU	Int32	The number of CPU cores in the server.
CpuCacheSizeInMB	Double	The size of the CPU cache in megabytes.
CpuFrequencyInGHz	Double	The clock frequency of the CPU in gigahertz.
CpuType	String	The model name of the CPU.

Name	Type	Notes
EfiFirmwareVersionCurrent	String	The current version of EFI firmware.
EfiFirmwareVersionPending	String	The pending version of EFI firmware.
ErrorCount	Int32	The number of unconfirmed error messages.
HardwareMaintenanceMode		Whether the server is in maintenance mode. This is from the chassis perspective, not vSphere maintenance mode.
HbaInformationList	Collection of HbaInformation objects	HBA details for the server.
Health	String	The health status of the server. Values: • Healthy • Warning • Critical • Unknown
InformationCount	Int32	The number of unconfirmed information events.
LastRefreshed	DateTime	The date and time server element manager information was last refreshed.
LIDColor	String	The color of the LID on the front of the server. Values: • Blue • Unknown
LIDState	String	The state of the LID on the front of the server. Values: • On • Off • Unknown
MacType		From the chassis perspective, the MAC Address type. Values: • Original • Additional
Manufacturer	String	The manufacturer name of the server.

Name	Type	Notes
MemoryAmountInGB	Double	The total size of memory in the server in gigabytes.
Model	String	The server's model name.
ModelNumber	String	The server's model number.
NicInformationList	Collection of NicInformation objects	NIC details for the server.
NumberOfCpus	Int32	Number of CPUs in the blade.
OperatingMode	String	Whether LPAR partitioning is possible or not. Values: • Basic • HVM • Unknown
PartitionNumber	Int32	Partition number of blade. Refer to HCSM document for an explanation of partitions.
PartitionValid	Boolean	Partition validation status.
PartitionWidth	Int32	The width of partition. Double-wide blades are not yet supported by UCP
PowerState	String	The state of server power. Values: • On • Off • Unknown
PrimarySlot	Int32	The slot number where the blade resides. Becomes valuable information if blades are multiple partitions wide. (Not supported by UCP yet.)
SerialNumber	String	The server's serial number.
ServerId	String	The ID of the server. Use this ID in parameters to specify this server.
ServerUuid	String	The UUID of the server.
WarningCount	Int32	The number of unconfirmed warning messages.

Name	Type	Notes
WwnType	String	The type of WWN used by the chassis for this blade. Values: • Original • Additional

UCPServerProfile

The contents of this data type are detailed in the following table.

Name	Type	Notes
CnaSettings	Collection	Collection of CnaSettings
Description	String	Description for the server profile
EfiSettings	Collection	Collection of EfiSettings
IpAddressSettings	Collection	Collection of IpAddressSettings
MacAddressSettings	Collection	Collection of MacAddressSettings
Name	String	Name for the server profile
NonHypervisor	Boolean	When true, the server profile is for non-hypervisor deployments. When false, the server profile is for hypervisor servers; either ESXi or Windows Hyper-V.
ServerUuid	String	The UUID generated by UCP for this server profile.
WwnAddressSettings	Collection	Collection of WwnAddressSettings.

ServerProfile.CnaControllerSetting

The contents of this data type are detailed in the following table. This data type does not have the common attributes.

Name	Type	Notes
PhysicalPortSettings	Collection	Collection of ServerProfile.CnaPhysicalPortSetting

ServerProfile.CnaPhysicalPortSetting

The contents of this data type are detailed in the following table. This data type does not have the common attributes.

Name	Type	Notes
VirtualPortSettings	Collection	Collection of ServerProfile.VirtualPortSetting

ServerProfile.VirtualPortSetting

The contents of this data type are detailed in the following table. This data type does not have the common attributes.

Name	Type	Notes
Bandwidth	String	Bandwidth value for the virtual port. Bandwidth must be supplied for all four virtual ports per physical CNA port. Total bandwidth for the four ports must be 100 percent. A bandwidth value of zero percent disables the virtual port.
EnableLogicalLink	Boolean	Enables the virtual partition. Each physical port can be divided into exactly four virtual partitions.
VlanId	Int32	Specifies the VLAN ID to be assigned on the virtual channel. Applicable for non-hypervisor server profiles. VLAN IDs configured on CNA virtual partitions are treated as native VLAN IDs.

ServerProfileSettings

The contents of this data type are detailed in the following table.This data type does not have the common properties.

Name	Type	Notes
Name		Name for the new server profile that will be extracted from a specified server.
Description	String	Description for the new server profile.

Name	Type	Notes
ServerId	String	ID of the server from which a server profile should be extracted.

ServerType

The contents of this data type are detailed in the following table.

Name	Type	Notes
DefaultImageId	String	ID of the default image for the server type.
DefaultImageName	String	Default Image name for server type.

UcpServiceTemplate

The contents of this data type are detailed in the following table.

Name	Type	Notes
BootImageId	String	ID of the boot image used by the service template.
BootImageName	String	Name of the boot image.
BootImageType	String	Type of operating system.
ComputeVlanIds	String	List of compute (trunk) VLAN IDs in the service template.
Name	String	The service template name.
ServiceTemplateType	String	Type of service template.

ServiceTemplate.VirtualDistributedSwitch

The contents of this data type are detailed in the following table.

Name	Type	Notes
CreateVdsSpecification	CreateVdsSpecification	Provides details when a cluster service template should create a new VDS.

Name	Type	Notes
ExistingVdsSpecification	ExistingVdsSpecification	Provides details when a cluster service template should attach Cluster to existing VDS.

ServiceTemplate.VirtualDistributedSwitch+ExistingVirtualDistributedSwitch

The contents of this data type are detailed in the following table.

Name	Type	Notes
DistributedSwitchId	String	Specifies existing VDS to attach hosts to upon application of cluster service template
ManagementPortGroupName	String	Specifies management port group name on existing VDS.
VmotionPortGroupName	String	Specifies vMotion port group name on existing VDS.

ServiceTemplate.VirtualDistributedSwitch+NewVirtualDistributedSwitch

The contents of this data type are detailed in the following table.

Name	Type	Notes
ComputeVlanIds	String	Compute VLAN Ids to use when making a new VDS with application of cluster service template.
VmotionVlanId	Int32	vMotion VLAN Id to use when making a new VDS with application of a cluster service template.

SnmpSetting

The contents of this data type are detailed in the following table.

Name	Type	Notes
AuthenticationProtocol	String	Authentication protocol used by the monitored resource type.
PrivacyProtocol	String	Privacy protocol used by the monitored resource type.
SnmpVersion	String	SNMP version used by the monitored resource type.
UserName	String	SNMP user name.

Storage

The contents of this data type are detailed in the following table.

Name	Type	Notes
AllocatedSpaceInGB	Double	The size of the allocated space in the storage system in gigabytes.
ArrayFamily	String	The family of the storage system, for instance, R700 or D850
ControllerVersion	String	The microcode version of the controller on the storage system.
FreeSpaceInGB	Double	The size of the free space available in the storage system in gigabytes.
MicrocodeVersion	String	The microcode version of the Service Processor of the storage system. Empty for HUS storage systems.
Name	String	The name of the storage system.
PhysicalSpaceInGB	Double	The size of the physical space in the storage system in gigabytes.
ReservedSpaceInGB	Double	The size of the reserved space in the storage system in gigabytes.
SerialNumber	String	The serial number of the storage system.
Status	String	The status of the storage system.
SystemIpAddress	Collection of strings	The IP addresses used by the storage system.

Name	Type	Notes
SystemType	String	The type of the storage system.
UnallocatedSpaceInGB	Double	The size of the unallocated space in the storage system in gigabytes.

StorageCluster

Used when collecting data into a variable. The variable is then fed into the creation of a service template. This data structure does not contain the common attributes.

Name	Type	Notes
AutomateStorageDrs	Boolean	Whether to Automate the enactment of I/O Metrics recommendations.
CreateStorageCluster	Boolean	Whether to create a storage cluster. Must be enabled as a prerequisite to the other parameters
EnableStorageDrs	Boolean	Whether to enable DRS on the storage cluster.
EnableStorageDrsIoMetric	Boolean	Whether to enable I/O Metrics recommendations from vSphere on the storage cluster.

StorageElementManager

The contents of this data type are detailed in the following table.

Name	Type	Notes
ApplicationUrl	String	The URL used by UCP to launch the storage element manager's user interface.
ServiceUrl	String	The URL used by UCP to manager the storage element manager.
Username	String	The user name used by UCP to manage the storage element manager.

StoragePool

The contents of this data type are detailed in the following table.

Name	Type	Notes
CapacityInGB	Double	The physical capacity of the pool in gigabytes.
CurrentSubscriptionPercentage	Int32	The over provisioning percentage of the pool expressed in percentage.
Status	PoolStatus	The status of the pool. Values: • NotApplicable • Normal • Blocked • OverThreshold • Warning • Shrinking
StorageSystemId	String	The ID of the storage system hosting the pool.
StorageSystemPoolDiskDetails	Collection of Strings	Additional detailed information about the disk type in the pool.
SubscribedCapacityInGB	Double	The subscribed capacity of the pool in gigabytes.
SubscriptionLimitPercentage	Int32	The upper subscription limit used to monitor over provisioning expressed as a percentage.
Type	TierPoolType	The tiering mode of the pool. Values: • Hdp • Hdt
UsedCapacityInGB	Double	The used capacity of the pool in gigabytes.
UsedPercentage	Int32	The usage rate of the pool expressed as a percentage.

StoragePort

The contents of this data type are detailed in the following table.

Name	Type	Notes
Attribute	Collection of PortRole	See PortRole for values.
PortName	String	The name of the storage port.
PortWwn	String	The world-wide name of the storage port.
Speed	ChannelSpeed	See ChannelSpeed for values.
StorageSystemId	String	The ID of the storage system that contains the storage port.
Type	PortType	See PortType for values.

StorageSystemJournal

The contents of this data type are detailed in the following table.

Name	Type	Notes
CapacityInBytes	Double	Size of the journal in Bytes. (Sum of the capacity of journal volumes).
InflowControlFlag	Int64	Journal flow control. 0 = off, 1 = on This is a flag for the in-flow control, in case the pair status is PFUL.
DataOverflowWatch	Int64	This is the time in second to monitor if the journal is full.
StorageSystemId	String	ID of the storage system on which Journal is being created.
PairedJournals	Collection of StorageSystemPairedJournalDTO	The paired journal is the remote site journal paired with this one for asynchronous replication. Used for HUR (Hitachi Universal Replication).
JournalVolumeIds	Collection of JournalVolumeIds	IDs of Journal volumes that are a part of this Journal.

StorageSystemJournalVolume

The contents of this data type are detailed in the following table.

Name	Type	Notes
Chassis	Int32	Chassis information
ArrayGroup	Int32	Array group number
JournalId	String	The ID of the journal that contains this journal volume
StorageSystemId	String	ID of the storage system on which Journal is being created
RaidType	String	RAID type of the volume
DiskModel	String	Model of disks in the volume
TotalCapacityInBytes	Double	Capacity of the journal volume in bytes

StorageSystemPairedJournalDTO

The contents of this data type are detailed in the following table. The only common property it has is Id.

Name	Type	Notes
PairStatus	String	The status of the pair relationship. Values: • Unknown • Copy • FailedOver • Pair • Suspended • Simplex • NotAvailable
StorageSystemId	String	Id of the storage system that contains this paired journal.

SwitchInformation

The contents of this data type are detailed in the following table. The only common property it has is Id.

Name	Type	Notes
ChassisId	String	The ID of the chassis where the switch module resides.
ChassisSerialNumber	String	The serial number of the chassis where the switch module resides.
DefaultGateway	String	The default gateway for the switch module's management port.
FirmwareVersion	String	The version of switch module firmware.
Health	String	The health status of the switch module. Values: • Healthy • Warning • Critical • Unknown
InstallStatus	String	Whether or not the switch module is installed.Values: • Installed • NotInstalled • Unknown
Ip	String	The management IP address of switch module.
LidColor	String	The color of the LID on the front of the switch module. Values: • Blue • Unknown

Name	Type	Notes
LidState	String	The state of the LID on the front of the switch module. Values: • On • Off • Unknown
MaintenanceMode	Boolean	Whether or not the switch module is in maintenance mode.
Model	String	The switch module's model name.
ModelNumber	String	The switch module's model number.
PowerState	String	The state of switch module power. Values: • On • Off • Unknown
SerialNumber	String	The switch module's serial number.
SubnetMask	String	Subnet mask used by the switch module.
SwitchSlot	Int32	The slot number of the switch module.

SwitchPort

The contents of this data type are detailed in the following table.

Name	Type	Notes
ConnectedDeviceId	String	The ID of the device connected to the switch port.
ConnectedPortAlias	String	The alias of the port connected to the switch port.
LoginWWN	String	The world-wide name of the device connected to the switch port.
PortName	String	The name of the switch port.
PortNumber	String	The number of the switch port.
PortState	String	The state of the switch port.
PortStatus	String	The status of the switch port.

TargetServer

The contents of this data type are detailed in the following table. This data type does not have the common properties.

Name	Type	Notes
ServerId	String	The ID of the server to which a service template should be applied.
ServerProfileId	String	The ID of a server profile to pair with the above server while applying a service template.

UcpCustomServiceTemplate

The contents of this data type are detailed in the following table.

Name	Type	Notes
BootImageId	String	ID of the boot image associated with the custom service template.
BootImageName	String	Name of the boot image.
BootImageType	String	Type of boot image associated with the service template.
ComputeVlanIds	String	When the service template is applied to servers, the connected Ethernet switch ports will be configured with this list or range of trunk VLAN IDs.
Name	String	Name of the custom service template.
ServiceTemplateType	String	Type of service template. (Custom)

UcpEsxiStatelessServiceTemplate

The contents of this data type are detailed in the following table.

Name	Type	Notes
BootImageId	String	ESXi boot image associated with the service template.
BootImageName	String	Name of the boot image.

Name	Type	Notes
BootImageType	String	Boot image type. (ESXiStateless)
ComputeVlanIds	String	When the template is applied to servers, this list or range of VLAN IDs will be configured on connected Ethernet switch ports as a trunk list.
Name	String	Name of the service template.
ServiceTemplateType	String	Type of service template. (EsxiStateless)

UcpEvent

The contents of this data type are detailed in the following table.

Name	Type	Notes
CreatedTime	DateTimeOffset	The date and time the event was created.
Description	String	The description of the event.
EventId	String	Identifies the UCP event.
EventType	String	The type of UCP event. Use with the eventtype query parameter to find other events of the same type.
JobId	String	Identifies the job associated with the event. Use with the jobid query parameter to find other events from the same job.
Severity	String	The severity level of the event. Values: • Info • Warning • Error
TargetId	String	The ID of the target associated with the event. Along with TargetType, the target resource of the event is uniquely identified.

Name	Type	Notes
TargetType	String	The type of target associated with the event. Values: Instance, Ucp, DatacenterConfiguration, Configuration, Ethernet, Storage, Compute, Topology, FibreChannel, EthernetSwitch, EthernetSwitchPort, FibreChannelSwitch, FibreChannelSwitchPort, ServerElementManager, DisasterRecoveryManager, ProtectedVolume, Server, ServerHostBusAdapterPort, ServerNetworkInterface, StorageSystem, StorageElementManager, Chassis, ServerImage, StorageFabric, StorageVolume, StorageZone, Cluster, Host, MonitorSettings, MonitorProtocols, EthernetSwitchBackup, CopyGroup, PrivacyProtocol, Job, Event, ServerType, StoragePool, StorageJournal, StorageJournalVolume, StoragePort, StorageParityGroup, StoragePhysicalDevice, StorageVolumePath, StorageProcessor, VirtualManager, Package, VirtualMachine, VirtualNic, VirtualSwitch, VirtualSwitchPort, VirtualSwitchPortProfile, SitePair, ReplicationGroup, ReplicatedVolumePair, User, Template, TemplateVolume, HostProfile
User	String	The user that triggered the event. Events from regularly scheduled jobs are created by UCP Director's service account.
Relation	String	Optional filter that specifies the events that user wants to retrieve. Users can retrieve events targeted to self, sub-components or to both self and all sub-components. Invalid if the Id parameter is specified. Value: • Self • Subcomponent

UcpJob

The contents of this data type are detailed in the following table.

Name	Type	Notes
CreatedBy	String	The identity of the user that started the job. Regularly scheduled jobs are created by UCP Director's service account.
EndTime	DateTimeOffset	The date and time the job ended. Null while the job is running.
Events	Collection of UcpEvent objects	The events associated with the job.
JobId	String	Identifies the job.
Name	String	The descriptive name of the job.
Platform	String	The platform name. This property is now obsolete. DO NOT use this property.
Progress	Int32	A rough estimate of job progress expressed as percent complete.
StartTime	DateTimeOffset	The date and time the job started.
Status	String	The status of the job. Values: • Running • Succeeded • Error
TargetId	String	The ID of the target associated with the job. With TargetType, uniquely identifies the target resource of the job.

Name	Type	Notes
TargetType	String	The type of target associated with the event. Values: Instance, Ucp, DatacenterConfiguration, Configuration, Ethernet, Storage, Compute, Topology, FibreChannel, EthernetSwitch, EthernetSwitchPort, FibreChannelSwitch, FibreChannelSwitchPort, ServerElementManager, DisasterRecoveryManager, ProtectedVolume, Server, ServerHostBusAdapterPort, ServerNetworkInterface, StorageSystem, StorageElementManager, Chassis, ServerImage, StorageFabric, StorageVolume, StorageZone, Cluster, Host, MonitorSettings, MonitorProtocols, EthernetSwitchBackup, CopyGroup, PrivacyProtocol, Job, Event, ServerType, StoragePool, StorageJournal, StorageJournalVolume, StoragePort, StorageParityGroup, StoragePhysicalDevice, StorageVolumePath, StorageProcessor, VirtualManager, Package, VirtualMachine, VirtualNic, VirtualSwitch, VirtualSwitchPort, VirtualSwitchPortProfile, SitePair, ReplicationGroup, ReplicatedVolumePair, User, Template, TemplateVolume, HostProfile.
Type	String	Use this type with the jobtype query parameter to find other jobs of the same type.

UcpLinuxServiceTemplate

The contents of this data type are detailed in the following table.

Name	Type	Notes
BootImageId	String	Id of the boot image this template will deploy.
BootImageName	String	Name of boot image.
BootImageType	String	Type of boot image this service template will deploy. (Linux)
BootVolumePoolId	String	Storage pool in which to create the boot volume.
BootVolumeSizeInBytes	Double	Size of boot volume to create.

Name	Type	Notes
BootVolumeStorageSystemId	String	Id of the storage system in which to create the boot volume.
ComputeVlanIds	String	When the template is applied to servers, the connected Ethernet switch ports will be configured with this list or range of VLAN IDs as a trunk list.
KickstartFileLocation	String	Location and file name of the Kickstart file. Applies only to Linux service templates.
Name	String	Name of the service template.
ServiceTemplateType	String	Type of service template. (Linux)

UcpServiceTemplateVolume

Used when getting information about a volume associated with an existing service template.

Name	Type	Notes
StorageSystemId	String	Storage system in which to find existing volume or create new.
PoolId	String	Pool in which to find or create new volumes. Pool Id must exist in the specified storage system.
CapacitySizeInBytes	Double	When new volume is to be created, this specifies the size.
FileSystem	FileSystem	When creating new volumes for a service template, this defines the file system to use. Values: • VMFS • none
VolumeName	String	If service template creates new datastore, this defines name for the datastore. Only datastores are named.
StorageSystemPortIds	String	Which ports on the SAN to use when host(s) access volumes.
VolumeInformation	Volume	Used when attaching existing volume.

UcpServiceTemplateVolumeInformation

Used when collecting data into a variable. The variable is then fed into the creation of a service template. This data type does not have the common attributes.

Name	Type	Notes
FileSystem	FileSystem	When creating new volumes for a service template, this defines the file system to use. Values: • VMFS • none
PoolId	String	Pool in which to find or create new volumes. Pool Id must exist in the specified storage system.
PortIds	String	Optionally defines which SAN ports to use when connecting volumes to servers. Port Ids must be available in storage system.
StorageSystemId	String	Storage system in which to find existing volume or create new.
VolumeId	String	If service template attaches existing volume, this defines the volume Id. Volume must exist in the specified Pool\Storage System.
VolumeName	String	If service template creates new datastore, this defines name for the datastore. Only datastores are named.
VolumeSize	Double	If service template creates new volume, this defines the size. Expressed in bytes.

UcpTopology (Deprecated)

This is the top level Topology object. All cmdlets and datatypes having to do with Topology are deprecated and will be removed in future versions of UCP.

UCPTopology sub resource data structures are detailed in the following sections.

The contents of this UCPTopology are detailed in the following table.

Name	Type	Notes
Chassis	Collection	Where a topology object is related to a chassis, the chassis is listed as the parent object. Example: Where a switch module is in a chassis and the view is network, the chassis is listed as a parent object
EthernetSwitches	Collection	Where a topology query collects a Network view, all connected Ethernet switches are shown.
FibreChannelFabrics	Collection	Where a topology query collects a Storage view, all connected Fibre Channel switches are shown.
ServerHosts	Collection	All Server Hosts related to the topology query are shown. Example: If a query is for the resource type of Virtual Machine, its ServerHost is shown.
StorageSystem	Collection	Where a topology query collects a storage view, the related Storage system is shown.

Common Topology types

BaseTopology

Each Topology type derives from this BaseTopology type:

Name	Type	Notes
ResourceLink	String	URI for accessing the associated resource. Not all topology objects are associated with a resource. Only those topology objects that are associated with a resource will have a populated ResourceLink, ResourceType, and ResourceState.
ResourceType	String	Type of the associated resource .
DisplayName	String	Display name of the resource or sub resource.
ResourceState	String	Monitored state of the resource.

ConnectedDevice

See main topic ConnectedDevice.

Sub topology types

The following sections are sub types under UcpTopology.

ServerHostTopology

The contents of this data type are detailed in the following table.

Name	Type	Notes
Host	Collection of HostTopology	OS-level description of a compute node.
Server	Collection of ServerTopology	Hardware-level description of a compute node.

ServerHostTopology -> HostTopology

The contents of this data type are detailed in the following table.

Name	Type	Notes
Uuid	String	Uuid for the host.
VirtualMachines	Collection of VirtualMachineTopology	Virtual machines associated with the host.
VirtualSwitches	Collection of VirtualSwitchTopology	Virtual switches used by the host.

ServerHostTopology -> HostTopology -> VirtualMachineTopology

The contents of this data type are detailed in the following table.

Name	Type	Notes
VirtualNics	Collection of VirtualNicTopology	Virtual NICs used by the virtual machine.
VolumeGlobalIds	Collection of String	Global Id of each storage system volume used by the virtual machine.

ServerHostTopology -> HostTopology -> VirtualMachineTopology -> VirtualNicTopology

The contents of this data type are detailed in the following table.

Name	Type	Notes
MacAddress	String	MAC address used.
VirtualPortProfile	ConnectedDevice	VLAN specification for virtual switch ports connected to this virtual NIC.

ServerHostTopology -> HostTopology -> VirtualSwitchTopology

The contents of this data type are detailed in the following table.

Name	Type	Notes
Type	VirtualSwitchType	Virtual switch type. Values: • Distributed • Host
UplinkVirtualPortProfiles	Collection of VirtualSwitchPortProfileTopology	VLAN specification for virtual switch ports connected to this virtual NIC.
VmVirtualPortProfiles	Collection of VirtualSwitchPortProfileTopology	VLAN specification for virtual switch ports connected to virtual NICs.

ServerHostTopology -> HostTopology -> VirtualSwitchTopology -> VirtualSwitchPortProfileTopology

The contents of this data type are detailed in the following table.

Name	Type	Notes
VlanIds	String	Vlan Ids applied to all virtual switch ports in this virtual port profile.
VirtualPorts	Collection of VirtualSwitchPortTopology	All virtual ports in this virtual port profile.

ServerHostTopology -> HostTopology -> VirtualSwitchTopology -> VirtualSwitchPortProfileTopology -> VirtualSwitchPortTopology

The contents of this data type are detailed in the following table.

Name	Type	Notes
MacAddress	String	MacAddress of the virtual port.

ServerHostTopology -> ServerTopology

The contents of this data type are detailed in the following table.

Name	Type	Notes
HostBusAdapters	Collection of HostBusAdapterTopology	Fibre Channel HBAs in the server.
PhysicalNics	Collection of PhysicalNicTopology	Physical NICs in the server.

ServerHostTopology -> ServerTopology -> PhysicalNicTopology

The contents of this data type are detailed in the following table.

Name	Type	Notes
MacAddress	String	MAC address of the NIC.
ConnectedEthernetSwitch	ConnectedDevice	Connected physical switch.
ConnectedVirtualPortProfiles	Collection of ConnectedDevice	Connected virtual port group.

ServerHostTopology -> ServerTopology -> HostBusAdapterTopology

The contents of this data type are detailed in the following table.

Name	Type	Notes
ConnectedFibreChannelSwitch	ConnectedDevice	The Fibre Channel switch connected to this HBA.

EthernetSwitchTopology

The contents of this data type are detailed in the following table.

Name	Type	Notes
Ports	Collection of EthernetSwitchPortTopology	The ports on this Ethernet switch.

EthernetSwitchTopology - > EthernetSwitchPortTopology

The contents of this data type are detailed in the following table.

Name	Type	Notes
ConnectedDevice	ConnectedDevice	The device connected to this port. Can be another Ethernet switch or a server.

FabricTopology

The contents of this data type are detailed in the following table.

Name	Type	Notes
FibreChannelSwitches	Collection of FibreChannelSwitchTopology	The Fibre Channel switches in this fabric.
Zones	Collection of ZoneTopology	The zones in this fabric.

FabricTopology -> FibreChannelSwitchTopology

The contents of this data type are detailed in the following table.

Name	Type	Notes
Ports	Collection of FibreChannelSwitchPortTopology	The ports on this Fibre Channel switch.

Name	Type	Notes
ConnectedFibreChannelSwitches	Collection of ConnectedDevice	Fibre Channel switches directly connected to this fibre channel switch.

FabricTopology -> FibreChannelSwitchTopology -> FibreChannelSwitchPortTopology

The contents of this data type are detailed in the following table.

Name	Type	Notes
ConnectedDevice	ConnectedDevice	The device connected to this Fibre Channel switch port. Displays either the storage system or host that connects to this fibre channel switch port

FabricTopology -> ZoneTopology

The contents of this data type are detailed in the following table.

Name	Type	Notes
ConnectedServers	ConnectedDevice	Servers included in this Zone. One server will be shown.
ConnectedStorageSystems	ConnectedDevice	Storage system included in this Zone. One storage system will be shown.

ChassisTopology

The contents of this data type are detailed in the following table.

Name	Type	Notes
ServerIds	Collection of string	Ids of the servers in this chassis.
EthernetSwitchIds	Collection of string	Ids of the Ethernet switch modules in this chassis.
FibreChannelSwitchIds	Collection of string	Ids of the Fibre Channel switch modules in this chassis.

StorageSystemTopology

The contents of this data type are detailed in the following table.

Name	Type	Notes
Ports	Collection of StorageSystemPortTopology	The storage ports in the StorageSystem which are available to UCP for provisioning
Pools	Collection of StorageSystemPoolTopology	The storage pools in the StorageSystem available to UCP for provisioning
StandardVolumes	Collection of StorageSystemVolumeTopology	The standard volumes in the StorageSystem in use by UCP. Standard volumes are currently only used by UCP for journaling.
ParityGroups	Collection of StorageSystemParityGroupTopology	The parity groups in the StorageSystem.
Journals	Collection of StorageSystemJournalTopology	The journals in the StorageSystem in use by UCP.

StorageSystemTopology -> StorageSystemPortTopology

Includes no additional properties other than the common properties.

StorageSystemTopology -> StorageSystemPoolTopology

The contents of this data type are detailed in the following table.

Name	Type	Notes
Volumes	Collection of StorageSystemVolumeTopology	The volumes in the storage pool.

StorageSystemTopology -> StorageSystemVolumeTopology

The contents of this data type are detailed in the following table.

Name	Type	Notes
Paths	Collection of StorageVolumePathTopology	Logical connections between server HBAs and storage ports allowing access to the volume.

StorageSystemTopology -> StorageSystemVolumeTopology -> StorageVolumePathTopology

The contents of this data type are detailed in the following table.

Name	Type	Notes
ConnectedServer	ConnectedDevice	Server which uses the volume
StoragePortId	String	Ports which the server uses to access the volume
LogicalUnitNumber	Int32	LUN number of the volume from the perspective of the connected server's host OS.

StorageSystemTopology -> StorageSystemParityGroupTopology

The contents of this data type are detailed in the following table.

Name	Type	Notes
VolumeIds	Collection of string	The Ids of the volumes in the parity group.
PhysicalDevices	Collection of StoragePhysicalDeviceTopology	The disk drives which make up the parity group.

StorageSystemTopology -> StorageSystemParityGroupTopology -> StoragePhysicalDeviceTopology

This type has no additional properties other than those derived from the base topology type.

StorageSystemTopology -> StorageSystemJournalTopology

The contents of this data type are detailed in the following table.

Name	Type	Notes
VolumeIds	Collection of string	The Ids of volumes used by the journal.

UcpWindowsServiceTemplate

The contents of this data type are detailed in the following table.

Name	Type	Notes
BootImageId	String	ID of the boot image associated with this template.
BootImageName	String	Name of the boot image.
BootImageType	String	Type of boot image. (Windows)
BootUnattendFileLocation	String	Name and location of the boot unattend file associated with the boot image.
BootVolumePoolId	String	ID of the storage pool where the boot volume should be created.
BootVolumeSizeInBytes	Double	Size of boot volume to create, expressed in bytes.
BootVolumeStorageSystemId	String	ID of the storage system where the boot volume should be created.
ComputeVlanIds	String	When the template is applied to servers, the connected Ethernet switch ports are configured with this list or range of trunk VLAN IDs.
ImageUnattendFileLocation	String	Name and location of the image unattend file associated with the boot image.
Name	String	Name of the service template.
ServiceTemplateType	String	Windows

UcpWindowsHyperVServiceTemplate

The contents of this data type are detailed in the following table.

Name	Type	Notes
BootImageId	String	ID of the boot image associated with this template.
BootImageName	String	Name of the boot image.
BootImageType	String	Type of boot image. (Windows)
BootUnattendFileLocation	String	Name and location of the boot unattend file associated with the boot image.

Name	Type	Notes
BootVolumePoolId	String	ID of the storage pool where the boot volume should be created.
BootVolumeSizeInBytes	Double	Size of boot volume to create, expressed in bytes.
BootVolumeStorageSystemId	String	ID of the storage system where the boot volume should be created.
ComputeVlanIds	String	When the template is applied to servers, the connected Ethernet switch ports are configured with this list or range of trunk VLAN IDs.
ImageUnattendFileLocation	String	Name and location of the image unattend file associated with the boot image.
Name	String	Name of the service template.
ServiceTemplateType	String	WindowsHyperV

UplinkConfiguration

The contents of this data type are detailed in the following table. This data structure does not contain the common attributes.

Name	Type	Notes
ConnectedEthernetSwitchPort	ConnectedEthernetSwitchPort	Id of the connected Ethernet switch port. Null if the host uplink is not connected to an access switch.
Name	String	Name of the host uplink.
Vlans	String	The comma separated list of VLANs on the connected switch port.

UuidIdentityPool

The contents of this data type are detailed in the following table.

Name	Type	Notes
Name	String	Name of the Uuid identity pool.
Ranges	Collection	This is not yet used.

UuidSettings

The contents of this data type are detailed in the following table. This data type does not have the common properties.

Name	Type	Notes
AutoGenerate	Boolean	If true, the UUID should be auto-generated upon creation of server profile.
UserValue	String	When UUID is not auto-generated, a distinct value must be supplied with this parameter.

VirtualDistributedSwitch

The contents of this data type are detailed in the following table.

Name	Type	Notes
Id	String	Id of the virtual distributed switch
Name	String	Virtual distributed switch name
PortGroupNames	Collection of strings	List of port group names

VirtualPlatformManager

The contents of this data type are detailed in the following table.

Name	Type	Notes
Id	String	Reports the ID of the virtual platform manager. Use this ID in parameters to specify this virtual platform manager.
PlatformUrl	String	Reports the URL used to access the virtual platform manager.
PlatformUsername	String	Reports the username used to access the virtual platform manager. This user needs to be an Administrator of the virtual platform manager.

Volume

The contents of this data type are detailed in the following table.

Name	Type	Notes
AttachedServerIds	Collection of Strings	The IDs of servers attached to the volume.
Id	String	Id of the volume. Use this ID in parameters to specify this volume.
LDev	String	The LDEV of the volume.
Name	String	The name of the volume.
PoolId	String	The ID of the pool that contains the volume.
StorageSystemId	String	The ID of the storage system that contains the volume.
TotalCapacityInGB	Double	The capacity of the volume in gigabytes.
UsedCapacityInGB	Double	The used capacity of the volume in gigabytes.
UsedPercentage	Int32	The used percentage of the volume expressed in percentage.

WindowsImage

The contents of this data type are detailed in the following table.

Name	Type	Notes
Architecture	String	Architecture of the Windows image. Values: • x64 • x86
BootUnattendFilePaths	Collection of string values	File path and name of the boot unattend file. One or more boot unattend files may be associated with the same Windows image.
Description	String	Brief description about the image.
Group	String	WDS group where the image is categorized
Id	String	Id of the image. Use this ID in parameters to specify this image.
ImageSizeInBytes	Double	Size of the boot image.

Name	Type	Notes
ImageType	String	Type of image. For Windows images, this value is always Windows.
ImageUnattendFilePaths	Collection of string values	File name and location of the image unattend file for this windows image. There may be more than one image unattend that could be used by a Windows image.
Language	String	The language of the Windows image.
Name	String	Name of the image.
Path	String	Path to the *.wim file for installing this Windows image.
Version	String	Version of this Windows image.

WwnAddressIdentityPool

The contents of this data type are detailed in the following table.

Name	Type	Notes
Name	String	Name of the WWN address identity pool
Ranges	Collection	Collection of string values

WwnAddressIdentityPoolRange

The contents of this data type are detailed in the following table.

Name	Type	Notes
AllocatedIdentityIds	Collection	Collection of AllocatedIdentityIds
Available	Int32	Quantity of available identities left in the range.
EndAddress	String	Ending address in the range.
IdentityPoolId	String	ID of the WWN pool where this range is.
StartAddress	String	Starting address in the range.
Total	Int32	Total quantity of addresses in the WWN range.

WwnAddressSetting

The contents of this data type are detailed in the following table.

Name	Type	Notes
IdentityPoolId	String	ID of the WWN address pool.
IdentityPoolRangeId	String	ID of the WWN Range within above pool.
IsNodeName	Boolean	When true, this WWN is to be treated as a WWNN. Omit of the WWN is to be treated as WWPN.
UsePool	Boolean	When this parameter is supplied, the WWN should be taken from the specified pool and range.
UserValue	String	When the WWN is not to be taken from pool, user supplies a WWN with this parameter.

Zone

The contents of this data type are detailed in the following table.

Name	Type	Notes
FabricId	String	The ID of the fabric.
Id	String	The ID of the zone.
Name	String	The name of the zone.
InitiatorWWN	String	The first initiator WWN in PortMembers. Read only.
TargetWWN	String	The first target WWN in PortMembers. Read only.
PortMembers	Collection of FibreChannel Port Objects	The port members of the zone.

Zone

3

Commands

The PowerShell commands that comprise the UCP Director CLI are defined in this chapter. The details found here are also available from the online help built into the CLI. The CLI provides the standard levels of details that are built into the PowerShell help facility (overview, detailed, examples, and full). To get started, after adding the snapin to your runspace you may also list the commands in the CLI as follows:

```
Get-Command -Module hitachi.ucp.cli
```

Cmdlet names begin with the action that will be taken against the specified object. These include: Apply, Attach, Copy, Deploy, Detach, Expand, Extract, Get, New, Purge, Register, Refresh, Reset, Restore, Start, Stop, Update.

Apply-UCPClusterServiceTemplate

Applies a cluster service template to servers.

Syntax

Apply-UCPClusterServiceTemplate [-ServiceTemplateId] <String> -Name <String> -ClusterParentId <String> -ClusterParentType <String> [<CommonParameters>]

Apply-UCPClusterServiceTemplate [-ServiceTemplateId] <String> -Name <String> -ServersToUse <ServerForCluster[]> -ClusterParentId <String> -ClusterParentType <String> [<CommonParameters>]

Description

The specified servers will be formed into a cluster with the configurations detailed in the service template.

Parameters

- -ServiceTemplateId <String>

  Id of the cluster service template to apply.

  – Required? true

  – Position? 1

  – Default value

  – Accept pipeline input? true (ByPropertyName)

  – Accept wildcard characters? false

- -Name <String>

  User defined name for the cluster.

  – Required? true

  – Position? named

  – Default value

- Accept pipeline input? false

- Accept wildcard characters? false

- -ClusterParentId <String>

  Id of the vSphere parent container where the cluster should be placed (use Get-UCPServerHierarchy).

  - Required? true

  - Position? named

  - Default value

  - Accept pipeline input? false

  - Accept wildcard characters? false

- -ClusterParentType <String>

  Type of parent object in which to place the cluster. Values are Folder or Datacenter.

  - Required? true

  - Position? named

  - Default value

  - Accept pipeline input? false

  - Accept wildcard characters? false

- -ServersToUse <ServerForCluster[]>

  Takes a variable containing the server Ids along with the vMotion IP address and subnetmask for each server.

  - Required? true

  - Position? named

  - Default value

  - Accept pipeline input? false

- Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

None

Outputs

Hitachi.UCP.CLI.Domain.Cluster

Notes

The UCP System Administrator role is required.

Prerequisite state of servers:

- Off with no storage attached

- Or, if running ESXi, they must:

  - Be in maintenance mode

  - Have no storage attached

  - Not using a virtual distributed switch

  - Not having any host profile applied

This operation requires UCP System Administrator priviledge to perform.

Example: Apply cluster service template to 3 servers

```
C:\PS># Find 3 available servers:
Get-UCPServerForCluster -Count 3 | Select-Object ServerId,
@{n="Chassis";e={$_.ChassisSerialNumber}},
    @{n="SlotNumber";e={$_.PrimarySlot}}
```

```
    ServerId                                Chassis
SlotNumber
    --------                                -------
----------
    c78de152-8fcc-11e1-97f8-9025f430fc6d    323GG-RE3A1NBX1-Y00000015
6
    cd1fc428-904a-11e1-8be0-a6b1dfa5d0a3    323GG-RE3A1NBX1-Y00000015
7
    35bf1653-90a1-11e1-b69b-b32c6ab9a5e3    323GG-RE3A1NBX1-Y00000015
5

    # Query for un-used server profiles:
    $usedServerProfileIdArray = @()
    foreach ($server in Get-UCPServer) { $usedServerProfileIdArray +=
$server.CurrentServerProfileId }
    Get-UcpServerProfile | where {$usedServerProfileIdArray -notcontains
$_.Id} | Select-Object -Property Id

    Id
    --
    4
    5
    6

    # Set variable with collection of servers:

    $Blade1 = New-UCPServerForClusterSetting -ServerUuid c78de152-8fcc-
11e1-97f8-9025f430fc6d -VMotionIp 10.21.26.6
    -VMotionSubnetMask 255.255.255.0 -ServerProfileId 4

    $Blade2 = New-UCPServerForClusterSetting -ServerUuid cd1fc428-904a-
11e1-8be0-a6b1dfa5d0a3 -VMotionIp 10.21.26.7
    -VMotionSubnetMask 255.255.255.0 -ServerProfileId 5

    $Blade3 = New-UCPServerForClusterSetting -ServerUuid 35bf1653-90a1-
11e1-b69b-b32c6ab9a5e3 -VMotionIp 10.21.26.5
    -VMotionSubnetMask 255.255.255.0 -ServerProfileId 6

    $Servers = @($Blade1,$Blade2,$Blade3)

    # Apply cluster template:
    Apply-UCPClusterServiceTemplate -ServiceTemplateId 19 -Name
SampleCluster -ServersToUse $Servers -ClusterParentId
    datacenter-7 -ClusterParentType Datacenter




    ClusterId          : domain-c599
    ClusterName        : SampleCluster
    ServerUuids        : {c78de152-8fcc-11e1-97f8-9025f430fc6d, cd1fc428-
904a-11e1-8be0-a6b1dfa5d0a3,
```

```
                    35bf1653-90a1-11e1-b69b-b32c6ab9a5e3}
Id                : domain-c599
GlobalResourceId  : inst.UCP-123-456-789.vmgr.1.clu.domain-c599
ResourceType      : Cluster
InstanceId        : UCP-123-456-789
```

Related Links

Get-UCPServer

Get-UCPServerForCluster

New-UCPServerForClusterSetting

Get-UCPServerHierarchy

Get-UCPServerProfile

Apply-UCPCustomServiceTemplate

Apply a custom service template.

Syntax

Apply-UCPCustomServiceTemplate [-ServiceTemplateId] <String> -TargetServers <TargetServer[]> [<CommonParameters>]

Description

Deploying a custom service template applies the configurations from the template to the target server or servers.

See New-UCPCustomServiceTemplate for more details.

Deployment of an operating system is a manual task.

Parameters

- ServiceTemplateId <String>

  ID of the service template to deploy.

  – Required? true

  – Position? 1

- – Default value

- – Accept pipeline input? true (ByPropertyName)

- – Accept wildcard characters? false

- • TargetServers <TargetServer[]>

  Requires a variable containing a server with a server profile. The variable might also contain an array of servers, each with an associated server profile. The profile will be applied to the server as part of the action to deploy the service template.

  This service template type requires a profile with a value of True for the IsBareMetal property.

  - – Required? true

  - – Position? named

  - – Default value

  - – Accept pipeline input? false

  - – Accept wildcard characters? false

- • <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

Hitachi.UCP.CLI.Domain.TargetServer

Outputs

None

Example: Apply custom service template to one server

```
C:\PS># Get server in slot 6 of specific chassis:
```

```
    $ServerID = (Get-UCPServer | where {$_.ChassisSerialNumber -eq
"323GG-RE3A1NBXR-Y00000061" -and $_.PrimarySlot -eq
    "6"}).Id

    # Get unused profiles:
    $usedServerProfileIdArray = @()
    foreach ($server in Get-UCPServer){ $usedServerProfileIdArray +=
$server.CurrentServerProfileId }
    Get-UcpServerProfile | where {$usedServerProfileIdArray -notcontains
$_.Id} | Select-Object @{n="Id";e={$_.Id}},
    @{n="IsNonHypervisor";e={$_.Is
BareMetal}} | ft -Autosize

    Id IsNonHypervisor
    -- ---------------
    2          True
    3          False
    4          False

    # Build variable to combine server Id with profile Id:
    $ServerAndProfile = New-UCPTargetServerSetting -ServerId $ServerID -
ServerProfileId 2

    # Apply Template:
    Apply-UCPCustomServiceTemplate -ServiceTemplateId 2 -TargetServers
$ServerAndProfile
```

Related Links

New-UCPTargetServerSetting

Get-UCPCustomServiceTemplate

Apply-UCPESXiStatelessServiceTemplate

Deploys an ESXi stand-alone host

Syntax

Apply-UCPEsxiStatelessServiceTemplate [-ServiceTemplateId] <String> -
TargetServers <TargetServer[]> [<CommonParameters>]

Description

ESXi stateless service templates deploy an ESXi image, configure trunk
VLAN Ids to attached Ethernet ports, and attach storage if specified. Each
server must be deployed along with a server profile designed for
hypervisors.

Parameters

- -ServiceTemplateId <String>

  ID of the service template to deploy.

  – Required? true

  – Position? 1

  – Default value

  – Accept pipeline input? true (ByPropertyName)

  – Accept wildcard characters? false

- -TargetServers <TargetServer[]>

  Requires a variable containing a server with a server profile. The variable might also contain an array of servers, each with an associated server profile. The profile will be applied to the server as part of the action to deploy the service template.

  – Required? true

  – Position? named

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_CommonParameters (http://go.microsoft.com/fwlink/?LinkID=113216).

Inputs

Hitachi.UCP.CLI.Domain.TargetServer

Outputs

None

Example: Apply ESXi service template to one server

```
C:\PS># Get server in slot 6 of specific chassis:
    $ServerID = (Get-UCPServer | where {$_.ChassisSerialNumber -eq
"323GG-RE3A1NBXR-Y00000061" -and $_.PrimarySlot -eq
    "6"}).Id

    # Get unused profiles:
    $usedServerProfileIdArray = @()
    foreach ($server in Get-UCPServer){ $usedServerProfileIdArray +=
$server.CurrentServerProfileId }
    Get-UcpServerProfile | where {$usedServerProfileIdArray -notcontains
$_.Id} | Select-Object @{n="Id";e={$_.Id}},
    @{n="IsNonHypervisor";e={$_.Is
    BareMetal}} | ft -Autosize

    Id IsNonHypervisor
    -- ---------------
    2          True
    3          False
    4          False

    # Build variable to combine server Id with profile Id:
    $ServerAndProfile = New-UCPTargetServerSetting -ServerId $ServerID -
ServerProfileId 4

    # Apply Template:
    Apply-UCPEsxiStatelessServiceTemplate -ServiceTemplateId 10 -
TargetServers $ServerAndProfile
```

Related Links

New-UCPTargetServerSetting

Get-UCPEsxiStatelessServiceTemplate

Apply-UCPLinuxServiceTemplate

Applies a Linux service template.

Syntax

Apply-UCPLinuxServiceTemplate [-ServiceTemplateId] <String> -TargetServers <TargetServer[]> [<CommonParameters>]

Description

Service templates are used for deploying images and attaching storage to hosts. Trunk VLAN IDs are also configured on attached Ethernet switch ports.

See New-UCPLinuxServiceTemplate for details.

Parameters

- -ServiceTemplateId <String>

  ID of the service template to deploy.

  – Required? true

  – Position? 1

  – Default value

  – Accept pipeline input? true (ByPropertyName)

  – Accept wildcard characters? false

- -TargetServers <TargetServer[]>

  Requires a variable containing a server with a server profile. The variable might also contain an array of servers, each with an associated server profile. The profile will be applied to the server as part of the action to deploy the service template.

  This service template type requires a profile with a value of True for the IsBareMetal property.

  – Required? true

- – Position? named

- – Default value

- – Accept pipeline input? false

- – Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

Hitachi.UCP.CLI.Domain.TargetServer

Outputs

None

Example: Apply a Linux service template

```
C:\PS># Get server in slot 6:
$Server = Get-UCPServer | where {$_.ChassisSerialNumber -eq "323GG-
RE3A1NBX1-Y00000017" -And $_.PrimarySlot -eq
"6"}

# Build variable with a server and a profile:
$ServerAndProfile = New-UCPTargetServerSetting -ServerId $Server.Id
-ServerProfileId 4

# Apply template:
Apply-UCPLinuxServiceTemplate -ServiceTemplateId 5 -TargetServers
$ServerAndProfile
```

Related Links

Get-UCPLinuxServiceTemplate

New-UCPTargetServerSetting

Apply-UCPServerProfileToServer

Applies a server profile to a server.

Syntax

Apply-UCPServerProfileToServer [-ServerId] <String> -ServerProfileId <String> [<CommonParameters>]

Description

Normally a server profile is applied to a server during the deployment of a service template. But a profile can be applied as a stand-alone action too. For example, after changing a setting in a server profile, re-apply the profile to the same server. This causes the changes to happen on the server.

Pre-requisite: Be sure the host is off or in maintenance mode.

Parameters

- -ServerId <String>

  The ID of the server to which the profile should be applied.

  – Required? true

  – Position? 1

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- -ServerProfileId <String>

  The ID of the server profile to apply.

  – Required? true

  – Position? named

  – Default value

— Accept pipeline input? false

— Accept wildcard characters? false

• <CommonParameters>

This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

None

Outputs

None

Example: Apply server profile to a server

```
C:\PS># Check if host in slot 7 is in a proper state:

$Server = Get-UCPServer | where {$_.ChassisSerialNumber -eq "323GG-
RE3A1NBX1-Y00000017" -And $_.PrimarySlot -eq
"7"}

$Server.PowerState
On
$Server.HostInformation.InMaintenanceMode
True
Get-UCPVolume -StorageSystemId (Get-UCPStorageSystem).Id | where {$_
.AttachedServerIds -eq $Server.Id}

# No volumes are returned, so the server has no attached volume. OK
to proceed:

# Query for un-used server profiles:
$usedServerProfileIdArray = @()
foreach ($server in Get-UCPServer) { $usedServerProfileIdArray +=
$server.CurrentServerProfileId }
Get-UcpServerProfile | where {$usedServerProfileIdArray -notcontains
$_.Id} | Select-Object @{n="Id";e={$_.Id}},
@{n="nonHypervisor";e={$_.NonHypervisor}},@{n="Name";e={$_.Name}} |
ft -Autosize

Id nonHypervisor Name
-- ------------- ----
```

```
1          True Windows_HT-Off
2          False ESXi_Host_DefaultEFI_28
3          False ESXi_Host_DefaultEFI_29


# Apply server profile number 3:
Apply-UCPServerProfileToServer -ServerId $Server.Id -ServerProfileId
3
```

Example: Apply multiple server profiles to multiple servers

```
C:\PS># Use case 1 - All blades in a chassis are replaced, perhaps
with newer models. All previously-used server
    profiles should be preserved, removed from old blades, and applied
to the new ones.
    # Use case 2 - A chassis is replaced and the SAME blades will
continue to be used. But their existing profiles
    need to be re-applied to the blades after chassis is replaced.

    # Get all servers for a particular chassis (assume all are powered
off)

    $availableServers = Get-UCPServer | where {$_.ChassisSerialNumber -
eq "323GG-RE3A1NBX1-Y00000017")

    #Collect a list of all available server profiles. This assumes that
the available profiles are the same ones that
    had been used by these blades prior to the hardware replacement.

    $usedServerProfileIdArray = @()
    foreach ($server in Get-UCPServer) { $usedServerProfileIdArray +=
$server.CurrentServerProfileId }
    $availableServerProfiles=Get-UcpServerProfile | where
{$usedServerProfileIdArray -notcontains $_.Id} |
    Select-Object @{n="Id";e={$_.Id}}, @{n="nonHypervisor";e={$_
.NonHypervisor}},@{n="Name";e={$_.Name}} | ft -Autosize

    Id nonHypervisor Name
    -- ------------- ----
    1          False ESXi_Host_DefaultEFI_28
    2          False ESXi_Host_DefaultEFI_29
    3          False ESXi_Host_DefaultEFI_30
    4          False ESXi_Host_DefaultEFI_31
    5          False ESXi_Host_DefaultEFI_32
    6          False ESXi_Host_DefaultEFI_33
    7          False ESXi_Host_DefaultEFI_34
    8          False ESXi_Host_DefaultEFI_35


    # Apply a server profile to each available server (assuming # of
available server profiles > # of available
    servers)
```

```
        for ($i=0; $i –le $availableservers.count; i++) { Apply-
    UCPServerProfileToServer –ServerId
        $availableservers[$i].id –ServerProfileId $serverprofiles[$i].Id}
```

Related Links

Get-UCPServerProfile

Get-UCPServer

Apply-UCPWindowsHyperVServiceTemplate

Applies a Windows Hyper-V service template.

Syntax

Apply-UCPWindowsHyperVServiceTemplate [-ServiceTemplateId] <String> -TargetServers <TargetServer[]> -Credential <PSCredential> [-HostGroupId <String>] [<CommonParameters>]

Description

Platform manager must be SCVMM.

HyperV templates can be deployed to one or more servers. A Windows Hyper-V template deploys a Windows image, attaches storage to host(s), configures trunk VLAN IDs on attached Ethernet ports, loads the Hyper-V role, and adds the resulting host(s) to SCVMM inventory.

Parameters

- -ServiceTemplateId <String>

  ID of the service template to deploy.

  – Required? true

  – Position? 1

  – Default value

  – Accept pipeline input? true (ByPropertyName)

  – Accept wildcard characters? false

- -TargetServers <TargetServer[]>

  Requires a variable containing a server with a server profile. The variable might also contain an array of servers, each with an associated server profile. The profile will be applied to the server as part of the action to deploy the service template.

  – Required? true

  – Position? named

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- -Credential <PSCredential>

  Use the command Get-Credential to build a variable. Input the user name and password of an SCVMM administrator.

  – Required? true

  – Position? named

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- -HostGroupId <String>

  – Required? false

  – Position? named

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

Inputs

Hitachi.UCP.CLI.Domain.TargetServer

Outputs

None

Example: Apply template to one server

```
C:\PS># Get server in slot 6 of specific chassis:
$ServerID = (Get-UCPServer | where {$_.ChassisSerialNumber -eq
"323GG-RE3A1NBXR-Y00000061" -and $_.PrimarySlot -eq
"6"}).Id

# Get unused profiles:
$usedServerProfileIdArray = @()
foreach ($server in Get-UCPServer){ $usedServerProfileIdArray +=
$server.CurrentServerProfileId }
Get-UcpServerProfile | where {$usedServerProfileIdArray -notcontains
$_.Id} | Select-Object @{n="Id";e={$_.Id}},
@{n="IsNonHypervisor";e={$_.Is
BareMetal}} | ft -Autosize

Id IsNonHypervisor
-- ---------------
2          False
3          False
4          False

# Build variable to combine server Id with profile Id:
$ServerAndProfile = New-UCPTargetServerSetting -ServerId $ServerID -
ServerProfileId 4


# Get Host Group Id from SCVMM:
$HostGroupId = (Get-UCPServerHierarchy | where {$_.Name -like "All
Hosts"}).Id

# Get Credentials:
$Credential = Get-Credential
cmdlet Get-Credential at command pipeline position 1
Supply values for the following parameters:
Credential

# Apply Template:
Apply-UCPWindowsHyperVServiceTemplate -ServiceTemplateId 9 -
TargetServers $ServerAndProfile -Credential
$Credential -HostGroupId $HostGroupId
```

Related Links

New-UCPTargetServerSetting

Get-UCPWindowsHyperVServiceTemplate

Apply-UCPWindowsServiceTemplate

Applies a Windows service template.

Syntax

Apply-UCPWindowsServiceTemplate [-ServiceTemplateId] <String> -TargetServers <TargetServer[]> [<CommonParameters>]

Description

Can be deployed to one or more servers. The platform manager can be vCenter or SCVMM. A Windows template deploys a Windows image, attaches storage to host(s), and configures trunk VLAN Ids to attached Ethernet switch ports.

Parameters

- -ServiceTemplateId <String>

  ID of the service template to deploy.

  – Required? true

  – Position? 1

  – Default value

  – Accept pipeline input? true (ByPropertyName)

  – Accept wildcard characters? false

- -TargetServers <TargetServer[]>

  Requires a variable containing a server with a server profile. The variable might also contain an array of servers, each with an associated server profile. The profile will be applied to the server as part of the action to deploy the service template.

This service template type requires a profile with a value of True for the IsBareMetal property.

- – Required? true

- – Position? named

- – Default value

- – Accept pipeline input? false

- – Accept wildcard characters? false

- • <CommonParameters>

This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

Hitachi.UCP.CLI.Domain.TargetServer

Outputs

None

Example: Apply Windows service template to one server

```
C:\PS># Get server in slot 6:
$Server = Get-UCPServer | where {$_.ChassisSerialNumber -eq "323GG-
RE3A1NBX1-Y00000017" -And $_.PrimarySlot -eq
"6"}

Get-UcpServerProfile | Select-Object @{n="Id";e={$_.Id}},
@{n="IsNonHypervisor";e={$_.NonHypervisor}} | ft
-Autosize

Id IsNonHypervisor
-- ---------------
1           True
2           False

# Build variable with a server and a profile:
```

```
    $ServerAndProfile = New-UCPTargetServerSetting -ServerId $Server.Id
-ServerProfileId 1

    # Apply template:
    Apply-UCPWindowsServiceTemplate -ServiceTemplateId 7 -TargetServers
$ServerAndProfile
```

Related Links

New-UCPTargetServerSetting

Get-UCPWindowsServiceTemplate

Attach-UCPVolume

Attaches an existing volume to either a server or a cluster.

Syntax

Attach-UCPVolume [-StorageSystemId] <String> [-VolumeId] <String> [-ServerId <String>] [-ClusterId <String>] [-PortIds <String[]>] [<CommonParameters>]

Description

Attaches an existing volume to either a server or a cluster.

UCP Director will ensure multiple storage paths exist by creating zones and host storage domains as needed. When one or more existing zones and host storage domains include the server's ports and use the same storage system ports, UCP Director will use them.

When one or more zones exist but complimentary host storage domains do not exist, UCP Director will create host storage domains that use the same storage system ports. When one or more host storage domains exist but complimentary zones do not exist, UCP Director will create zones that use the same storage system ports. If zones and host storage domains for the server ports both exist but do not use the same storage system ports, UCP Director will select the ports that have the least paths and create the complimentary zones or host storage domains.

When no zones or host storage domains exist for the servers, UCP will select storage system ports having the fewest paths. If preferred, you may specify four StorageSystemPortIds to be used instead. When doing so, one odd and one even port must be specified for each fabric.

The volume to be attached may be specified in the pipeline. Alternatively, the StorageSystemId and VolumeId parameters may be used. An updated volume is returned.

Parameters

- -StorageSystemId <String>

  Specifies the ID of the storage system with the volume that is to be attached. Use Get-UCPStorageSystem to discover the storage system ID.

  – Required? true

  – Position? 1

  – Default value

  – Accept pipeline input? true (ByPropertyName)

  – Accept wildcard characters? false

- -VolumeId <String>

  Specifies the ID of the volume that is to be attached. Id is an alias for this parameter.

  – Required? true

  – Position? 2

  – Default value

  – Accept pipeline input? true (ByPropertyName)

  – Accept wildcard characters? false

- -ServerId <String>

  Specifies the ID of the server to which the volume is to be attached. Either ServerId or ClusterId must be provided.

  – Required? false

  – Position? named

Commands

- – Default value

- – Accept pipeline input? false

- – Accept wildcard characters? false

- • -ClusterId <String>

  Specifies the ID of the cluster to which the volume is to be attached. Either ServerId or ClusterId must be provided.

  - – Required? false

  - – Position? named

  - – Default value

  - – Accept pipeline input? false

  - – Accept wildcard characters? false

- • -PortIds <String[]>

  Optionally specifies four Ids of storage system ports to be used for volume paths. There must be one odd and one even port for each fabric. If not specified, UCP Director will select ports with the fewest paths. Use Get-UCPStoragePort to discover port IDs.

  - – Required? false

  - – Position? named

  - – Default value

  - – Accept pipeline input? false

  - – Accept wildcard characters? false

- • <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

Hitachi.UCP.CLI.Domain.Volume

Outputs

Hitachi.UCP.CLI.Domain.Volume

Notes

The UCP Storage Administrator and UCP View privileges are required.

Example: Attach a volume to a server

```
C:\PS>Attach-UCPVolume 53106 14848 -ServerId 6e37f410-b4a7-11e1-94b0-
c6aca3093fbb
```

```
Id                : 14848
AttachedServerIds : {6e37f410-b4a7-11e1-94b0-c6aca3093fbb}
StorageSystemId   : 53106
LDev              : 00:3A:00
PoolId            : 3
Name              : HRWeb
TotalCapacityInGB : 150
UsedCapacityInGB  : 0.9
UsedPercentage    : 0
```

Example: Attach a volume to a cluster

```
C:\PS>Attach-UCPVolume 53106 14849 -ClusterId domain-c93
```

```
AttachedServerIds : {a00a087e-b42f-11e1-b5b5-de6c62e1293f, c92fe2c0-
b391-11e1-b1cc-8c192ba3b146,
                    7939714f-b3cf-11e1-b0e7-c85aebf97785}
StorageSystemId   : 53106
LDev              : 00:3A:01
PoolId            : 3
Name              : HRServices
TotalCapacityInGB : 200
UsedCapacityInGB  : 0.82
UsedPercentage    : 0
```

```
Id                 : 14849
GlobalResourceId   : inst.v2ProductionB-123-456-
789.stor.1.ss.93040480.vol.14849
ResourceType       : StorageVolume
InstanceId         : v2ProductionB-123-456-789
```

Example: Attach a volume to a server using specific storage ports

```
C:\PS>Attach-UCPVolume 53106 14082 -ServerId 4e483e76-b4ba-11e1-8dc6-
d1f3cfb81b84 -PortIds CL1-D, CL2-D, CL3-D, CL4-D
```

```
AttachedServerIds : {4e483e76-b4ba-11e1-8dc6-d1f3cfb81b84}
StorageSystemId   : 53106
LDev              : 00:37:02
PoolId            : 2
Name              : Datastore12
TotalCapacityInGB : 50
UsedCapacityInGB  : 0.82
UsedPercentage    : 1
Id                : 14082
GlobalResourceId  : inst.v2ProductionB-123-456-
789.stor.1.ss.93040480.vol.14082
ResourceType      : StorageVolume
InstanceId        : v2ProductionB-123-456-789
```

Related Links

Detach-UCPVolume

Get-UCPVolume

New-UCPVolume

Expand-UCPVolume

Remove-UCPVolume

Copy-UCPServiceTemplate

Makes a copy of a UCP Service Template.

Syntax

Copy-UCPServiceTemplate [-ServiceTemplateId] <String> [-Name] <String> [<CommonParameters>]

Description

The copy is an exact clone of the original, but with a new name.

Parameters

- -ServiceTemplateId <String>

  Id of the service template to copy.

  - Required? true

  - Position? 1

  - Default value

  - Accept pipeline input? true (ByPropertyName)

  - Accept wildcard characters? false

- -Name <String>

  Name to apply to the new copy.

  - Required? true

  - Position? 2

  - Default value

  - Accept pipeline input? false

  - Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

Hitachi.UCP.CLI.Domain.UcpServiceTemplate

Outputs

Hitachi.UCP.CLI.Domain.UcpWindowsHyperVServiceTemplate,
Hitachi.UCP.CLI.Domain.UcpWindowsServiceTemplate,
Hitachi.UCP.CLI.Domain.UcpEsxiStatelessServiceTemplate,
Hitachi.UCP.CLI.Domain.UcpEsxiStatelessClusterServiceTemplate,
Hitachi.UCP.CLI.Domain.UcpLinuxServiceTemplate,
Hitachi.UCP.CLI.Domain.UcpCustomServiceTemplate

Notes

The UCP System Administrator role is required.

Example: Copy a Windows service template

```
    C:\PS>Copy-UCPServiceTemplate -Id 2 -Name
NewSampleWindowsServiceTemplate


    # Required parameters: Id of the template to be copied and Name for
the new copy.



    BootVolumeStorageSystemId         : 66716
    BootVolumePoolId                  : 1
    BootVolumeSizeInBytes             : 128849018880
    BootUnattendFileLocation          :
    \\10.21.19.247\REMINST\Boot\x64\Windows\BootUnattendFiles\
Windows2012DatacenterBootUnattend.xml
    ImageUnattendFileLocation         :
    \\10.21.19.247\REMINST\Boot\x64\Windows\ImageUnattendFiles\
TemplateWindows2012DatacenterImageUnattend.xml
    Id                                : 10
    Name                              : NewSampleWindowsServiceTemplate
    BootImageId                       : 6
```

```
        BootImageName                        : Windows Server 2012
SERVERDATACENTER
        BootImageType                        : Windows
        ServiceTemplateType                  : Windows
        ComputeVlanIds                       : 125
        GlobalResourceId                     : inst.v2ProductionA-123-456-
789.svctmplt.10
        ResourceType                         : ServiceTemplate
        InstanceId                           : v2ProductionA-123-456-789
```

Related Links

Remove-UCPServiceTemplate

Get-UCPWindowsHyperVserviceTemplate

Get-UCPWindowsServiceTemplate

Get-UCPLinuxServiceTemplate

Get-UCPEsxiStatelessServiceTemplate

Get-UCPEsxiStatelessClusterServiceTemplate

Copy-UCPUpdatePackage

Copies a zip file containing all updates for UCP from a remote location into UCP update repository.

Syntax

Copy-UCPUpdatePackage [-PackageUncPath] <String>
[<CommonParameters>]

Description

Before updating firmware on UCP hardware resources, the firmware files must first be uploaded into UCP with the help of this cmdlet. The updates to hardware can then be performed with the help of this cmdlet:

Update-UCPChassisAndServersFirmware

Update-UCPChassisFirmware

Update-UCPEthernetSwitchFirmware

Update-UCPFibreChannelSwitchFirmware

Update-UCPServerFirmware

Parameters

- -PackageUncPath <String>

  Path and file name for the UCP update package.

  – Required? true

  – Position? 1

  – Default value

  – Accept pipeline input? true (ByPropertyName)

  – Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

String (UNC path to the update zip file)

Outputs

None

Notes

The UCP System Administrator role is required.

These updates are not at all related to ESXi or Windows or Linux images.

Example: Copy update package from a network location

```
C:\PS>Copy-UCPUpdatePackage -PackageUncPath
```

```
    \\10.21.223.110\public\Automation\UpdatePackageRepository\Server_
CB500_HBA1_01-71.zip

    Confirm
    This will replace any existing update package in the UCP repository.
Proceed?
    [Y] Yes  [N] No  [S] Suspend  [?] Help (default is "Y"): y
```

Related Links

Update-UCPChassisAndServersFirmware

Update-UCPChassisFirmware

Update-UCPEthernetSwitchFirmware

Update-UCPFibreChannelSwitchFirmware

Update-UCPServerFirmware

Deploy-UCPCluster

Deploy all servers belonging to a specified ESXi cluster.

Syntax

Deploy-UCPCluster [-ClusterId] <String> [<CommonParameters>]

Description

Applicable only when the platform manager is VMware.

This command is generally used after Set-UCPClusterImage where a new pending ESXi image is applied to a cluster. Deploy-UCPCluster will orchestrate a graceful changeover to the pending image by placing each host into maintenance mode before rebooting.

This cmdlet does not create clusters. For creating clusters, use Apply-UCPClusterServiceTemplate.

Parameters

- -ClusterId <String>

  The vSphere Id for the cluster.

  – Required? true

  – Position? 1

  – Default value

  – Accept pipeline input? true (ByPropertyName)

  – Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

None

Outputs

None

Notes

Requires UCP Server Administrator role.

Host profiles and vSphere answer files ensure that the servers will be configured correctly upon reboot.

Example: Deploy cluster

```
C:\PS>Deploy-UCPCluster –ClusterId domain–c60
```

```
Confirm
Proceed deploying cluster?
[Y] Yes  [N] No  [S] Suspend  [?] Help (default is "Y"): y

ClusterId   ClusterName  GlobalResourceId           ServerUuids
---------   -----------  --------                   -----------
domain-c60 TestA         inst.v2ProductionH-123-456... {42cb371f-06e4-
11e2-8e1e-f...
```

Related Links

Set-UCPClusterImage

Get-UCPCluster

Deploy-UCPServer

Deploys a pending ESXi image to a server.

Syntax

Deploy-UCPServer [-ServerId] <String> [-Force] [<CommonParameters>]

Description

Deploys a pending image to an ESXi host by resetting the server. When the reset is completed, the pending ESXi image will become the current image. UCP Director expects hosts to be in maintenance mode before deploying the pending ESXi image unless the Force switch has been specified.

The specified server must be in boot-type mode ESXiStateless. It must not be undergoing template application. The server may be specified in the pipeline. Alternatively, the ServerId parameter may be used. An updated server is returned.

Parameters

- -ServerId <String>

  Specifies the Id of the server that has a pending image to be deployed.

  – Required? true

  – Position? 1

110   Commands

- Default value

- Accept pipeline input? true (ByPropertyName)

- Accept wildcard characters? false

- -Force

  Specifies that the pending image is to be deployed to the server even if the server is not in maintenance mode.

  - Required? false

  - Position? named

  - Default value

  - Accept pipeline input? false

  - Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

Hitachi.UCP.CLI.Domain.Server

Outputs

Hitachi.UCP.CLI.Domain.Server

Notes

Requires the UCP Server Administrator and UCP View privileges.

Example: Deploy a pending ESXi image to a server

```
C:\PS>Deploy-UCPServer -ServerId 5ca1ee5b-8f7d-11e1-8972-b4d25e4bd7d7 -
Force
```

```
HostInformation            : r1-hi-cb500-1-b07.poda.local
ServerDeploymentInformation : HitachiESXiImage-520HB1
ServerId                   : 5ca1ee5b-8f7d-11e1-8972-b4d25e4bd7d7
SerialNumber               : 323GGAGC0B1-TNNX14Y00000095
ServerUuid                 : 5ca1ee5b-8f7d-11e1-8972-b4d25e4bd7d7
Manufacturer               : HITACHI
Model                      : Compute Blade 520HB1
ModelNumber                : GGAGC0B1-TNNX14Y
BootType                   : ESXiStateless
ChassisSerialNumber        : 323GG-RE3A1NBX1-Y00000017
PartitionNumber            : 7
PrimarySlot                : 7
PartitionWidth             : 1
PartitionValid             : True
CpuType                    : Intel(R) Xeon(R) CPU E5-2640 0 @ 2.50GHz
CoresPerCPU                : 6
NumberOfCpus               : 0
CpuFrequencyInGHz          : 2.5
CpuCacheSizeInMB           : 30
MemoryAmountInGB           : 96
BmcIp                      : 10.21.19.18
BmcSubnetMask              : 255.255.255.0
BmcDefaultGateway          : 10.21.19.1
BmcDhcpEnabled             : False
PowerState                 : On
LIDState                   : Off
LIDColor                   : Blue
Health                     : Healthy
ErrorCount                 : 0
WarningCount               : 0
InformationCount           : 0
LastRefreshed              : 12/19/2013 8:14:58 PM
CurrentFirmwareVersion     : 01-81
PendingFirmwareVersion     :
AvailableFirmwareVersion   : 01-71
EfiFirmwareVersionCurrent  : 07-07
EfiFirmwareVersionPending  :
BmcFirmwareVersionCurrent  : 01-77
BmcFirmwareVersionPending  :
HardwareMaintenanceMode    :
MacType                    : Additional
WwnType                    : Additional
OperatingMode              : Basic
ConsoleUri                 : https://10.21.19.18/
NicInformationList         : {10Gb Onboard LAN, 10Gb Onboard LAN}
HbaInformationList         : {Hitachi 8Gb 2-port fibre channel
mezzanine card, Hitachi 8Gb 2-port fibre channel mezzanine card}
Id                         : 5ca1ee5b-8f7d-11e1-8972-b4d25e4bd7d7
```

```
GlobalResourceId              : inst.v2ProductionA-123-456-
789.cmp.1.ser.5ca1ee5b-8f7d-11e1-8972-b4d25e4bd7d7
ResourceType                  : Server
InstanceId                    : v2ProductionA-123-456-789
```

Related Links

Get-UCPServer

Set-UCPServerImage

Reset-UCPServer

Start-UCPServer

Stop-UCPServer

Set-UCPServerLocationId

Detach-UCPVolume

Detaches a volume from either a server or a cluster.

Syntax

Detach-UCPVolume [-StorageSystemId] <String> [-VolumeId] <String> [-ServerId <String>] [-ClusterId <String>] [<CommonParameters>]

Description

Detaches the specified volume from either a server or a cluster. If a cluster is specified, UCP Director will detach the volume from all of the hosts in that cluster.

When detaching a volume, UCP Director will remove any zones and host storage domains used in storage paths for that server or cluster if they are no longer being used.

The volume to be detached may be specified in the pipeline. Alternatively, the StorageSystemId and VolumeId parameters may be used.

For detachments to succeed, these requirements must be met:

- ESXi hosts:

    – First unmount the datastore in vCenter

- Non-Hypervisor deployments of Linux, Windows, Custom:

    – Server must be powered off

- Hyper-V hosts:

    – When detaching data volumes, the host must be powered on

    – When detaching a boot volume, first remove the host from SCVMM inventory, then power the server off

Parameters

- -StorageSystemId <String>

    Specifies the ID of the storage system containing the volume to be detached. Use Get-UCPStorageSystem to discover the storage system ID.

    – Required? true

    – Position? 1

    – Default value

    – Accept pipeline input? true (ByPropertyName)

    – Accept wildcard characters? false

- -VolumeId <String>

    Specifies the ID of the volume that is to be detached.

    – Required? true

    – Position? 2

    – Default value

    – Accept pipeline input? true (ByPropertyName)

- – Accept wildcard characters? false

- -ServerId <String>

  Specifies the ID of the server from which the volume is to be detached. Either ServerId or ClusterId must be provided.

  - – Required? false

  - – Position? named

  - – Default value

  - – Accept pipeline input? false

  - – Accept wildcard characters? false

- -ClusterId <String>

  Specifies the ID of the cluster from which the volume is to be detached. Either ServerId or ClusterId must be provided.

  - – Required? false

  - – Position? named

  - – Default value

  - – Accept pipeline input? false

  - – Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

Hitachi.UCP.CLI.Domain.UcpVolume

Outputs

Hitachi.UCP.CLI.Domain.UcpVolume

Notes

Requires the UCP Storage Administrator and UCP View privileges.

Example: Detach a volume from a server

```
C:\PS>Detach-UCPVolume 53106 14848 -ServerId 6e37f410-b4a7-11e1-94b0-
c6aca3093fbb
```

```
AttachedServerIds : {}
StorageSystemId   : 53106
LDev              : 00:3A:00
PoolId            : 3
Name              :
TotalCapacityInGB : 150
UsedCapacityInGB  : 0.9
UsedPercentage    : 0
Id                : 14848
GlobalResourceId  : inst.v2ProductionB-123-456-
789.stor.1.ss.93040480.vol.14848
ResourceType      : StorageVolume
InstanceId        : v2ProductionB-123-456-789
```

Example: Detach a volume from a cluster

```
C:\PS>Detach-UCPVolume 53106 14849 -ClusterId domain-c93
```

```
AttachedServerIds : {}
StorageSystemId   : 53106
LDev              : 00:3A:01
PoolId            : 3
Name              :
TotalCapacityInGB : 200
UsedCapacityInGB  : 0.82
UsedPercentage    : 0
Id                : 14849
GlobalResourceId  : inst.v2ProductionB-123-456-
789.stor.1.ss.93040480.vol.14849
```

```
ResourceType        : StorageVolume
InstanceId          : v2ProductionB-123-456-789
```

Example: Loop to detach multiple volumes from a server

```
C:\PS>#where $serverid is the id of the server to detach volumes from
$storageSystem = Get-UCPStorageSystem
$volumesToDetach = Get-UCPVolume –StorageSystemId $storageSystem.Id -
ServerId $serverid
foreach($volume in $volumesToDetach) {Detach-UCPVolume –StorageSystemId
$storageSystem.Id -VolumeId $volume.Id -ServerId $serverid}
```

Related Links

Attach-UCPVolume

Get-UCPVolume

New-UCPVolume

Expand-UCPVolume

Remove-UCPVolume

Expand-UCPJournal

Expands a journal on a storage system.

Syntax

Expand-UCPJournal [-StorageSystemId] <String> [-JournalId] <String> [-JournalVolumeIds] <Int32[]> [<CommonParameters>]

Description

Expands a specified journal volume. Journals are used during asynchronous replication between two UCP Pro for VMware vSphere sites.

Parameters

• -StorageSystemId <String>

Specifies the Id of the storage system where the journal is.

– Required? true

- Position? 1

- Default value

- Accept pipeline input? false

- Accept wildcard characters? false

• -JournalId <String>

The ID of the journal to expand. Can be found with Get-UCPJournal.

- Required? true

- Position? 2

- Default value

- Accept pipeline input? false

- Accept wildcard characters? false

• -JournalVolumeIds <Int32[]>

Specifies the Id(s) of the journal volumes to add to the journal. One or more journal volumes must be specified.

- Required? true

- Position? 3

- Default value

- Accept pipeline input? false

- Accept wildcard characters? false

• <CommonParameters>

This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

None

Outputs

Hitachi.UCP.CLI.Domain.StorageSystemJournal

Notes

Requires UCP System Administrator privilege.

Example: Expand a journal by adding two volumes

```
C:\PS>Expand-UCPJournal –StorageSystemId 53106 –JournalId 0 –
JournalVolumeIds 4137, 4138


# In this example, the journal 0 on storage system 53106 originally
contained journal volumes 4131 and 4132.  This
command expands the journal by adding the journal volumes 4137 and
4138.


CapacityInBytes   : 322123530240
InflowControlFlag : 1
DataOverflowWatch : 60
StorageSystemId   : 53106
PairedJournals    : {}
JournalVolumeIds  : {4131, 4132, 4137, 4138}
Id                : 0
GlobalResourceId  : inst.ucp12345.stor.1.ss.53106.jrnl.0
ResourceType      : StorageJournal
InstanceId        : ucp12345
```

Related Links

Get-UCPJournal

New-UCPJournal

Remove-UCPJournal

Expand-UCPVolume

Expands the size of a volume.

Syntax

Expand-UCPVolume [-StorageSystemId] <String> [-VolumeId] <String> -NewSizeInGB <Double> [<CommonParameters>]

Description

Expands the size of a volume that is attached to any UCP server.

The volume to be expanded may be specified in the pipeline. Alternatively, the StorageSystemId and VolumeId parameters may be used. An updated volume is returned.

Parameters

- -StorageSystemId <String>

  Specifies the ID of the storage system that contains the volume to be expanded. Use Get-UCPStorageSystem to discover the storage system ID.

  – Required? true

  – Position? 1

  – Default value

  – Accept pipeline input? true (ByPropertyName)

  – Accept wildcard characters? false

- -VolumeId <String>

  Specifies the ID of the volume that is to be expanded. Id is an alias for this parameter.

  – Required? true

  – Position? 2

  – Default value

  – Accept pipeline input? true (ByPropertyName)

  – Accept wildcard characters? false

- -NewSizeInGB <Double>

  Specifies the size (in gigabytes) of the volume after it is expanded.

    – Required? true

    – Position? named

    – Default value

    – Accept pipeline input? false

    – Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

Hitachi.UCP.CLI.Domain.Volume

Outputs

Hitachi.UCP.CLI.Domain.Volume

Notes

Requires the UCP Storage Administrator and UCP View privileges.

Example: Expand a volume

```
C:\PS>Expand-UCPVolume 53106 14848 –NewSizeInGB 150
```

```
AttachedServerIds : {6e37f410-b4a7-11e1-94b0-c6aca3093fbb}
StorageSystemId   : 53106
LDev              : 00:3A:00
PoolId            : 3
```

```
Name              : HRWeb
TotalCapacityInGB : 150
UsedCapacityInGB  : 0.82
UsedPercentage    : 0
IsBootVolume      : False
IsReplicatedVolume: False
VolumeType        : HDP
Id                : 14848
GlobalResourceId  : inst.v2ProductionE-123-456-
789.stor.1.ss.53106.vol.14848
ResourceType      : StorageVolume
InstanceId        : v2ProductionE-123-456-789
```

Related Links

Get-UCPVolume

New-UCPVolume

Attach-UCPVolume

Detach-UCPVolume

Remove-UCPVolume

Extract-UCPServerProfile

Extracts a server profile from an existing server. Can be executed in bulk.

Syntax

Extract-UCPServerProfile [-ServerProfileSettings]
<ServerProfileSettings[]> [<CommonParameters>]

Description

Appropriate when UCP has been upgraded and profiles need to be generated for existing servers. Preserved identity numbers are: IP address, MAC addresses, WWPN, and WWNN. The UUIDs are re-generated. All numbers for a given server are collected and added to a new server profile.

Parameters

- -ServerProfileSettings <ServerProfileSettings[]>

  Takes a collection of settings including server Id, name for server profile, and optional description. Use New-UCPServerProfileSetting to prepare a variable or array with multiple servers to extract.

  – Required? true

  – Position? 1

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

Hitachi.UCP.CLI.Domain.ServerProfileSettings

Outputs

None

Example: Extract multiple servers with array from New-UCPServerProfileSetting

```
C:\PS># The variable $ExtractArray was built with New-
UCPServerProfileSetting. (see example 2 for that cmdlet)
C:\PS>Extract-UCPServerProfile –ServerProfileSettings $ExtractArray

# If a profile already exists for a given server, an error is returned.
```

Related Links

New-UCPServerProfileSetting

Get-UCPAggregationFrequency

List supported aggregation frequencies for performance data.

Syntax

Get-UCPAggregationFrequency [<CommonParameters>]

Description

Returned values could be "30Minutes", "2Hours", "Daily", "Weekly"

Parameters

- <CommonParameters>

This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

None

Outputs

String

Notes

Requires UCP View privilege.

Example: Get supported Aggregation frequencies

```
C:\PS>Get-UCPAggregationFrequency
```

```
# This retrieves the supported aggregation frequencies which can be used
to return performance data for the specified aggregation type


30Minutes
2Hours
Daily
Weekly
```

Related Links

Get-UCPPerformanceData

Get-UCPAllServiceTemplate

Returns every service template in UCP.

Syntax

Get-UCPAllServiceTemplate [<CommonParameters>]

Description

This cmdlet returns details on all existing service templates in UCP of all types.

Parameters

- <CommonParameters>

   This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

None

Outputs

Hitachi.UCP.CLI.Domain.UcpServiceTemplate

Notes

Requires UCP View Privilege

Example: List all service templates

```
#Returns a list of all Service Templates from UCP
C:\PS>Get-UCPAllServiceTemplate

Name                : Blade05-Linux
BootImageId         : 7
BootImageName       : RHEL6.4
BootImageType       : Linux
ServiceTemplateType : Linux
ComputeVlanIds      : 20-22
Id                  : 1
ResourceType        : ServiceTemplate
GlobalResourceId    : inst.PODA-1234-5678.svctmplt.1
InstanceId          : PODA-1234-5678

Name                : Blade00-Windows
BootImageId         : 11
BootImageName       : Windows Server 2012 R2 SERVERDATACENTER
BootImageType       : Windows
ServiceTemplateType : Windows
ComputeVlanIds      : 20-22
Id                  : 2
ResourceType        : ServiceTemplate
GlobalResourceId    : inst.PODA-1234-5678.svctmplt.2
InstanceId          : PODA-1234-5678
```

Related Links

Get-UCPWindowsServiceTemplate

Get-UCPWindowsHyperVServiceTemplate

Get-UCPLinuxServiceTemplate

Get-UCPESXiStatelessServiceTemplate

Get-UCPESXiClusterServiceTemplate

Get-UCPCustomServiceTemplate

Get-UCPCandidateServerforCluster

Returns UCP recommended server(s) for use with a cluster.

Syntax

Get-UCPCandidateServerForCluster [-Count] <String>
[<CommonParameters>]

Description

This cmdlet will return a user-specified number of servers which are recommended for use in creating an ESXi cluster.

Qualifying servers will be off or in maintenance mode, will be in an ESXiStateless boot mode, and will not have any storage attached.

Parameters

- -Count <String>

  The number of servers you want UCP to recommend for use with a cluster. This number must be less than or equal to the number of servers available in your system.

  – Required? true

  – Position? 1

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

None

Outputs

Hitachi.UCP.CLI.Domain.ServerInformation

Notes

Requires UCP View privilege.

Example: Get 2 servers for Apply-UCPClusterServiceTemplate

```
C:\PS>C:\PS>$Servers = Get-UCPCandidateServerForCluster -Count 2
```

```
$Server
ServerId                  : 139c1715-04b2-11e2-95d5-f49c32dbad1f
SerialNumber              : 323GGAGC0B1-TNNX14Y00000489
ServerUuid                : 139c1715-04b2-11e2-95d5-f49c32dbad1f
Manufacturer              : HITACHI
Model                     : Compute Blade 520HB1
ModelNumber               : GGAGC0B1-TNNX14Y
BootType                  : ESXiStateless
ChassisSerialNumber       : 323GG-RE3A1NBX1-Y00000016
PartitionNumber           : 1
PrimarySlot               : 1
PartitionWidth            : 1
PartitionValid            : True
CpuType                   : Intel(R) Xeon(R) CPU E5-2640 0 @ 2.50GHz
CoresPerCPU               : 6
NumberOfCpus              : 0
CpuFrequencyInGHz         : 2.5
CpuCacheSizeInMB          : 30
MemoryAmountInGB          : 96
BmcIp                     : 10.21.19.22
BmcSubnetMask             : 255.255.255.0
BmcDefaultGateway         : 10.21.19.1
BmcDhcpEnabled            : False
PowerState                : Off
LIDState                  : Off
LIDColor                  : Blue
Health                    : Healthy
ErrorCount                : 0
WarningCount              : 0
InformationCount          : 0
LastRefreshed             : 7/24/2014 11:36:08 AM
CurrentFirmwareVersion    : 01-96
PendingFirmwareVersion    :
AvailableFirmwareVersion  :
EfiFirmwareVersionCurrent : 07-43
```

```
    EfiFirmwareVersionPending :
    BmcFirmwareVersionCurrent : 01-87
    BmcFirmwareVersionPending :
    HardwareMaintenanceMode   :
    MacType                   : Original
    WwnType                   : Original
    OperatingMode             : Basic
    ConsoleUri                : https://10.21.19.22/
    NicInformationList        : {10Gb Onboard LAN, 10Gb Onboard LAN}
    HbaInformationList        : {Hitachi 8Gb 2-port fibre channel
mezzanine card, Hitachi 8Gb 2-port fibre channel
    mezzanine card}
    CurrentServerProfileId    :
    UuidType                  : Original


    ServerId                  : 9320493d-5ec6-11e2-884f-89c46646a647
    SerialNumber              : 323GG-RV3XGC0B2X1-Y00000003
    ServerUuid                : 9320493d-5ec6-11e2-884f-89c46646a647
    Manufacturer              : HITACHI
    Model                     : Compute Blade 520HB2
    ModelNumber               : GG-RV3XGC0B2X1-Y
    BootType                  : ESXiStateless
    ChassisSerialNumber       : 323GG-RE3A1NBX1-Y00000017
    PartitionNumber           : 2
    PrimarySlot               : 2
    PartitionWidth            : 1
    PartitionValid            : True
    CpuType                   : Intel(R) Xeon(R) CPU E5-2697 v2 @
2.70GHz
    CoresPerCPU               : 12
    NumberOfCpus              : 0
    CpuFrequencyInGHz         : 2.7
    CpuCacheSizeInMB          : 60
    MemoryAmountInGB          : 96
    BmcIp                     : 10.21.19.13
    BmcSubnetMask             : 255.255.255.0
    BmcDefaultGateway         : 10.21.19.1
    BmcDhcpEnabled            : False
    PowerState                : On
    LIDState                  : Off
    LIDColor                  : Blue
    Health                    : Healthy
    ErrorCount                : 0
    WarningCount              : 0
    InformationCount          : 0
    LastRefreshed             : 7/24/2014 11:35:49 AM
    CurrentFirmwareVersion    : 04-30
    PendingFirmwareVersion    :
    AvailableFirmwareVersion  :
    EfiFirmwareVersionCurrent : 10-46
    EfiFirmwareVersionPending :
    BmcFirmwareVersionCurrent : 04-23
    BmcFirmwareVersionPending :
```

```
      HardwareMaintenanceMode   :
      MacType                   : Original
      WwnType                   : Original
      OperatingMode             : Basic
      ConsoleUri                : https://10.21.19.13/
      NicInformationList        : {10Gb Onboard LAN, 10Gb Onboard LAN}
      HbaInformationList        : {Hitachi 8Gb 2-port fibre channel
mezzanine card, Hitachi 8Gb 2-port fibre channel
      mezzanine card}
      CurrentServerProfileId    :
      UuidType                  : Original
```

Related Links

Apply-UCPClusterServiceTemplate

Get-UCPChassis

Gets information about chassis in UCP Director inventory.

Syntax

Get-UCPChassis [[-ChassisId] <String>] [<CommonParameters>]

Description

Gets information about chassis in UCP Director inventory. If a chassis ID is specified, that chassis is returned. Otherwise, all chassis are returned in an array.

Parameters

- -ChassisId <String>

  Optionally specifies the ID of the chassis that is to be returned. If not specified, all Chassis are returned.

  – Required? false

  – Position? 1

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

None

Outputs

Hitachi.UCP.CLI.Domain.Chassis

Notes

The UCP View privilege is required.

Example: List information for all chassis

```
C:\PS>Get-UCPChassis | Format-Table -Property ChassisId,
ChassisPowerState, ChassisHealth -AutoSize
```

```
ChassisId                          ChassisPowerState ChassisHealth
---------                          --- -------------
Hitachi_0_323GG-RE3A1NBX1-Y00000015 On              Healthy
Hitachi_0_323GG-RE3A1NBX1-Y00000016 On              Healthy
```

Example: Get a chassis by Id

```
C:\PS>Get-UCPChassis -ChassisId Hitachi_0_323GG-RE3A1NBX1-Y00000056
```

```
    HostInformationList              : {r1-hi-cb500-1-b03.podh.local,
r1-hi-cb500-1-b06.podh.local, ,
    r1-hi-cb500-1-b05.podh.local...}
    ChassisId                        : Hitachi_0_323GG-RE3A1NBX1-
Y00000056
```

```
    FanInformationList                : {Slot 0:Healthy, Slot 1:Healthy,
Slot 2:Healthy, Slot 3:Healthy...}
    ManagementModuleInformationList   : {Slot 0:Healthy, Slot 1:Healthy}
    SwitchInformationList             : {Slot 0:Healthy, Slot 1:Healthy,
Slot 2:Healthy, Slot 3:Healthy}
    BladeInformationList              : {Slot 0:Healthy
(ServerId:a962454b-04ba-11e2-96ea-8fb57d1ab050), Slot 1:Healthy
    (ServerId:d0b5f583-8e23-4841-abeb-b552108c5a06), Slot 2:Healthy
                                      (ServerId:99b41c96-33d9-42bb-
afaf-fde6da443efc), Slot 3:Healthy
    (ServerId:42cb371f-06e4-11e2-8e1e-f345f3d23816)...}
    PowerSupplyModuleInformationList : {Slot 0:Healthy, Slot 1:Healthy,
Slot 2:Healthy, Slot 3:Healthy}
    ChassisPowerState                 : On
    ChassisLIDState                   : Off
    ChassisHealth                     : Healthy
    LIDColor                          : Blue
    SerialNumber                      : 323GG-RE3A1NBX1-Y00000056
    ModelName                         : RE3A1NBX1-Y000056
    ModelType                         : Hitachi Compute Blade 500
    ModelNumber                       : GG-RE3A1NBX1-Y
    ChassisName                       : RE3A1NBX1-Y000056
    ErrorCount                        : 0
    WarningCount                      : 17
    InformationCount                  : 269
    MaintenanceMode                   : False
    Connectivity                      : True
    LastRefreshed                     : 6/11/2014 7:03:37 PM
    SvpIp                             : 10.21.84.10
    SvpSubnetMask                     : 255.255.255.0
    SvpDefaultGateway                 : 10.21.84.1
    SvpWebconsoleUrl                  : https://10.21.84.10/
    AvailableFirmwareVersion          : A0165-B-8205
    AvailableDictionaryVersion        : A0073
    AvailableParameterVersion         : 1012
    Id                                : Hitachi_0_323GG-RE3A1NBX1-
Y00000056
    GlobalResourceId                  : inst.ucp12345.cmp.1.ch.Hitachi_0_
323GG-RE3A1NBX1-Y00000056
    ResourceType                      : Chassis
    InstanceId                        : ucp12345
```

Related Links

Get-UCPServer

Get-UCPServerElementManager

Get-UCPCluster

Gets ESXi cluster details.

Syntax

Get-UCPCluster [[-ClusterId] <String>] [<CommonParameters>]

Description

Gets ESXi cluster details. If a cluster ID is specified, that cluster is
returned. Otherwise, all clusters are returned.

Parameters

- -ClusterId <String>

  vSphere's Id for the cluster.

  - Required? false

  - Position? 1

  - Default value

  - Accept pipeline input? false

  - Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug,
  ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer,
  PipelineVariable, and OutVariable. For more information, see about_
  CommonParameters (http://go.microsoft.com/fwlink/
  ?LinkID=113216).

Inputs

None

Outputs

Hitachi.UCP.CLI.Domain.Cluster

Notes

Requires UCP View privilege.

Example: List Clusters

```
C:\PS>Get-UCPCluster
```

```
ClusterId          : domain-c936
ClusterName        : SampleCluster
ServerUuids        : {5e21dabd-90bc-11e1-901a-f947807ab247, 4b757475-
8fa9-11e1-b9b4-f518649264e1, e0b1045c-90a7-11e1-a61b-824
                     9a74ae29a, 2515af28-8fec-11e1-8a03-90259a41924f...}
Id                 : domain-c936
GlobalResourceId   : inst.v2ProductionB-123-456-789.vmgr.1.clu.domain-
c936
ResourceType       : Cluster
InstanceId         : v2ProductionB-123-456-789
```

Example: Get specific cluster

```
C:\PS>Get-UCPCluster -ClusterId domain-c936
```

```
ClusterId          : domain-c936
ClusterName        : SampleCluster
ServerUuids        : {5e21dabd-90bc-11e1-901a-f947807ab247, 4b757475-
8fa9-11e1-b9b4-f518649264e1, e0b1045c-90a7-11e1-a61b-824
                     9a74ae29a, 2515af28-8fec-11e1-8a03-90259a41924f...}
Id                 : domain-c936
GlobalResourceId   : inst.v2ProductionB-123-456-789.vmgr.1.clu.domain-
c936
ResourceType       : Cluster
InstanceId         : v2ProductionB-123-456-789
```

Related Links

Deploy-UCPCluster

Set-UCPClusterNetworkVlan

Set-UCPClusterImage

Set-UCPClusterTemplate

Get-UCPClusterNetworkVlan

Gets the network uplink configuration of all hosts in a specified cluster.

Syntax

Get-UCPClusterNetworkVlan [-ClusterId] <String>
[<CommonParameters>]

Description

For each host in a cluster, the names of the network uplinks are returned along with the VLAN IDs used by them.

Parameters

- -ClusterId <String>

  Id of the cluster from which to get VLAN list.

  – Required? true

  – Position? 1

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

None

Outputs

Hitachi.UCP.CLI.Domain.HostUplinkConfigurations

Notes

The UCP View privilege is required.

Example: Get the network uplink configurations for all hosts in a cluster

```
C:\PS>Get-UCPClusterNetworkVlan domain-c93 | Select -ExpandProperty
HostUplinkConfigurations | Select HostId -ExpandProperty
UplinkConfigurations | Format-Table HostId, Name, Vlans -AutoSize


# Given a cluster ID, host uplink configuration information for every
host in the cluster is returned.


HostId Name Vlans
------ ---- -----
host-102 vmnic0 475-477,482,521
host-102 vmnic1 475-477,482,521
host-164 vmnic0 475-477,482,521
host-164 vmnic1 475-477,482,521
host-68 vmnic0 475-477,482,521
host-68 vmnic1 475-477,482,521
```

Related Links

Get-UCPCluster

Set-UCPClusterNetworkVlan

Get-UCPEthernetFeature

Set-UCPEthernetFeature

Get-UCPConvergedSwitch

Get Converged switch details.

Syntax

Get-UCPConvergedSwitch [[-Id] <String>] [<CommonParameters>]

Description

Gets Converged switch details. If a Converged switch ID is specified, that Converged switch is returned. Otherwise, all Converged switches are returned in an array.

Parameters

- -Id <String>

  Optionally supply the Id of a converged switch.

  – Required? false

  – Position? 1

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

None

Outputs

Hitachi.UCP.CLI.Domain.ConvergedSwitch

Notes

Requires the UCP View privilege.

Example: List converged switches

```
C:\PS>Get-UCPConvergedSwitch | Format-Table Id, IpAddress, Status, Type,
Name, OSVersion -AutoSize

Id IpAddress       Status       Type    Name                OSVersion
-- ---------       ------       ----    ----                ---------
1  10.21.80.212    Active       Access  R1-CS-5548-A-U42
3  10.21.80.213    Initializing Access  R1-CS-5548-B-U41
```

Example: Get a converged switch

```
C:\PS>Get-UCPConvergedSwitch 1

Type            : Access
Status          : Active
Name            : R1-CS-5548-A-U42
Make            : Cisco
Model           : Nexus5548
SerialNumber    : FOC17012NGC
FirmwareVersion : 6.0(2)N2(3)
IpAddress       : 10.21.80.212
UserName        : ucpadmin
EthernetPorts   : {Ethernet1/1, Ethernet1/2, Ethernet1/3, Ethernet1/
4...}
FibreChannelPorts : {fc1/25, fc1/26, fc1/27, fc1/28...}
FCoEPorts       : {Ethernet1/11, Ethernet1/12, Ethernet1/17,
Ethernet1/18...}
Id              : 1
GlobalResourceId : inst.PODG-1234.conv.1.net.1
ResourceType    : ConvergedSwitch
InstanceId      : PODG-1234
```

Related Links

Remove-UCPConvergedSwitch

Get-UCPConvergedSwitchUnmanagedPort

Returns a list of unmanaged converged ports.

Syntax

Get-UCPConvergedSwitchUnmanagedPort [-Id] <String>
[<CommonParameters>]

Description

UCP will not apply VLAN IDs to ports that are marked as "Unmanaged". This is commonly done when the user wishes to manually change and control the VLAN IDs on ports used by particular blades.

Parameters

- -Id <String>

  Id of the port.

  – Required? true

  – Position? 1

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

String

Outputs

Hitachi.UCP.CLI.Domain.ConvergedSwitchUnmanagedPorts

Notes

Requires UCP View privilege.

Example: Get Unmanaged ports with piped ID

```
C:\PS>$ConvergedSwitch = Get-UCPConvergedSwitch | where {$_
.IpAddress -eq "10.21.24.216"}

C:\PS>Get-UCPConvergedSwitchUnmanagedPort -Id $ConvergedSwitch.id |
fl


# In this example, the user knows the IP address of the switch. The
Id of this switch is piped to -Id for
Get-UCPConvergedSwitchUnmanagedPort.



Id
UnmanagedPorts
--                                                              --------
------
1
{Ethernet1/11, Ethernet1/12, Ethernet1/17, fc1/26...}
```

Related Links

Get-UCPConvergedSwitch

Get-UCPCustomServiceTemplate

Returns Custom service templates.

Syntax

Get-UCPCustomServiceTemplate [[-ServiceTemplateId] <String>]
[<CommonParameters>]

Description

This cmdlet returns detailed information on custom service templates. If a
ServiceTemplateId belonging to a custom service template is specified,
only that template will be returned. Else, all Custom Service Templates will
be returned in an array.

Parameters

- -ServiceTemplateId <String>

  ID of a specific Custom Service Template

  – Required? false

  – Position? 1

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

None

Outputs

Hitachi.UCP.CLI.Domain.UcpCustomServiceTemplate

Notes

Requires UCP View privilege

Example: Get specified custom service template

```
C:\PS>Get-UCPCustomServiceTemplate -ServiceTemplateId 5
Id                  : 5
Name                : MyCustomTemplate
BootImageId         : 3
BootImageName       : Custom Image
BootImageType       : Custom
ServiceTemplateType : Custom
ComputeVlanIds      : 19-21
```

```
GlobalResourceId     : inst.PODA-1234-5678.svctmplt.5
ResourceType         : ServiceTemplate
InstanceId           : PODA-1234-5678
```

Related Links

New-UCPCustomServiceTemplate

Get-UCPDirector

Gets a connection to UCP Director.

Syntax

Get-UCPDirector [[-ComputerName] <String>] [<CommonParameters>]

Description

Gets a connection to UCP Director. This UCP Director is required by other UCP commands.

Parameters

- -ComputerName <String>

  Specifies the name or IP address of the computer running UCP Director.

  – Required? false

  – Position? 1

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

None

Outputs

Hitachi.UCP.CLI.Domain.UcpDirector

Notes

The UCP View privilege is required.

Example: Connect to UCP Director

```
C:\PS>Get-UCPDirector ucpmanagement.ucp.local


# This establishes a connection to the instance of UCP Director running
on ucpmanagement.ucp.local using your identity.


ComputerName           : ucpmanagement.ucp.local
UserName               : UCP\ucpadmin
OrchestratorServiceUrl : https://ucpmanagement.ucp.local/api
Version                : 3.5.0.4634
SerialNumber           : v2ProductionB-123-456-789
```

Related Links

Get-UCPDirectorConfiguration

Get-UCPDirectorConfiguration

Gets details of UCP configuration.

Syntax

Get-UCPDirectorConfiguration [<CommonParameters>]

Description

The UCP settings are returned, some of which are configurable through
Set-UCPDirectorConfiguration.

Parameters

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

None

Outputs

Hitachi.UCP.CLI.Domain.UcpDirectorConfiguration

Notes

The UCP View privilege is required.

Example: Get UCP configuration details

```
C:\PS>Get-UCPDirectorConfiguration


    # AMQP is a protocol used for queuing UCP jobs.
    # RaidcomUsername is used for gaining admin access to the UCP
resource group in G1000 storage systems.
    # SCP server is a management VM running a 'Secure Copy' server. It
is used for uploading firmware bundles into UCP
    and for Ethernet switch configuration backups and restores.
    # WDS is a management VM running Windows Deployment Service.
    # UCP is the management VM running Hitachi Unified Compute Platform
Pro for VMware vSphere.



    AmqpUsername          : ucp
    RaidcomUsername       : ucpadmin
    UcpManagementIpAddress : 10.21.74.243
    WdsManagementIpAddress : 10.21.74.247
    ScpServerIpAddress    : 10.21.74.242
    ScpServerUserName     : ucpscp
    ManagementVLanId      : 74
    Id                    : 1
    GlobalResourceId      : inst.PODF-04669.cfg.1
```

```
ResourceType          : Configuration
InstanceId            : PODF-04669
```

Related Links

Set-UCPDirectorConfiguration

Get-UCPDisasterRecoveryManager

Gets the disaster recovery manager details.

Syntax

Get-UCPDisasterRecoveryManager [[-Id] <String>]
[<CommonParameters>]

Description

UCP Disaster Recovery uses VMware Site Recovery Manager (SRM) to provide failover management. This cmdlet returns the SRM instance used by UCP Disaster Recovery.

Parameters

- -Id <String>

  Optionally specifies the Id of the DR server to return.

  – Required? false

  – Position? 2

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

None

Outputs

Hitachi.UCP.CLI.Domain.DisasterRecoveryManager

Notes

The UCP View privilege is required.

Example: Get disaster recovery manager information

```
C:\PS>Get-UCPDisasterRecoveryManager


# This command gets the disaster recovery manager information for the
UCP instance.


ServiceUrl       : https://10.21.74.248:9007/
Username         : podf\ucpadmin
Id               : 1
GlobalResourceId : inst.V2ProductionF-123-456-789.dr.1
ResourceType     : DisasterRecoveryManager
InstanceId       : V2ProductionF-123-456-789
```

Related Links

New-UCPDisasterRecoveryManager

Set-UCPDisasterRecoveryManager

Get-UCPEsxiStatelessClusterServiceTemplate

Lists ESXi cluster service templates

Syntax

Get-UCPEsxiStatelessClusterServiceTemplate [[-ServiceTemplateId] <String>] [<CommonParameters>]

Description

This cmdlet returns detailed information on ESXi cluster service templates. If a ServiceTemplateId belonging to an ESXi cluster service template is specified, only that template will be returned. Else, all ESXi cluster service templates will be returned in an array.

Parameters

- -ServiceTemplateId <String>

  ID of a specific ESXi Cluster Service Template

  – Required? false

  – Position? 1

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

None

Outputs

Hitachi.UCP.CLI.Domain.UcpESXiStatelessClusterServiceTemplate

Notes

Requires UCP view privilege.

Example: Get specified ESXi cluster service template

```
C:\PS>Get-UCPEsxiStatelessClusterServiceTemplate -ServiceTemplateId 4

HostProfileId                      : hostprofile-1
DistributedSwitchId                : dvs-241
VmotionVlanId                      :
ManagementPortGroupName            : dvHostMgmt
VmotionPortGroupName               : dvvMotion
FailoverRamPercentage              : 90
FailoverCpuPercentage              : 90
EnableHighAvailability             : True
EnableDistributedResourceScheduler : False
EnableStorageDrs                   : False
AutomateStorageDrs                 : False
EnableStorageDrsIOMetric           : False
CreateStorageCluster               : False
Id                                 : 4
Name                               : MyESXiClusterTemplate
BootImageId                        : 2
BootImageName                      : HitachiESXiImage-520HB2
BootImageType                      : ESXiStateless
ServiceTemplateType                : EsxiStatelessCluster
ComputeVlanIds                     :
GlobalResourceId                   : inst.PODA-1234-5678.svctmplt.4
ResourceType                       : ServiceTemplate
InstanceId                         : PODA-1234-5678
```

Related Links

New-UCPEsxiStatelessClusterServiceTemplate

Get-UCPEsxiStatelessServiceTemplate

Lists ESXi stateless cluster service templates.

Syntax

Get-UCPEsxiStatelessServiceTemplate [[-ServiceTemplateId] <String>]
[<CommonParameters>]

Description

This cmdlet returns detailed information on ESXi standalone service templates. If a ServiceTemplateId belonging to an ESXi standalone service template is specified, only that template will be returned. Else, all ESXi standalone service templates will be returned in an array.

Parameters

- -ServiceTemplateId <String>

  ID of a specific ESXi Standalone Service Template

  – Required? false

  – Position? 1

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

None

Outputs

Hitachi.UCP.CLI.Domain.UcpServiceTemplate

Notes

Requires UCP view privilege

Example: Get specific ESXi Standalone Service Template

```
C:\PS>Get-UCPEsxiStatelessServiceTemplate -ServiceTemplateId 3
```

```
Id                  : 3
Name                : MyESXiStandaloneTemplate
BootImageId         : 2
BootImageName       : HitachiESXiImage-520HB2
BootImageType       : ESXiStateless
ServiceTemplateType : EsxiStateless
ComputeVlanIds      : 19-21
GlobalResourceId    : inst.PODA-1234-5678.svctmplt.3
ResourceType        : ServiceTemplate
InstanceId          : PODA-1234-5678
```

Related Links

New-UCPESXiStatelessServiceTemplate

Get-UCPEthernetFeature

Get the current status of UCP Ethernet Features setting.

Syntax

Get-UCPEthernetFeature [<CommonParameters>]

Description

When enabled, UCP manages the Ethernet switch ports, port channels, and host VLAN configurations as well as the SNMP configuration of Ethernet switches.

Parameters

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

None

Outputs

Hitachi.UCP.CLI.Domain.EthernetFeatures

Notes

Requires UCP View privilege.

Example: Get Ethernet Features status

```
C:\PS>Get-UCPEthernetFeature


HostNetworkConfigurationFeatureEnabled
```

Related Links

Set-UCPEthernetFeature

Get-UCPEthernetSwitch

Gets Ethernet switch details.

Syntax

Get-UCPEthernetSwitch [[-Id] <String>] [<CommonParameters>]

Description

Gets Ethernet switch details. If an Ethernet switch ID is specified, that Ethernet switch is returned. Otherwise, all Ethernet switches are returned in an array.

Parameters

- -Id <String>

  Optionally specifies the ID of the Ethernet switch that is to be returned. If not specified, all Ethernet switches are returned.

  – Required? false

  – Position? 1

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_CommonParameters (http://go.microsoft.com/fwlink/?LinkID=113216).

Inputs

None

Outputs

Hitachi.UCP.CLI.Domain.EthernetSwitch

Notes

This command requires the UCP View privilege.

Example: List all Ethernet switches

```
    C:\PS>Get-UCPEthernetSwitch | Format-Table Id, IpAddress, Status,
Type, Name, OSVersion -AutoSize
```

```
Id IpAddress      Status Type      Name                  OSVersion
-- ---------      ------ ----      ----                  ---------
 1 10.21.19.212  Active Aggregate R1-BR-6720-A-U41      4.1.2ad
 2 10.21.19.213  Active Aggregate R1-BR-6720-B-U39      4.1.2ad
 3 10.21.19.214  Active Access    R1-HI-CB500-1-U03-6746A 4.1.2ad
 4 10.21.19.215  Active Access    R1-HI-CB500-1-U03-6746B 4.1.2ad
```

Example: Get an Ethernet switch

```
C:\PS>Get-UCPEthernetSwitch 1
```

```
Type            : Aggregate
Status          : Active
Name            : R1-BR-6720-A-U41
Make            : Brocade
Model           : VDX6720-60
SerialNumber    : BKS2505H006
OSVersion       : 3.0.1aa
IpAddress       : 10.21.24.212
UserName        : ucpadmin
Ports           : {TenGigabitEthernet 0/1, TenGigabitEthernet 0/2,
TenGigabitEthernet 0/3, TenGigabitEthernet 0/4...}
Id              : 1
GlobalResourceId : inst.v2ProductionB-123-456-789.eth.1.net.1
ResourceType    : EthernetSwitch
InstanceId      : v2ProductionB-123-456-789
```

Related Links

Get-UCPEthernetSwitchUnmanagedPorts

Get-UCPEthernetSwitchBackup

Get Ethernet switch configuration backups for an Ethernet switch.

Syntax

Get-UCPEthernetSwitchBackup [[-BackupId] <String>] [-SwitchId]
<String> [<CommonParameters>]

Description

A configuration backup contains metadata regarding the configurations that UCP has applied to an Ethernet switch. If a backup ID is specified, that Ethernet switch backup is returned. Otherwise, all Ethernet switch configuration backups of the Ethernet switch are returned in an array.

Parameters

- -BackupId <String>

  Optional. Specifies the Id of one configuration backup to return. Must also supply the Id of the switch that the backup belongs to.

  – Required? false

  – Position? 2

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- -SwitchId <String>

  Required parameter. Configuration backups are listed for the specified switch.

  – Required? true

  – Position? 1

  – Default value

  – Accept pipeline input? true (ByPropertyName)

  – Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

None

Outputs

Hitachi.UCP.CLI.Domain.EthernetSwitchBackup

Notes

This command requires the UCP View privilege.

Example: Get an Ethernet switch backup

```
C:\PS>Get-UCPEthernetSwitchBackup -BackupId 1 -SwitchId 4
```

```
Content               :
Hitachi.UCP.CLI.Domain.EthernetSwitchBackupContent
CreatedBy             : podb\ucpadmin
CreatedDate           : 9/26/2013 8:44:59 AM
Description           : Add Ethernet switch to inventory
SwitchOSVersion       : 3.0.0_dcb
BackupId              : 1
Pinned                : False
SwitchId              : 4
Id                    : 5
GlobalResourceId      : inst.v2ProductionB-123-456-789.eth.1.net.4.bak.5
ResourceType          : EthernetSwitchBackup
InstanceId            : v2ProductionB-123-456-789
```

Example: List all Ethernet backups of an Ethernet switch

```
C:\PS>Get-UCPEthernetSwitchBackup -SwitchId 4 | Format-Table
```

```
Hitachi.... podb\svc... 9/26/201... Refresh ... 3.0.0_dcb  12
False 4           12
    inst.v2P...
   Hitachi.... podb\ucp... 9/26/201... Add Ethe... 3.0.0_dcb  5
False 4           5
    inst.v2P
```

Example: Save Ethernet switch backup configuration to a file

```
C:\PS>(Get-UCPEthernetSwitchBackup -BackupId 1 -SwitchId
4).Content.Configuration | Out-File switch-4-backup-1.cfg


# Config file "switch-4-backup-1.cfg" is placed in the current
powershell directory.
```

Related Links

New-UCPEthernetSwitchBackup

Get-UCPEthernetSwitchBackupRetentionPolicy

Set-UCPEthernetSwitchBackupRetentionPolicy

Set-UCPEthernetSwitchBackup

Restore-UCPEthernetSwitchBackup

Get-UCPEthernetSwitchBackupRetentionPolicy

Gets the retention policy for UCP Director's Ethernet switch configuration backups.

Syntax

Get-UCPEthernetSwitchBackupRetentionPolicy [<CommonParameters>]

Description

The retention policy dictates how many total configuration backups that UCP will save per Ethernet switch and how many of them can be pinned. UCP regularly deletes older configuration backups as new ones are created. A 'pinned' backup will not be deleted.

Parameters

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

None

Outputs

Hitachi.UCP.CLI.Domain.EthernetSwitchBackupRetentionPolicy

Notes

This command requires the UCP View privilege.

Example: Get Ethernet switch backup retention policy

```
C:\PS>Get-UCPEthernetSwitchBackupRetentionPolicy | Format-List
```

```
NumberOfPinnedBackupsPerSwitch : 80
TotalNumberOfBackupsPerSwitch  : 90
```

Related Links

Set-UCPEthernetSwitchBackupRetentionPolicy

Get-UCPEthernetSwitchBackup

Get-UCPEthernetSwitchUnmanagedPort

Returns a list of unmanaged Ethernet ports.

Syntax

Get-UCPEthernetSwitchUnmanagedPort [-Id] <String>
[<CommonParameters>]

Description

UCP will not apply VLAN IDs to ports that are marked as "Unmanaged". This is commonly done when the user wishes to manually change and control the VLAN IDs on ports used by particular blades.

Parameters

- -Id <String>

  Id of the Ethernet switch. (Required)

  – Required? true

  – Position? 1

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

String

Outputs

Hitachi.UCP.CLI.Domain.EthernetSwitchUnmanagedPorts

Notes

This command requires the UCP View privilege.

Example: Get Unmanaged ports with piped ID

```
C:\PS>$EthSwitch = Get-UCPEthernetSwitch | where {$_.IpAddress -eq
"10.21.24.216"}

C:\PS>Get-UCPEthernetSwitchUnmanagedPort -Id $EthSwitch.id | fl


# In this example, the user knows the IP address of the switch. The Id
of this switch is piped to -Id for Get-UCPEthernetSwitchUnmanagedPort.


Id               : 3
UnmanagedPorts : {TenGigabitEthernet 0/13, TenGigabitEthernet 0/14,
TenGigabitEthernet 0/15}
```

Related Links

Get-UCPEthernetSwitch

Set-UCPEthernetSwitchUnmanagedPort

Get-UCPEvent

Gets UCP event details.

Syntax

Get-UCPEvent [[-EventId] <String>] [-JobId <String>] [-TargetType
<String>] [-TargetId <String>] [-Relation <String>] [-EventType
<String>] [-Severity <String>] [-FromDateTime <DateTime>] [-
ToDateTime <DateTime>] [<CommonParameters>]

Description

Without parameters, this cmdlet lists recent events. Parameters are used
as filters to narrow the search results.

Parameters

- -EventId <String>

  Returns only the event specified by its Id. When present, optional filter parameters are invalid.

  - Required? false

  - Position? 1

  - Default value

  - Accept pipeline input? false

  - Accept wildcard characters? false

- -JobId <String>

  Narrows search results to only the events related to the specified job.

  - Required? false

  - Position? named

  - Default value

  - Accept pipeline input? false

  - Accept wildcard characters? false

- -TargetType <String>

  Optional filter to narrow the list of events to only those for a specified TargetType.

  Most commonly used values for this parameter are: EthernetSwitch, EthernetSwitchBackup, FibreChannelSwitch, ServerElementManager, MonitorSettings, MonitorProtocols, Server, StorageArray, StorageElementManager, Chassis, ServerImage, StorageFabric, StorageVolume, StorageZone, Cluster, and Host.

  The complete list of TargetTypes are too numerous to add here. However, a likely goal is to search for all other instances of one known event that has occurred. Hence, the value for TargetType in the known event can then be used as a search criteria to find all other times that an event was posted for the same TargetType.

  – Required? false

  – Position? named

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- -TargetId <String>

  Optional filter to specify the GlobalResourceId of one resource for which to return events. Its use requires the matching TargetType.

  – Required? false

  – Position? named

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- -Relation <String>

  Optionally used for listing events targeted to only the specified resource or to the specified resource plus all sub-components.

  Possible values for this parameter are self, subcomponent.

  – Required? false

  – Position? named

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- -EventType <String>

  Optional filter to specify the type of UCP event to search for.

  The list of EventTypes are too numerous to list here. However, the most likely goal is to search for all other instances of one known event. Hence, the value for EventType in the known event can be used as a search criteria to find all occurrences of the same EventType.

  – Required? false

  – Position? named

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- -Severity <String>

  Optional filter that specifies the severity of the UCP events that are to be returned.

  – Required? false

  – Position? named

  – Default value

- – Accept pipeline input? false

- – Accept wildcard characters? false

- -FromDateTime <DateTime>

  Optional filter that specifies the beginning date and time of the UCP events that are to be returned. Must be earlier than ToDateTime if it is present.

  - – Required? false

  - – Position? named

  - – Default value

  - – Accept pipeline input? false

  - – Accept wildcard characters? false

- -ToDateTime <DateTime>

  Optional filter that specifies the ending date and time of the UCP events that are to be returned. Must be later than FromDateTime if it is present.

  - – Required? false

  - – Position? named

  - – Default value

  - – Accept pipeline input? false

  - – Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

None

Outputs

Hitachi.UCP.CLI.Domain.UcpEvent

Notes

This command requires the UCP View privilege.

Example: Get recent events that targeted servers and were not associated with a job

```
C:\PS>Get-UCPEvent -JobId None -TargetType Compute | Select-Object -
First 5
```

```
EventId           : 481
CreatedTime       : 9/24/2013 7:57:22 PM +00:00
Description       : UCP has successfully updated the inventory for
server.
EventType         : ServerInventoryRefreshSucceedInfoEvent
JobId             :
Severity          : info
TargetId          : inst.v2ProductionB-123-456-789.cmp.1
TargetType        : Compute
CreatedBy         : UCP\svc_ucp
RecommendedAction :
Id                : 481
GlobalResourceId  : inst.v2ProductionB-123-456-789.event.481
ResourceType      : Event
InstanceId        : v2ProductionB-123-456-789

EventId           : 12
CreatedTime       : 9/24/2013 6:31:13 PM +00:00
Description       : UCP could not update the inventory details for
server.
EventType         : ServerInventoryRefreshFailWarningEvent
JobId             :
Severity          : warning
TargetId          : inst.v2ProductionB-123-456-789.cmp.1
TargetType        : Compute
CreatedBy         : podb\svc_ucp
RecommendedAction :
```

```
Id                : 12
GlobalResourceId  : inst.v2ProductionB-123-456-789.event.12
ResourceType      : Event
InstanceId        : v2ProductionB-123-456-789

EventId           : 2
CreatedTime       : 9/24/2013 6:30:21 PM +00:00
Description       : UCP could not update the inventory details for
server.
EventType         : ServerInventoryRefreshFailWarningEvent
JobId             :
Severity          : warning
TargetId          : inst.v2ProductionB-123-456-789.cmp.1
TargetType        : Compute
CreatedBy         : podb\svc_ucp
RecommendedAction :
Id                : 2
GlobalResourceId  : inst.v2ProductionB-123-456-789.event.2
ResourceType      : Event
InstanceId        : v2ProductionB-123-456-789
```

Example: Get recent server refreshes

```
C:\PS>Get-UCPEvent -TargetType Compute -TargetId inst.v2ProductionB-123-
456-789.cmp.1 -EventType ServerInventoryRefresh
SucceedInfoEvent | Select-Object -First 5
```

```
EventId           : 896
CreatedTime       : 9/24/2013 8:39:23 PM +00:00
Description       : UCP has successfully updated the inventory for
server.
EventType         : ServerInventoryRefreshSucceedInfoEvent
JobId             : 256
Severity          : info
TargetId          : inst.v2ProductionB-123-456-789.cmp.1
TargetType        : Compute
CreatedBy         : UCP\svc_ucp
RecommendedAction :
Id                : 896
GlobalResourceId  : inst.v2ProductionB-123-456-789.event.896
ResourceType      : Event
InstanceId        : v2ProductionB-123-456-789

EventId           : 869
CreatedTime       : 9/24/2013 8:37:23 PM +00:00
Description       : UCP has successfully updated the inventory for
server.
EventType         : ServerInventoryRefreshSucceedInfoEvent
```

```
JobId              : 250
Severity           : info
TargetId           : inst.v2ProductionB-123-456-789.cmp.1
TargetType         : Compute
CreatedBy          : UCP\svc_ucp
RecommendedAction  :
Id                 : 869
GlobalResourceId   : inst.v2ProductionB-123-456-789.event.869
ResourceType       : Event
InstanceId         : v2ProductionB-123-456-789

EventId            : 845
CreatedTime        : 9/24/2013 8:35:23 PM +00:00
Description        : UCP has successfully updated the inventory for
server.
EventType          : ServerInventoryRefreshSucceedInfoEvent
JobId              : 247
Severity           : info
TargetId           : inst.v2ProductionB-123-456-789.cmp.1
TargetType         : Compute
CreatedBy          : UCP\svc_ucp
RecommendedAction  :
Id                 : 845
GlobalResourceId   : inst.v2ProductionB-123-456-789.event.845
ResourceType       : Event
InstanceId         : v2ProductionB-123-456-789

EventId            : 838
CreatedTime        : 9/24/2013 8:33:23 PM +00:00
Description        : UCP has successfully updated the inventory for
server.
EventType          : ServerInventoryRefreshSucceedInfoEvent
JobId              : 242
Severity           : info
TargetId           : inst.v2ProductionB-123-456-789.cmp.1
TargetType         : Compute
CreatedBy          : UCP\svc_ucp
RecommendedAction  :
Id                 : 838
GlobalResourceId   : inst.v2ProductionB-123-456-789.event.838
ResourceType       : Event
InstanceId         : v2ProductionB-123-456-789

EventId            : 822
CreatedTime        : 9/24/2013 8:32:35 PM +00:00
Description        : UCP has successfully updated the inventory for
server.
EventType          : ServerInventoryRefreshSucceedInfoEvent
JobId              : 207
Severity           : info
TargetId           : inst.v2ProductionB-123-456-789.cmp.1
TargetType         : Compute
CreatedBy          : UCP\ucpadmin
```

```
RecommendedAction :
Id                : 822
GlobalResourceId  : inst.v2ProductionB-123-456-789.event.822
ResourceType      : Event
InstanceId        : v2ProductionB-123-456-789
```

Example: Get events for a specific job

```
C:\PS>Get-UCPEvent -JobId 10
```

```
EventId           : 85
CreatedTime       : 10/1/2013 3:54:03 PM +00:00
Description       : UCP has successfully updated the inventory for
server.
EventType         : ServerInventoryRefreshSucceedInfoEvent
JobId             : 10
Severity          : info
TargetId          : inst.UCP-PODH1.cmp.1
TargetType        : Compute
CreatedBy         : podh\ucpadmin
RecommendedAction :
Id                : 85
GlobalResourceId  : inst.UCP-PODH1.event.85
ResourceType      : Event
InstanceId        : UCP-PODH1

EventId           : 84
CreatedTime       : 10/1/2013 3:54:01 PM +00:00
Description       : Successfully updated HCSM information.
EventType         : ConfigureHcsmSuccessInfoEvent
JobId             : 10
Severity          : info
TargetId          : inst.UCP-PODH1.cmp.1.sem.1
TargetType        : ServerElementManager
CreatedBy         : podh\ucpadmin
RecommendedAction :
Id                : 84
GlobalResourceId  : inst.UCP-PODH1.event.84
ResourceType      : Event
InstanceId        : UCP-PODH1
```

Example: Get subcomponent's events of those whose target type is 'Compute'

```
C:\PS>Get-UCPEvent -TargetType compute -TargetId inst.blue-podf-
3925.cmp.1 -Relation subcomponent | select
EventId, TargetType, TargetId
```

```
    EventId                          TargetType
TargetId
    -------                          ----------
--------
    10234                            Server
     inst.blue-podf-3925.cmp.1.ser.e4582d...
    10232                            Server
     inst.blue-podf-3925.cmp.1.ser.e4582d...
    10231                            Server
     inst.blue-podf-3925.cmp.1.ser.e4582d...
    2098                             Server
     inst.blue-podf-3925.cmp.1.ser.519ba2...
    2097                             Server
     inst.blue-podf-3925.cmp.1.ser.519ba2...
    2096                             Server
     inst.blue-podf-3925.cmp.1.ser.519ba2...
    2094                             Server
     inst.blue-podf-3925.cmp.1.ser.519ba2...
    2034                             Server
     inst.blue-podf-3925.cmp.1.ser.519ba2...
    2032                             Server
     inst.blue-podf-3925.cmp.1.ser.519ba2...
    2020                             Server
     inst.blue-podf-3925.cmp.1.ser.519ba2...
    1746                             Server
     inst.blue-podf-3925.cmp.1.ser.519ba2...
    1742                             Server
     inst.blue-podf-3925.cmp.1.ser.519ba2...
    1620                             Server
     inst.blue-podf-3925.cmp.1.ser.519ba2...
    1619                             Server
     inst.blue-podf-3925.cmp.1.ser.519ba2...
    1617                             Server
     inst.blue-podf-3925.cmp.1.ser.519ba2...
    1615                             Server
     inst.blue-podf-3925.cmp.1.ser.519ba2...
    1612                             Server
     inst.blue-podf-3925.cmp.1.ser.519ba2...
    1610                             Server
     inst.blue-podf-3925.cmp.1.ser.793971...
    1607                             Server
     inst.blue-podf-3925.cmp.1.ser.793971...
    1606                             Server
     inst.blue-podf-3925.cmp.1.ser.793971...
    1599                             Server
     inst.blue-podf-3925.cmp.1.ser.519ba2...
    1506                             Server
     inst.blue-podf-3925.cmp.1.ser.519ba2...
```

```
    1505                               Server
     inst.blue-podf-3925.cmp.1.ser.519ba2...
    913                               Server
     inst.blue-podf-3925.cmp.1.ser.519ba2...
    871                               Server
     inst.blue-podf-3925.cmp.1.ser.519ba2...
    869                               Server
     inst.blue-podf-3925.cmp.1.ser.519ba2...
    767                               Server
     inst.blue-podf-3925.cmp.1.ser.519ba2...
    764                               Server
     inst.blue-podf-3925.cmp.1.ser.519ba2...
    760                               Server
     inst.blue-podf-3925.cmp.1.ser.519ba2...
    111                               ServerElementManager
inst.blue-podf-3925.cmp.1.sem.1
```

Example: Get events for Ethernet switch and its subcomponents

```
C:\PS>Get-UCPEvent -TargetType EthernetSwitch -TargetId inst.blue-podf-
3925.eth.1.net.1 -Relation "self, subcomponent" | Select-Object -First 3
```

```
EventId           : 13079
CreatedTime       : 9/27/2013 8:53:10 AM +00:00
Description       : Authentication failure occurred for Ethernet switch
with IP address 10.21.74.212.
EventType         : EthernetSwitchAuthenticationFailureErrorEvent
JobId             :
Severity          : error
TargetId          : inst.blue-podf-3925.eth.1.net.1
TargetType        : EthernetSwitch
CreatedBy         : podf\svc_ucp
RecommendedAction : Contact the system administrator.
Id                : 13079
GlobalResourceId  : inst.blue-podf-3925.event.13079
ResourceType      : Event
InstanceId        : blue-podf-3925

EventId           : 13077
CreatedTime       : 9/27/2013 8:53:09 AM +00:00
Description       : Authentication failure occurred for Ethernet switch
with IP address 10.21.74.212.
EventType         : EthernetSwitchAuthenticationFailureErrorEvent
JobId             :
Severity          : error
TargetId          : inst.blue-podf-3925.eth.1.net.1
TargetType        : EthernetSwitch
CreatedBy         : podf\svc_ucp
```

```
RecommendedAction : Contact the system administrator.
Id               : 13077
GlobalResourceId : inst.blue-podf-3925.event.13077
ResourceType     : Event
InstanceId       : blue-podf-3925

EventId          : 13075
CreatedTime      : 9/27/2013 8:53:08 AM +00:00
Description      : Authentication failure occurred for Ethernet switch
with IP address 10.21.74.212.
EventType        : EthernetSwitchAuthenticationFailureErrorEvent
JobId            :
Severity         : error
TargetId         : inst.blue-podf-3925.eth.1.net.1
TargetType       : EthernetSwitch
CreatedBy        : podf\svc_ucp
RecommendedAction : Contact the system administrator.
Id               : 13075
GlobalResourceId : inst.blue-podf-3925.event.13075
ResourceType     : Event
InstanceId       : blue-podf-3925
```

Related Links

Get-UCPJob

Purge-UCPEvent

Get-UCPFabric

Lists fabrics.

Syntax

Get-UCPFabric [[-FabricId] <String>] [<CommonParameters>]

Description

Lists fabrics.

Parameters

- -FabricId <String>

  – Required? false

  – Position? 2

- Default value

- Accept pipeline input? false

- Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

None

Outputs

Hitachi.UCP.CLI.Domain.Fabric

Notes

This command requires the UCP View privilege.

Example: List all fabrics

```
C:\PS>Get-UCPFabric | Format-List
```

```
FabricName        : Fabric B
ActiveZonesetName : ucp_compute_config_b
FcPorts           : {24.D0.5F.CE.01.01.00.0A, 24.D0.5F.CE.01.01.00.1A,
24.D0.5F.CE.01.01.00.4A, 24.D0.5F.CE.01.01.00.5A
                    ...}
Id                : 1
GlobalResourceId  : inst.v2ProductionB-123-456-789.fc.1.fab.1
ResourceType      : StorageFabric
InstanceId        : v2ProductionB-123-456-789

FabricName        : Fabric A
ActiveZonesetName : ucp_compute_config_a
```

```
FcPorts           : {24.D0.5F.CE.01.01.00.08, 24.D0.5F.CE.01.01.00.18,
24.D0.5F.CE.01.01.00.48, 24.D0.5F.CE.01.01.00.58
                    ...}
Id                : 2
GlobalResourceId  : inst.v2ProductionB-123-456-789.fc.1.fab.2
ResourceType      : StorageFabric
InstanceId        : v2ProductionB-123-456-789
```

Example: Get information for ports in a fabric

```
C:\PS>Get-UCPFabric | Where-Object { $_.Id -eq 2 } | Select -
ExpandProperty FcPorts | Format-Table PortAlias, PortName, FcPortType,
DeviceName -AutoSize


# The Where-Object cmdlet is used to get one of the two fabrics and the
Select-Object cmdlet is used to report the contents of that fabric's
FcPorts. When the initiator is a server, DeviceName is that server's ID.


PortAlias PortName              FcPortType DeviceName
--------- --------              ---------- ----------
Port0     50.00.08.70.00.53.7A.18  Initiator a00a087e-b42f-11e1-b5b5-
de6c62e1293f
Port0     50.00.08.70.00.53.7A.08  Initiator c92fe2c0-b391-11e1-b1cc-
8c192ba3b146
Port0     50.00.08.70.00.53.7B.48  Initiator 7939714f-b3cf-11e1-b0e7-
c85aebf97785
Port0     50.00.08.70.00.53.79.F0  Initiator 6e37f410-b4a7-11e1-94b0-
c6aca3093fbb
Port0     50.00.08.70.00.53.7A.68  Initiator 87d4b28d-b381-11e1-b1ab-
e8843d6f91b3
Port0     50.00.08.70.00.53.7B.00  Initiator e4582df8-a333-11e1-bdd7-
ef1591e6b88e
Port0     50.00.08.70.00.53.79.E0  Initiator 519ba210-b36e-11e1-a395-
87395b8d6cf1
Port0     50.00.08.70.00.53.7A.30  Initiator 45f6c765-b37d-11e1-ac31-
cba134fd5e3e
CL1-C     50.06.0E.80.06.CF.72.02  Target VSP@10.20.90.67
CL2-C     50.06.0E.80.06.CF.72.12  Target VSP@10.20.90.67
CL5-C     50.06.0E.80.06.CF.72.42  Target VSP@10.20.90.67
CL6-C     50.06.0E.80.06.CF.72.52    Target VSP@10.20.90.67
```

Related Links

Get-UCPZone

Set-UCPZone

Remove-UCPZone

Get-UCPFibreChannelSwitch

Gets Fibre Channel switch details.

Syntax

Get-UCPFibreChannelSwitch [[-Id] <String>] [<CommonParameters>]

Description

Gets Fibre Channel switch details. If a Fibre Channel switch ID is specified, that Fibre Channel switch is returned. Otherwise, all Fibre Channel switches are returned in an array.

Parameters

- -Id <String>

  Optionally specifies the ID of the Fibre Channel switch that is to be returned. If not specified, all Fibre Channel switches are returned.

  – Required? false

  – Position? 1

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

None

Outputs

Hitachi.UCP.CLI.Domain.FibreChannelSwitch

Notes

This command requires the UCP View privilege.

Example: List all Fibre Channel switches

```
C:\PS>Get-UCPFibreChannelSwitch | Format-Table Id, IpAddress, Status,
SwitchTopologyRole, Name, FirmwareVersion -AutoSize
```

```
Id IpAddress     Status SwitchTopologyRole Name
FirmwareVersion
-- ---------     ---------- ----                      -
1  10.21.47.132 Active Core Switch        Brocade-6510-R1F-U09
v7.0.1
2  10.21.47.133 Active Core Switch        Brocade-6510-R1F-U10
v7.0.1
3  10.21.47.142 Active Edge Switch        Brocade-5460-R1F-U03-SW-02
v6.3.2d
4  10.21.47.143 Active Edge Switch        Brocade-5460-R1F-U03-SW-03
v6.3.2d
```

Example: Get a Fibre Channel switch

```
C:\PS>Get-UCPFibreChannelSwitch 7
```

```
IpAddress          : 10.21.24.170
Username           : ucpadmin
FirmwareVersion    : v7.1.1
Manufacturer       : Brocade
Model              : Brocade 6510
Name               : R1-BR-6510-A-U38
SerialNumber       : BRW2513H06H
Status             : Active
SwitchTopologyRole : Core Switch
FabricId           : 2
SwitchPorts        : {0, 1, 2, 3...}
Id                 : 7
GlobalResourceId   : inst.v2ProductionB-123-456-789.fc.1.fcs.7
```

```
ResourceType        : FibreChannelSwitch
InstanceId          : v2ProductionB-123-456-789
```

Related Links

New-UCPFibreChannelSwitch

Set-UCPFibreChannelSwitchConnectionInformation

Remove-UCPFibreChannelSwitch

Get-UCPHostNetworkVlan

Gets a server's network uplink configuration.

Syntax

Get-UCPHostNetworkVlan [-ServerId] <String> [<CommonParameters>]

Description

Returns the host's network uplink along with the VLAN IDs they use. The server must be a host in the virtual platform.

Parameters

- -ServerId <String>

  The server to get network VLAN Ids from.

  – Required? true

  – Position? 1

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

None

Outputs

Hitachi.UCP.CLI.Domain.HostUplinkConfigurations

Example: Get a host's network uplink configuration

```
C:\PS>Get-UCPHostNetworkVlan 6e37f410-b4a7-11e1-94b0-c6aca3093fbb |
Select -ExpandProperty UplinkConfigurations | Format-Table Name, Vlans -
AutoSize
```

```
Name    Vlans
----    -----
vmnic0 475-477,482,521
vmnic1 475-477,482,521
```

Related Links

Set-UCPHostNetworkVlan

Get-UCPClusterNetworkVlan

Get-UCPGlobalVlan

Get-UCPEthernetFeature

Set-UCPEthernetFeature

Get-UCPHostProfile

Gets host profile information.

Syntax

Get-UCPHostProfile [[-ProfileId] <String>] -VirtualManagerId <String>
[<CommonParameters>]

Description

Gets host profile information in UCP Director inventory. If a ProfileId is
specified, that host profile is returned. Otherwise, all host profiles are
returned in an array.

Parameters

- -ProfileId <String>

  Optionally specifies the ID of the host profile that is to be returned.
  Otherwise, all host profiles are returned in an array.

  – Required? false

  – Position? 1

  – Default value

  – Accept pipeline input? true (ByPropertyName)

  – Accept wildcard characters? false

- -VirtualManagerId <String>

  Id of the virtual platform manager. Usually 1.

  – Required? true

  – Position? named

  – Default value

  – Accept pipeline input? true (ByPropertyName)

  – Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

String

Outputs

Hitachi.UCP.CLI.Domain.HostProfile

Notes

Host profiles are used by vSphere to reapply configuration details to stateless ESXi compute hosts after every reboot. Host profiles are used by UCP templates for ESXi clusters.

Example: Get host profile information

```
C:\PS>$manager=Get-UCPVirtualPlatformManager

C:\PS>Get-UCPHostProfile -VirtualManagerId $manager.id
```

```
Name             : Profile - CB500-1-05
Id               : hostprofile-30
GlobalResourceId : inst.v2ProductionB-123-456-
789.hostprofile.hostprofile-30
ResourceType     : HostProfile
InstanceId       : v2ProductionB-123-456-789

Name             : SampleHostProfile
Id               : hostprofile-53
GlobalResourceId : inst.v2ProductionB-123-456-
789.hostprofile.hostprofile-53
ResourceType     : HostProfile
InstanceId       : v2ProductionB-123-456-789
```

Example: Get host profile by name

```
C:\PS>Get-UCPHostProfile -VirtualManagerId 1 | where {$_.Name -like "*-
05"}


# Get host profile where the name ends in -05


Name               : Profile - CB500-1-05
Id                 : hostprofile-30
GlobalResourceId   : inst.v2ProductionB-123-456-
789.hostprofile.hostprofile-30
ResourceType       : HostProfile
InstanceId         : v2ProductionB-123-456-789
```

Related Links

New-UCPClusterServiceTemplate

Get-UCPIdentity

Gets details on a specific identity

Syntax

Get-UcpIdentity [[-IdentityId] <String>] [-IdentityType <IdentityType>]
[-IdentityPoolId <String>] [<CommonParameters>]

Description

This cmdlet returns details on a specific identity of types: IP Address, MAC
Address, WWN Address, and UUID. If an IdentityId is provided, the details
of that specific identity will be returned. Otherwise, you may specify an
IdentityType, which will return all identities of that type in an array.

Parameters

- -IdentityId <String>

  Id of a specific identity of any type.

  – Required? false

  – Position? 1

   –   Default value

   –   Accept pipeline input? false

   –   Accept wildcard characters? false

- -IdentityType <IdentityType>

 The type of identities you want returned. Valid values can be retrieved with Get-UCPIdentityType

   –   Required? false

   –   Position? named

   –   Default value

   –   Accept pipeline input? false

   –   Accept wildcard characters? false

- -IdentityPoolId <String>

   –   Id of a specific pool from which to get identities.

   –   Required? false

   –   Position? named

   –   Default value

   –   Accept pipeline input? false

   –   Accept wildcard characters? false

- <CommonParameters>

 This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

None

Outputs

Hitachi.UCP.CLI.Domain.Identity

Notes

This command requires the UCP View privilege.

Example: Get list of WWnAddress identitites

```
C:\PS>Get-UcpIdentity -IdentityType WwnAddress
```

All WwnAddress identities are returned. Just three are shown in this example to conserve space.

```
IdentityId          : 5
IdentityPoolRangeId : 2
Value               : 24:00:D0:5F:CE:01:00:00
Type                : WwnAddress
ServerProfileId     : 1
DateCreated         : 6/10/2014 6:26:14 PM +00:00
DateAssigned        : 6/10/2014 6:26:14 PM +00:00
Id                  : 5
GlobalResourceId    : inst.PODA-1234-5678.id.5
ResourceType        : Identity
InstanceId          : PODA-1234-5678

IdentityId          : 6
IdentityPoolRangeId : 2
Value               : 24:00:D0:5F:CE:01:00:01
Type                : WwnAddress
ServerProfileId     : 1
DateCreated         : 6/10/2014 6:26:14 PM +00:00
DateAssigned        : 6/10/2014 6:26:14 PM +00:00
Id                  : 6
GlobalResourceId    : inst.PODA-1234-5678.id.6
ResourceType        : Identity
InstanceId          : PODA-1234-5678

IdentityId          : 7
IdentityPoolRangeId : 2
Value               : 24:00:D0:5F:CE:01:00:02
Type                : WwnAddress
ServerProfileId     : 1
DateCreated         : 6/10/2014 6:26:14 PM +00:00
DateAssigned        : 6/10/2014 6:26:14 PM +00:00
Id                  : 7
GlobalResourceId    : inst.PODA-1234-5678.id.7
```

```
ResourceType        : Identity
InstanceId          : PODA-1234-5678
```

Example: Get identities in a specified pool (Ipaddress)

```
C:\PS>$ID = Get-UcpIpAddressIdentityPool
Get-UcpIdentity -IdentityPoolId $ID.Id
```

Get the Id of IpAddress pool. Then get identities from that pool. Just first three are shown here to conserve space.

```
IdentityId          : 4
IdentityPoolRangeId : 3
Value               : 10.21.20.11
Type                : IpAddress
ServerProfileId     : 1
DateCreated         : 6/10/2014 6:26:14 PM +00:00
DateAssigned        : 6/10/2014 6:26:14 PM +00:00
Id                  : 4
GlobalResourceId    : inst.PODA-1234-5678.id.4
ResourceType        : Identity
InstanceId          : PODA-1234-5678

IdentityId          : 12
IdentityPoolRangeId : 3
Value               : 10.21.20.12
Type                : IpAddress
ServerProfileId     : 2
DateCreated         : 6/10/2014 6:26:38 PM +00:00
DateAssigned        : 6/10/2014 6:26:38 PM +00:00
Id                  : 12
GlobalResourceId    : inst.PODA-1234-5678.id.12
ResourceType        : Identity
InstanceId          : PODA-1234-5678

IdentityId          : 20
IdentityPoolRangeId : 3
Value               : 10.21.20.13
Type                : IpAddress
ServerProfileId     : 3
DateCreated         : 6/10/2014 6:26:42 PM +00:00
DateAssigned        : 6/10/2014 6:26:42 PM +00:00
Id                  : 20
GlobalResourceId    : inst.PODA-1234-5678.id.20
ResourceType        : Identity
InstanceId          : PODA-1234-5678
```

Related Links

Get-UcpIdentityType

Get-UcpIpAddressIdentityPool

Get-UcpMacAddressIdentityPool

Get-UcpWwnAddressIdentityPool

Get-UcpIdentityType

Gets all valid identity types.

Syntax

Get-UcpIdentityType [<CommonParameters>]

Description

This helper cmdlet returns an array of all valid Identity Types.

Parameters

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer and OutVariable. For more information, see about_CommonParameters (http://go.microsoft.com/fwlink/?LinkID=113216).

Inputs

None

Outputs

system.string

Notes

This command requires the UCP View privilege.

Example: Get all valid identity types

```
C:\PS>Get-UCPIdentityType

IpAddress
MacAddress
Uuid
WwnAddress
```

Related Links

Get-UCPIdentity

Get-UCPImage

Gets image details.

Syntax

Get-UCPImage [[-ImageId] <String>] [-ImageType <ServerImageType>]
[<CommonParameters>]

Description

Gets ESXi image details. If an image ID is specified, that image is
returned. To get all images, specify ImageType as All. Otherwise, all ESXi
images are returned in an array.

Parameters

- -ImageId <String>

  Optionally specifies the ID of the image that is to be returned. If not
  specified, all ESXi images are returned.

  – Required? false

  – Position? 1

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- -ImageType <ServerImageType>

  Optionally specifies the type of the image that is to be returned. If not specified, all ESXi images are returned. Valid values: EsxiStateless, Windows, Linux, Custom, All.

  – Required? false

  – Position? named

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

None

Outputs

Hitachi.UCP.CLI.Domain.Image

Notes

This command requires the UCP View privilege.

Example: List all images

```
C:\PS>$Images = Get-UCPImage -ImageType all

C:\PS>$Images | Select-Object Id, @{n="Name";e={$_.Name}},
@{n="ImageType";e={$_.ImageType}} |  Format-table -AutoSize
```

```
Id Name                                          ImageType
-- ----                                          ---------
3  CentOS6.4                                      Linux
4  RHEL6.4                                        Linux
5  Windows 2012 STD-HFC                           Windows
6  Windows Server 2012 SERVERDATACENTERCORE       Windows
7  Windows 2012 DC-HFC                            Windows
8  Windows Server 2012 SERVERSTANDARDCORE         Windows
9  Windows Server 2008 R2 SERVERSTANDARDCORE      Windows
10 Windows Server 2008 R2 SERVERENTERPRISE        Windows
11 Windows Server 2008 R2 SERVERENTERPRISECORE    Windows
12 Windows Server 2008 R2 SERVERDATACENTER        Windows
13 Windows Server 2008 R2 SERVERDATACENTERCORE    Windows
14 Windows Server 2008 R2 SERVERWEB               Windows
15 Windows Server 2008 R2 SERVERWEBCORE           Windows
16 Win2K8R2-HFC-StdServer                         Windows
17 Windows Server 2008 R2 SERVERSTANDARDCORE      Windows
18 Windows Server 2008 R2 SERVERENTERPRISE        Windows
19 Windows Server 2008 R2 SERVERENTERPRISECORE    Windows
20 Windows Server 2008 R2 SERVERDATACENTER        Windows
21 Windows Server 2008 R2 SERVERDATACENTERCORE    Windows
22 Windows Server 2008 R2 SERVERWEB               Windows
23 Windows Server 2008 R2 SERVERWEBCORE           Windows
24 Win2K8R2-OEM-StdServer                         Windows
25 Windows Server 2012 SERVERSTANDARD             Windows
26 Windows Server 2012 SERVERDATACENTERCORE       Windows
27 Windows Server 2012 SERVERDATACENTER           Windows
28 Windows Server 2012 SERVERSTANDARDCORE         Windows
29 CloneEsxiImage                                 EsxiStateless
1  HitachiESXiImage                               EsxiStateless
30 HitachiEsxiClone-0921                          EsxiStateless
31 TestImage                                      EsxiStateless
2  Custom Image                                   Custom
```

Example: Get an image

```
C:\PS>Get-UCPImage -ImageId 4


KickstartFilePaths : {\\10.21.24.247\REMINST\Boot\x64\Linux\Images\
RHEL6.4\KickstartFiles\RHEL6.4_template.cfg}
Architecture       : x64
Group              :
ImageSizeInBytes   : 3714472930
Language           : en-US
Path               : \Boot\x64\Linux\Images\RHEL6.4
Version            : 6.4
Name               : RHEL6.4
Description        : RHEL 6.4
ImageType          : Linux
Id                 : 4
```

```
GlobalResourceId    : inst.v2ProductionB-123-456-789.cmp.1.img.4
ResourceType        : ServerImage
InstanceId          : v2ProductionB-123-456-789
```

Example: List packages in an image

```
C:\PS>(Get-UCPImage 1).Packages | Format-Table -Property Name, Version,
ReleaseDate -AutoSize


# Package information is kept in the Packages property of an image
object. In this example only three of the values are selected.


Name                          Version
ReleaseDate
----                          -------                              -----
------
scsi-bnx2i                    1.9.1d.v50.1-5vmw.510.0.0.799733     8/2/
2012 3:00:43 AM
sata-sata-promise             2.12-3vmw.510.0.0.799733             8/2/
2012 3:00:43 AM
net-forcedeth                 0.61-2vmw.510.0.0.799733             8/2/
2012 3:00:43 AM
scsi-hfcldd                   4.28.16.1156-1OEM.500.0.0.472560     2/17/
2012 8:57:04 AM
misc-cnic-register            1.1-1vmw.510.0.0.799733              8/2/
2012 3:00:43 AM
misc-drivers                  5.1.0-1.12.1065491                   3/23/
2013 5:10:26 PM
scsi-megaraid-mbox            2.20.5.1-6vmw.510.0.0.799733         8/2/
2012 3:00:41 AM
esx-dvfilter-generic-fastpath 5.1.0-0.0.799733                     8/2/
2012 3:01:09 AM
scsi-ips                      7.12.05-4vmw.510.0.0.799733          8/2/
2012 3:00:42 AM
sata-ahci                     3.0-13vmw.510.0.0.799733             8/2/
2012 3:00:43 AM
sata-sata-svw                 2.3-3vmw.510.0.0.799733              8/2/
2012 3:00:43 AM
scsi-qla4xxx                  5.01.03.2-4vmw.510.0.0.799733        8/2/
2012 3:00:42 AM
net-bnx2                      2.0.15g.v50.11-7vmw.510.1.12.1065491 3/23/
2013 5:10:28 PM
net-e1000                     8.0.3.1-2vmw.510.0.0.799733          8/2/
2012 3:00:41 AM
ata-pata-serverworks          0.4.3-3vmw.510.0.0.799733            8/2/
2012 3:00:43 AM
scsi-megaraid-sas             5.34-4vmw.510.1.12.1065491           3/23/
2013 5:10:28 PM
scsi-mptspi                   4.23.01.00-6vmw.510.0.0.799733       8/2/
2012 3:00:43 AM
```

Commands **187**

ata-pata-hpt3x2n	0.3.4-3vmw.510.0.0.799733	8/2/2012 3:00:42 AM
net-s2io	2.1.4.13427-3vmw.510.0.0.799733	8/2/2012 3:00:43 AM
vmware-fdm	5.1.0-1064983	3/23/2013 8:00:35 AM
net-bnx2x	1.61.15.v50.3-1vmw.510.0.11.1063671	3/22/2013 7:22:24 AM
net-be2net	4.2.327.0-1OEM.500.0.0.472560	8/11/2012 5:02:55 AM
net-igb	2.1.11.1-3vmw.510.1.12.1065491	3/23/2013 5:10:28 PM
scsi-megaraid2	2.00.4-9vmw.510.0.0.799733	8/2/2012 3:00:41 AM
ata-pata-amd	0.3.10-3vmw.510.0.0.799733	8/2/2012 3:00:42 AM
net-cnic	1.10.2j.v50.7-3vmw.510.0.0.799733	8/2/2012 3:00:43 AM
net-tg3	3.123b.v50.1-1vmw.510.1.12.1065491	3/23/2013 5:10:28 PM
scsi-lpfc820	8.2.3.1-127vmw.510.0.0.799733	8/2/2012 3:00:42 AM
hfc	1.28.16-30	3/20/2012 12:59:54 PM
ata-pata-atiixp	0.4.6-4vmw.510.0.0.799733	8/2/2012 3:00:42 AM
esx-tboot	5.1.0-0.0.799733	8/2/2012 3:01:09 AM
ipmi-ipmi-devintf	39.1-4vmw.510.0.0.799733	8/2/2012 3:00:43 AM
scsi-qla2xxx	902.k1.1-9vmw.510.0.0.799733	8/2/2012 3:00:42 AM
net-r8169	6.011.00-2vmw.510.0.0.799733	8/2/2012 3:00:43 AM
scsi-mpt2sas	10.00.00.00-5vmw.510.0.0.799733	8/2/2012 3:00:43 AM
net-e1000e	1.1.2-3vmw.510.1.12.1065491	3/23/2013 5:10:28 PM
scsi-hpsa	5.0.0-21vmw.510.0.0.799733	8/2/2012 3:00:42 AM
ata-pata-via	0.3.3-2vmw.510.0.0.799733	8/2/2012 3:00:42 AM
scsi-aacraid	1.1.5.1-9vmw.510.0.0.799733	8/2/2012 3:00:41 AM
scsi-rste	2.0.2.0088-1vmw.510.0.0.799733	8/2/2012 3:01:09 AM
ata-pata-cmd64x	0.2.5-3vmw.510.0.0.799733	8/2/2012 3:00:42 AM
net-ixgbe	3.7.13.6iov-10vmw.510.1.12.1065491	3/23/2013 5:10:28 PM
ima-qla4xxx	2.01.31-1vmw.510.0.0.799733	8/2/2012 3:00:42 AM

scsi-adp94xx	1.0.8.12-6vmw.510.0.0.799733	8/2/
2012 3:00:42 AM		
tools-light	5.1.0-1.12.1065491	3/23/
2013 5:10:54 PM		
block-cciss	3.6.14-10vmw.510.0.0.799733	8/2/
2012 3:00:42 AM		
scsi-aic79xx	3.1-5vmw.510.0.0.799733	8/2/
2012 3:00:41 AM		
net-vmxnet3	1.1.3.0-3vmw.510.0.0.799733	8/2/
2012 3:00:43 AM		
uhci-usb-uhci	1.0-3vmw.510.0.0.799733	8/2/
2012 3:00:43 AM		
net-sky2	1.20-2vmw.510.0.0.799733	8/2/
2012 3:00:43 AM		
sata-sata-nv	3.5-4vmw.510.0.0.799733	8/2/
2012 3:00:42 AM		
ipmi-ipmi-si-drv	39.1-4vmw.510.1.12.1065491	3/23/
2013 5:10:28 PM		
sata-sata-sil24	1.1-1vmw.510.0.0.799733	8/2/
2012 3:00:43 AM		
ipmi-ipmi-msghandler	39.1-4vmw.510.0.0.799733	8/2/
2012 3:00:43 AM		
sata-ata-piix	2.12-6vmw.510.0.0.799733	8/2/
2012 3:00:43 AM		
ata-pata-sil680	0.4.8-3vmw.510.0.0.799733	8/2/
2012 3:00:43 AM		
ata-pata-pdc2027x	1.0-3vmw.510.0.0.799733	8/2/
2012 3:00:42 AM		
net-enic	1.4.2.15a-1vmw.510.0.0.799733	8/2/
2012 3:00:43 AM		
esx-xserver	5.1.0-0.11.1063671	3/22/
2013 7:22:50 AM		
net-nx-nic	4.0.558-3vmw.510.0.0.799733	8/2/
2012 3:00:43 AM		
esx-xlibs	5.1.0-0.0.799733	8/2/
2012 3:01:09 AM		
sata-sata-sil	2.3-4vmw.510.0.0.799733	8/2/
2012 3:00:43 AM		
ehci-ehci-hcd	1.0-3vmw.510.0.0.799733	8/2/
2012 3:00:43 AM		
ohci-usb-ohci	1.0-3vmw.510.0.0.799733	8/2/
2012 3:00:43 AM		
net-r8168	8.013.00-3vmw.510.0.0.799733	8/2/
2012 3:00:43 AM		
esx-base	5.1.0-1.12.1065491	3/23/
2013 5:10:54 PM		
scsi-fnic	1.5.0.3-1vmw.510.0.0.799733	8/2/
2012 3:00:43 AM		
scsi-mptsas	4.23.01.00-6vmw.510.0.0.799733	8/2/
2012 3:00:41 AM		

Example: Get images for Windows

```
C:\PS>$Windows = Get-UCPImage -ImageType Windows

C:\PS>$Windows | Select-Object Id, @{n="Name";e={$_.Name}},
@{n="Group";e={$_.Group}} | Format-table -Autosize


# Gets all windows images, displaying only Id, Name, and Group.


Id Name                                            Group
-- ----                                            -----
5  Windows Server 2008 R2 SERVERSTANDARDCORE       Win2K8R2SP1
6  Windows Server 2008 R2 SERVERENTERPRISE         Win2K8R2SP1
7  Windows Server 2008 R2 SERVERENTERPRISECORE     Win2K8R2SP1
8  Windows Server 2008 R2 SERVERDATACENTER         Win2K8R2SP1
9  Windows Server 2008 R2 SERVERDATACENTERCORE     Win2K8R2SP1
10 Windows Server 2008 R2 SERVERWEB                Win2K8R2SP1
11 Windows Server 2008 R2 SERVERWEBCORE            Win2K8R2SP1
12 Windows Server 2008 R2 SERVERSTANDARD           Win2K8R2SP1
13 Windows Server 2008 R2 SERVERSTANDARDCORE       Win2K8R2SP1_Japanese
14 Windows Server 2008 R2 SERVERENTERPRISE         Win2K8R2SP1_Japanese
15 Windows Server 2008 R2 SERVERENTERPRISECORE     Win2K8R2SP1_Japanese
16 Windows Server 2008 R2 SERVERDATACENTER         Win2K8R2SP1_Japanese
17 Windows Server 2008 R2 SERVERDATACENTERCORE     Win2K8R2SP1_Japanese
18 Windows Server 2008 R2 SERVERWEB                Win2K8R2SP1_Japanese
19 Windows Server 2008 R2 SERVERWEBCORE            Win2K8R2SP1_Japanese
20 Windows Server 2008 R2 SERVERSTANDARD           Win2K8R2SP1_Japanese
21 Windows Server 2012 SERVERSTANDARD              Windows2012
22 Windows Server 2012 SERVERDATACENTERCORE        Windows2012
23 Windows Server 2012 SERVERSTANDARDCORE          Windows2012
24 Windows Server 2012 SERVERSTANDARD              Windows2012
25 Windows Server 2012 SERVERDATACENTERCORE        Windows2012
26 Windows Server 2012 SERVERDATACENTER            Windows2012
27 Windows Server 2012 SERVERSTANDARDCORE          Windows2012
```

Related Links

New-UCPImage

Set-UCPImage

Remove-UCPImage

Update-UCPActiveImages

Refresh-UCPInventory

New-UCPServiceTemplate

New-UCPClusterServiceTemplate

Get-UCPImageUpdateNotification

Get a list of email accounts registered for ESXi image update notification

Syntax

Get-UCPImageUpdateNotification [<CommonParameters>]

Description

This command returns a list of email accounts that registered to UCP. UCP will send an email to notify these recipients when there is any new ESXi image update available.

Parameters

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

None

Outputs

String

List of email addresses

Notes

Image update notifications are for ESXi images only.

Example: Get a list of registered email account

```
C:\PS>Get-UCPImageUpdateNotification
```

```
server@hds.com
storage@hds.com
```

Related Links

Set-UCPImageUpdateNotification

Get-UcpIpAddressIdentityPool

Gets details on IP Address Pools.

Syntax

Get-UcpIpAddressIdentityPool [[-IdentityPoolId] <String>]
[<CommonParameters>]

Description

This cmdlet returns details on IP Address Pools. If an IP Address Pool Id is provided, details on that individual pool will be returned. Otherwise, all IP Address Pools are returned in an array.

This pool is needed when making a server profile that automatically pulls an IP address from the pool.

Parameters

- -IdentityPoolId <String>

   Optionally specifies the ID of the Identity Pool to retrieve details from. If not specified, details on all Identity Pools are returned.

  – Required? true

  – Position? named

  – Default value

  – Accept pipeline input? false

— Accept wildcard characters? false

• <CommonParameters>

This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

None

Outputs

Hitachi.UCP.CLI.Domain.IdentityPool

Notes

This command requires the UCP View privilege.

Example: Get All IP Address Pools

```
C:\PS>Get-UCPIpAddressIdentityPool
```

```
Ranges           : {3}
IdentityPoolId   : 1
Name             : IpAddresses
Type             : IpAddress
Id               : 1
GlobalResourceId : inst.UCP-12345.idpool.1
ResourceType     : IdentityPool
InstanceId       : UCP-12345
```

Related Links

Get-UcpIpAddressIdentityPoolRange

Get-UCPIdentity

Get-UcpIpAddressIdentityPoolRange

Gets details on IP pool ranges.

Syntax

Get-UcpIpAddressIdentityPoolRange -IdentityPoolId <String>
[<CommonParameters>]

Get-UcpIpAddressIdentityPoolRange -IdentityPoolRangeId <String> -
IdentityPoolId <String> [<CommonParameters>]

Description

This cmdlet returns details on IP Address Pool ranges. If an IP Address Pool
Id is provided, details of all ranges within that pool will be returned.
Otherwise, you may specify a range id to retrieve details on a single range.

Parameters

- -IdentityPoolId <String>

  Specifies the ID of an Identity Pool to retrieve all range details from. If
  not specified, IdentityPoolRangeId must be provided.

  – Required? true

  – Position? named

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- -IdentityPoolRangeId <String>

  Optionally specifies the ID of an Identity Pool Range to retrieve details
  from. If not specified, IdentityPoolId must be provided.

  – Required? true

  – Position? named

  – Default value

— Accept pipeline input? false

— Accept wildcard characters? false

- \<CommonParameters\>

This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

None

Outputs

Hitachi.UCP.CLI.Domain.IdentityPoolRange

Notes

This command requires the UCP View privilege.

Example: Get details on all IP ranges in a pool

```
C:\PS>Get-UcpIpAddressIdentityPoolRange -IdentityPoolId 1
```

```
SubnetMask         : 255.255.255.0
DefaultGateway     : 10.21.19.1
Dns                : 10.21.19.246
IdentityPoolRangeId : 3
StartAddress       : 10.21.19.50
EndAddress         : 10.21.19.60
IdentityPoolId     : 1
Allocated          : {}
Available          : 11
Total              : 11
Id                 : 3
GlobalResourceId   : inst.UCP-12345.idpoolrange.3
ResourceType       : IdentityPoolRange
InstanceId         : UCP-12345

SubnetMask         : 255.255.255.0
```

```
DefaultGateway      : 10.21.19.1
Dns                 : 10.21.124.1
IdentityPoolRangeId : 4
StartAddress        : 10.21.19.110
EndAddress          : 10.21.19.112
IdentityPoolId      : 1
Allocated           : {}
Available           : 3
Total               : 3
Id                  : 4
GlobalResourceId    : inst.UCP-12345.idpoolrange.4
ResourceType        : IdentityPoolRange
InstanceId          : UCP-12345
```

Example: Get details on a specified IP range

```
C:\PS>Get-UCPIpAddressIdentityPoolRange -IdentityPoolRangeId 3
```

```
SubnetMask          : 255.255.255.0
DefaultGateway      : 10.21.19.1
Dns                 : 10.21.19.246
IdentityPoolRangeId : 3
StartAddress        : 10.21.19.50
EndAddress          : 10.21.19.60
IdentityPoolId      : 1
Allocated           : {}
Available           : 11
Total               : 11
Id                  : 3
GlobalResourceId    : inst.UCP-12345.idpoolrange.3
ResourceType        : IdentityPoolRange
InstanceId          : UCP-12345
```

Related Links

Get-UCPIPAddressIdentityPool

Get-UCPJob

Gets UCP job details.

Syntax

Get-UCPJob [[-JobId] <String>] [-JobType <String>] [-JobStatus <String>] [-TargetType <String>] [-TargetId <String>] [-Relation <String>] [-FromDateTime <DateTime>] [-ToDateTime <DateTime>] [<CommonParameters>]

Description

Gets UCP job details. Use optional filter parameters to manage the number of jobs returned.

Parameters

- -JobId <String>

  Optionally specifies the ID of the UCP job that is to be returned. When present, optional filter parameters are invalid.

  – Required? false

  – Position? 1

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- -JobType <String>

  Optional filter for narrowing the search results to only jobs of a specified type.

  The complete list of JobTypes are too numerous to add here. However, the JobType value can be read from a known job and then used as filter criteria to look for all other jobs of the same type.

  – Required? false

  – Position? named

  – Default value

  – Accept pipeline input? false

    – Accept wildcard characters? false

- -JobStatus <String>

  Optional filter that specifies the status of the UCP jobs that are to be returned. Valid values are Running, Success, or Error. Invalid if the Id parameter is specified.

  – Required? false

  – Position? named

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- -TargetType <String>

  Optional filter to narrow the list of jobs to only those for a specified TargetType.

  The complete list of TargetTypes are too numerous to add here. However, a likely goal is to search for all other instances of one known job that has occurred. Hence, the value for TargetType in the known job can then be used as a search criteria to find all other times that a job was executed against the same TargetType.

  – Required? false

  – Position? named

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- -TargetId <String>

  Optional filter to specify the target ID of a UCP resource against which a job was executed. Using this parameter also requires that the correct TargetType be supplied.

  – Required? false

- – Position? named

- – Default value

- – Accept pipeline input? false

- – Accept wildcard characters? false

- -Relation <String>

  Optionally used for listing jobs targeted to only the specified resource or to the specified resource plus all sub-components.

  Possible values for this parameter are self, subcomponent.

  - – Required? false

  - – Position? named

  - – Default value

  - – Accept pipeline input? false

  - – Accept wildcard characters? false

- -FromDateTime <DateTime>

  Optional filter that specifies the beginning date and time of the UCP jobs that are to be returned. Must be earlier than ToDateTime if it is present.

  - – Required? false

  - – Position? named

  - – Default value

  - – Accept pipeline input? false

  - – Accept wildcard characters? false

- -ToDateTime <DateTime>

  Optional filter that specifies the ending date and time of the UCP jobs that are to be returned. Must be later than FromDateTime if it is present.

  – Required? false

  – Position? named

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

None

Outputs

Hitachi.UCP.CLI.Domain.UcpJob

Notes

This command requires the UCP View privilege.

Example: Get recent user initiated jobs that targeted servers

```
C:\PS>Get-UCPJob -TargetType Server | Where-Object {$_.CreatedBy -ne
"UCP\svc_ucp"} | Select-Object -First 5


# Where-Object is used to filter out all jobs initiated by the system
(in this example, UCP Director runs as UCP\svc_ucp).
```

200   Commands

```
JobId            : 204
CreatedBy        : UCP\ucpadmin
EndTime          :
Name             : Deploy image to server
Progress         : 0
StartTime        : 9/24/2013 8:16:56 PM +00:00
Status           : Running
TargetId         : inst.v2ProductionB-123-456-789.cmp.1.ser.dc62699b-
8fbf-11e1-8af8-8d51dd9b5240
TargetType       : Server
Type             : ServerDeployImage
Events           : {585, 588, 589, 590}
Id               : 204
GlobalResourceId : inst.v2ProductionB-123-456-789.job.204
ResourceType     : Job
InstanceId       : v2ProductionB-123-456-789

JobId            : 196
CreatedBy        : UCP\Administrator
EndTime          : 9/24/2013 8:10:52 PM +00:00
Name             : Reset server
Progress         : 100
StartTime        : 9/24/2013 8:10:29 PM +00:00
Status           : Success
TargetId         : inst.v2ProductionB-123-456-789.cmp.1.ser.f912356c-
8fed-11e1-b5f4-a1de70d1e7f3
TargetType       : Server
Type             : ServersReset
Events           : {541, 544, 545}
Id               : 196
GlobalResourceId : inst.v2ProductionB-123-456-789.job.196
ResourceType     : Job
InstanceId       : v2ProductionB-123-456-789

JobId            : 195
CreatedBy        : UCP\Adminstrator
EndTime          : 9/24/2013 8:09:41 PM +00:00
Name             : Reset server
Progress         : 0
StartTime        : 9/24/2013 8:09:39 PM +00:00
Status           : Error
TargetId         : inst.v2ProductionB-123-456-789.cmp.1.ser.f912356c-
8fed-11e1-b5f4-a1de70d1e7f3
TargetType       : Server
Type             : ServersReset
Events           : {536}
Id               : 195
GlobalResourceId : inst.v2ProductionB-123-456-789.job.195
ResourceType     : Job
InstanceId       : v2ProductionB-123-456-789
```

Example: Get recent user initiated jobs that targeted a specific server

```
C:\PS>Get-UCPJob -TargetType Server -TargetId inst.UCP-
12345.cmp.1.ser.a8730650-0919-11e2-baa2-d0c6dceef8b7 | Where-Object {$_
.CreatedBy -ne "UCP\svc_ucp"} | Select-Object -First 10 | Format-Table
JobId, Name, Status, StartTime -AutoSize


# Where-Object is used to filter out all jobs initiated by the system
(in this example, UCP Director runs as UCP\svc_ucp).


JobId Name                    Status StartTime
----- ----                    ------ ---------
170   Deploy image to server Success  9/12/2013 4:21:31 PM +00:00
170   Deploy image to server Success  9/12/2013 4:40:31 PM +00:00
```

Example: Get all running jobs

```
C:\PS>Get-UCPJob -JobStatus Running




JobId            : 207
CreatedBy        : UCP\Administrator
EndTime          :
Name             : Apply template
Progress         : 0
StartTime        : 9/24/2013 8:18:09 PM +00:00
Status           : Running
TargetId         : inst.v2ProductionB-123-456-789.servicetemplate.1
TargetType       : ServiceTemplate
Type             : TemplateApply
Events           : {593}
Id               : 207
GlobalResourceId : inst.v2ProductionB-123-456-789.job.207
ResourceType     : Job
InstanceId       : v2ProductionB-123-456-789

JobId            : 205
CreatedBy        : UCP\ucpadmin
EndTime          :
Name             : Create cluster from template
Progress         : 0
StartTime        : 9/24/2013 8:17:19 PM +00:00
Status           : Running
TargetId         : inst.v2ProductionB-123-456-789
TargetType       : Instance
```

```
Type          : ClusterCreate
Events        : {592}
Id            : 205
GlobalResourceId  : inst.v2ProductionB-123-456-789.job.205
ResourceType  : Job
InstanceId    : v2ProductionB-123-456-789

JobId         : 204
CreatedBy     : UCP\Administrator
EndTime       :
Name          : Deploy image to server
Progress      : 0
StartTime     : 9/24/2013 8:16:56 PM +00:00
Status        : Running
TargetId      : inst.v2ProductionB-123-456-789.cmp.1.ser.dc62699b-
8fbf-11e1-8af8-8d51dd9b5240
TargetType    : Server
Type          : ServerDeployImage
Events        : {585, 588, 589, 590}
Id            : 204
GlobalResourceId  : inst.v2ProductionB-123-456-789.job.204
ResourceType  : Job
InstanceId    : v2ProductionB-123-456-789
```

Example: Get a specific job

```
C:\PS>Get-UCPJob -JobId 196
```

```
JobId         : 196
CreatedBy     : UCP\ucpadmin
EndTime       : 9/24/2013 8:10:52 PM +00:00
Name          : Reset server
Progress      : 100
StartTime     : 9/24/2013 8:10:29 PM +00:00
Status        : Success
TargetId      : inst.v2ProductionB-123-456-789.cmp.1.ser.f912356c-
8fed-11e1-b5f4-a1de70d1e7f3
TargetType    : Server
Type          : ServersReset
Events        : {541, 544, 545}
Id            : 196
GlobalResourceId  : inst.v2ProductionB-123-456-789.job.196
ResourceType  : Job
InstanceId    : v2ProductionB-123-456-789
```

Example: Get subcomponent job of 'Storage'

```
C:\PS>Get-UCPJob -TargetType Storage -TargetId inst.blue-podf-
3925.stor.1 -Relation SubComponent | Select-Object -First 3
```

```
JobId             : 1302
CreatedBy         : podf\ucpadmin
EndTime           : 9/27/2013 8:53:33 AM +00:00
Name              : Create a copy group
Progress          : 100
StartTime         : 9/27/2013 8:53:29 AM +00:00
Status            : Success
TargetId          : inst.blue-podf-3925.stor.1.ss.53106
TargetType        : StorageSystem
Type              : ReplicationCreateCopyGroup
Events            : {13107}
Id                : 1302
GlobalResourceId  : inst.blue-podf-3925.job.1302
ResourceType      : Job
InstanceId        : blue-podf-3925

JobId             : 1295
CreatedBy         : podf\ucpadmin
EndTime           : 9/27/2013 8:51:18 AM +00:00
Name              : Create a copy group
Progress          : 100
StartTime         : 9/27/2013 8:51:14 AM +00:00
Status            : Success
TargetId          : inst.blue-podf-3925.stor.1.ss.53106
TargetType        : StorageSystem
Type              : ReplicationCreateCopyGroup
Events            : {13004}
Id                : 1295
GlobalResourceId  : inst.blue-podf-3925.job.1295
ResourceType      : Job
InstanceId        : blue-podf-3925

JobId             : 1292
CreatedBy         : podf\ucpadmin
EndTime           : 9/27/2013 8:49:04 AM +00:00
Name              : Create a copy group
Progress          : 100
StartTime         : 9/27/2013 8:48:59 AM +00:00
Status            : Success
TargetId          : inst.blue-podf-3925.stor.1.ss.53106
TargetType        : StorageSystem
Type              : ReplicationCreateCopyGroup
Events            : {13001}
```

```
Id                : 1292
GlobalResourceId  : inst.blue-podf-3925.job.1292
ResourceType      : Job
InstanceId        : blue-podf-3925
```

Related Links

Get-UCPEvent

Purge-UCPJob

Get-UCPJournal

Gets journal details.

Syntax

Get-UCPJournal [-StorageSystemId] <String> [[-JournalId] <String>] [<CommonParameters>]

Description

Gets the details of all the journals being used for asynchronous replication. Or, if a journal Id is specified, returns details for that journal only.

Parameters

- -StorageSystemId <String>

  Specify the Id of the storage system for which the journals are required

  – Required? true

  – Position? 1

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- -JournalId <String>

  Optionally specify the Id of the journal for which the details are required. If not specified, all details for all journals are returned.

  – Required? false

  – Position? 2

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

String

Outputs

Hitachi.UCP.CLI.Domain.StorageSystemJournal

Notes

This command requires the UCP View privilege.

Example: Get journal information

```
C:\PS>Get-UCPJournal -StorageSystemId 53106
```

```
CapacityInBytes   : 107374182400
InflowControlFlag : 1
DataOverflowWatch : 60
```

```
StorageSystemId   : 53106
PairedJournals    : {}
JournalVolumeIds  : {14861, 14862}
Id                : 4
GlobalResourceId  : inst.blue-podf-3965.stor.1.ss.53106.journal.4
ResourceType      : StorageJournal
InstanceId        : blue-podf-3965
```

Example: Get journal information for journal with Id 4

```
C:\PS>Get-UCPJournal -StorageSystemId 53106 -JournalId 4
```

```
CapacityInBytes   : 107374182400
InflowControlFlag : 1
DataOverflowWatch : 60
StorageSystemId   : 53106
PairedJournals    : {}
JournalVolumeIds  : {14861, 14862}
Id                : 4
GlobalResourceId  : inst.blue-podf-3965.stor.1.ss.53106.journal.4
ResourceType      : StorageJournal
InstanceId        : blue-podf-3965
```

Related Links

New-UCPJournal

Expand-UCPJournal

Remove-UCPJournal

Get-UCPJournalVolume

Gets all journal volumes

Syntax

Get-UCPJournalVolume [-StorageSystemId] <String>
[<CommonParameters>]

Description

Gets all the journal volumes available to create journals for asynchronous replication.

Parameters

- -StorageSystemId <String>

  Specify the Id of the storage system for which the journal volumes are required

  — Required? true

  — Position? 1

  — Default value

  — Accept pipeline input? false

  — Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

String

Outputs

Hitachi.UCP.CLI.Domain.StorageSystemJournalVolume

Example: Get journal volumes

```
C:\PS>Get-UCPJournalVolume -StorageSystemId 53106


# Gets all journal volumes which could be added to a journal.
```

```
Chassis            : 6
ArrayGroup         : 48
JournalId          :
StorageSystemId    : 53106
RaidType           : RAID5(3D+1P)
DiskModel          : DKR2D-H2R0AT
TotalCapacityInBytes : 32212254720
Id                 : 14135
GlobalResourceId   : inst.v2ProductionE-123-456-
789.stor.1.ss.53106.journalVolume.14135
ResourceType       : StorageJournalVolume
InstanceId         : v2ProductionE-123-456-789

Chassis            : 6
ArrayGroup         : 48
JournalId          :
StorageSystemId    : 53106
RaidType           : RAID5(3D+1P)
DiskModel          : DKR2D-H2R0AT
TotalCapacityInBytes : 32212254720
Id                 : 14136
GlobalResourceId   : inst.v2ProductionE-123-456-
789.stor.1.ss.53106.journalVolume.14136
ResourceType       : StorageJournalVolume
InstanceId         : v2ProductionE-123-456-789

Chassis            : 6
ArrayGroup         : 48
JournalId          :
StorageSystemId    : 53106
RaidType           : RAID5(3D+1P)
DiskModel          : DKR2D-H2R0AT
TotalCapacityInBytes : 32212254720
Id                 : 14137
GlobalResourceId   : inst.v2ProductionE-123-456-
789.stor.1.ss.53106.journalVolume.14137
ResourceType       : StorageJournalVolume
InstanceId         : v2ProductionE-123-456-789
```

Related Links

Get-UCPStorageSystem

New-UCPJournal

Get-UCPJournal

Get-UCPLinuxServiceTemplate

Returns information on Linux service templates.

Syntax

Get-UCPLinuxServiceTemplate [[-ServiceTemplateId] <String>]
[<CommonParameters>]

Description

This cmdlet returns detailed information on Linux Service Templates. If a
ServiceTemplateId belonging to a Linux Service Template is specified, only
that template will be returned. Else, all Linux Service Templates will be
returned in an array.

Parameters

- -ServiceTemplateId <String>

  The ID of a specific Linux Service Template

  – Required? false

  – Position? 1

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug,
  ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer,
  PipelineVariable, and OutVariable. For more information, see about_
  CommonParameters (http://go.microsoft.com/fwlink/
  ?LinkID=113216).

Inputs

None

Outputs

Hitachi.UCP.CLI.Domain.UcpLinuxServiceTemplate

Notes

Requires UCP View privilege

Example: Get specified Linux service template

```
C:\PS>Get-UCPLinuxServiceTemplate -ServiceTemplateId 1
```

```
BootVolumeStorageSystemId : 66716
BootVolumePoolId          : 1
BootVolumeSizeInBytes     : 148176371712
KickstartFileLocation     : \\wds\REMINST\Boot\x64\Linux\Images\
RHEL6.4\KickstartFiles\RHEL6.4_template.cfg
Id                        : 1
Name                      : Blade05-Linux
BootImageId               : 7
BootImageName             : RHEL6.4
BootImageType             : Linux
ServiceTemplateType       : Linux
ComputeVlanIds            : 20-22
GlobalResourceId          : inst.PODA-1234-5678.svctmplt.1
ResourceType              : ServiceTemplate
InstanceId                : PODA-1234-5678
```

Related Links

New-UCPLinuxServiceTemplate

Get-UcpMacAddressIdentityPool

Gets details on the MAC address pool

Syntax

Get-UcpMacAddressIdentityPool [[-IdentityPoolId] <String>]
[<CommonParameters>]

Description

This cmdlet returns details on MAC the address pool.

This pool is needed when making a server profile that automatically pulls MAC addresses from the pool.

Parameters

- -IdentityPoolId <String>

  Optionally specifies the ID of the Identity Pool to retrieve details from. If not specified, details on all Identity Pools are returned.

  – Required? false

  – Position? 1

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

None

Outputs

Hitachi.UCP.CLI.Domain.MacAddressIdentityPool

Notes

This command requires the UCP View privilege.

Example: Get all MAC address identity pools

```
C:\PS>Get-UCPMacAddressIdentityPool
```

```
Ranges            : {1}
IdentityPoolId    : 2
Name              : Default MacAddresses
Type              : MacAddress
Id                : 2
GlobalResourceId  : inst.UCP-12345.idpool.2
ResourceType      : IdentityPool
InstanceId        : UCP-12345
```

Related Links

Get-UCPMacAddressIdentityPoolRange

Get-UCPMacAddressIdentityPoolRange

Gets details on MAC pool ranges.

Syntax

Get-UcpMacAddressIdentityPoolRange -IdentityPoolId <String> [<CommonParameters>]

Get-UcpMacAddressIdentityPoolRange -IdentityPoolRangeId <String> -IdentityPoolId <String> [<CommonParameters>]

Description

This cmdlet returns details on MAC Address Pool ranges. If a MAC Address Pool Id is provided, details of all ranges within that pool will be returned. Otherwise, you may specify a range id to retrieve details on a single range.

Parameters

- -IdentityPoolId <String>

  Specifies the ID of an Identity Pool to retrieve all range details from. If not specified, IdentityPoolRangeId must be provided.

- – Required? true

- – Position? named

- – Default value

- – Accept pipeline input? false

- – Accept wildcard characters? false

- -IdentityPoolRangeId <String>

  Optionally specifies the ID of an Identity Pool Range to retrieve details from. If not specified, IdentityPoolId must be provided.

  - – Required? true

  - – Position? named

  - – Default value

  - – Accept pipeline input? false

  - – Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

None

Outputs

Hitachi.UCP.CLI.Domain.MacAddressIdentityPoolRange

Notes

Requires the UCP View privilege.

Example: Get all ranges in specified MAC address pool

```
C:\PS>Get-UcpMacAddressIdentityPoolRange -IdentityPoolId 2


IdentityPoolRangeId : 1
StartAddress        : D0:5F:CE:01:00:00
EndAddress          : D0:5F:CE:01:23:FF
IdentityPoolId      : 2
Allocated           : {}
Available           : 9215
Total               : 9215
Id                  : 1
GlobalResourceId    : inst.UCP-12345.idpoolrange.1
ResourceType        : IdentityPoolRange
InstanceId          : UCP-12345
```

Related Links

Get-UcpMacAddressIdentityPool

Get-UCPMonitorMode

Gets the monitor mode for a resource type.

Syntax

Get-UCPMonitorMode [-ResourceType] <MonitorResourceType> [-GlobalResourceId <String>] [<CommonParameters>]

Description

The monitor mode dictates how UCP handles SNMP events from resources. Report will forward messages to the virtual platform. Monitor collects events without forwarding to the platform. Off means that events are not collected.

Parameters

- -ResourceType <MonitorResourceType>

  Using this required parameter returns the monitor mode for the specified resource type. Valid values: Ethernet, FibreChannel, Storage, Compute, FibreChannelSwitchPort, EthernetSwitchPort.

  – Required? true

- – Position? 1

- – Default value

- – Accept pipeline input? true (ByPropertyName)

- – Accept wildcard characters? false

- -GlobalResourceId <String>

  Applicable only to Ethernet and Fibre switch ports where a single port is specified by its global resource ID.

  - – Required? false

  - – Position? named

  - – Default value

  - – Accept pipeline input? false

  - – Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

None

Outputs

Hitachi.UCP.CLI.Domain.MonitorMode

Notes

The UCP View privilege is required.

Example: Get Monitor mode for specified resource type

```
C:\PS>Get-UCPMonitorMode -ResourceType Storage


# This retrieves the monitor mode for the top level Storage resource
type.


Report
```

Example: Get the monitor mode for a specified Ethernet switch port

```
C:\PS>Get-UCPMonitorMode -ResourceType EthernetSwitchPort -
GlobalResourceId "inst.v2ProductionA-123-456-
789.eth.1.net.1.port.TenGigabitEthernet 0/60"


# Surround the switch port's global resource Id with quotes.

Off
```

Related Links

Get-UCPResourceType

Set-UCPMonitorMode

Get-UCPMonitorState

Gets the monitor state for a resource type.

Syntax

Get-UCPMonitorState [[-ResourceType] <TopLevelMonitorResourceType>]
[<CommonParameters>]

Description

Returns a composite health state for all resources within the specified
resource type.

Values can be Ok, Warning, Error, Unknown, or NotApplicable.

If a resource type is not supplied, the monitor state for all resource types are returned.

Parameters

- -ResourceType <TopLevelMonitorResourceType>

  Optionally specifies the resource type for which to return the monitor state.

  Valid values: Ethernet, FibreChannel, Storage, Compute.

  – Required? false

  – Position? 1

  – Default value

  – Accept pipeline input? true (ByPropertyName)

  – Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

Hitachi.UCP.CLI.Domain.MonitorResourceType

Outputs

Hitachi.UCP.CLI.Domain.MonitorState

Example: Get monitor state for Ethernet

```
C:\PS>Get-UCPMonitorState –ResourceType Ethernet
```

```
# The monitor state is returned for all Ethernet switches and Ethernet
switch ports. To be concise, this example is truncated after the third
item.


ResourceType      : Ethernet
GlobalResourceId  : inst.UCP-781932.eth.1
State             : Warning
NumErrors         : 0
NumWarnings       : 81
NumUnknowns       : 0
NumOks            : 53
UpdatedDateTime   : 12/20/2013 12:08:22 AM +00:00
MonitorIndicators : {EthernetSwitches}

ResourceType      : EthernetSwitch
GlobalResourceId  : inst.UCP-781932.eth.1.net.2
State             : Warning
NumErrors         : 0
NumWarnings       : 40
NumUnknowns       : 0
NumOks            : 27
UpdatedDateTime   : 12/20/2013 12:08:22 AM +00:00
MonitorIndicators : {Temperature, Fan, PowerSupply,
ProcessorPerformance...}

ResourceType      : EthernetSwitchPort
GlobalResourceId  : inst.UCP-781932.eth.1.net.2.port.Ethernet1/15
State             : Ok
NumErrors         : 0
NumWarnings       : 0
NumUnknowns       : 0
NumOks            : 1
UpdatedDateTime   : 12/20/2013 12:08:22 AM +00:00
MonitorIndicators : {InterfaceHealth, InterfacePerformance}
```

Example: Get monitor state for Compute

```
C:\PS>Get-UCPMonitorState -ResourceType Compute


# Returns the monitor states for all resources in the ResourceType of
Compute. Includes chassis and servers. To be concise, this example is
truncated after the fourth item.


ResourceType      : Compute
GlobalResourceId  : inst.UCP-781932.cmp.1
State             : Ok
NumErrors         : 0
NumWarnings       : 0
NumUnknowns       : 0
```

```
NumOks            : 12
UpdatedDateTime   : 12/20/2013 12:07:58 AM +00:00
MonitorIndicators : {Chassis}


ResourceType      : Chassis
GlobalResourceId  : inst.UCP-781932.cmp.1.ch.Hitachi_0_323GG-RE3A1NBX1-
Y00000056
State             : Ok
NumErrors         : 0
NumWarnings       : 0
NumUnknowns       : 0
NumOks            : 12
UpdatedDateTime   : 12/20/2013 12:07:58 AM +00:00
MonitorIndicators : {ChassisHealth, FanModules, PowerSupplyModules,
ManagementModules...}


ResourceType      : Server
GlobalResourceId  : inst.UCP-781932.cmp.1.ser.c669a174-ed4e-11e1-a564-
f2185a819f25
State             : Ok
NumErrors         : 0
NumWarnings       : 0
NumUnknowns       : 0
NumOks            : 1
UpdatedDateTime   : 12/20/2013 12:07:58 AM +00:00
MonitorIndicators : {ServerHealth}


ResourceType      : Server
GlobalResourceId  : inst.UCP-781932.cmp.1.ser.9c6ccfef-ea70-11e1-8680-
9268763c4ba1
State             : Ok
NumErrors         : 0
NumWarnings       : 0
NumUnknowns       : 0
NumOks            : 1
UpdatedDateTime   : 12/20/2013 12:07:58 AM +00:00
MonitorIndicators : {ServerHealth}
```

Related Links

Get-UCPResourceType

Get-UCPPackage

Lists the packages from the ESXi image repository locations known to UCP.

Syntax

Get-UCPPackage [[-PackageId] <String>] [<CommonParameters>]

Description

This commandlet is for ESXi images only. Packages are ESXi driver bundles.

If PackageId is specified, only information for the specified package will be returned.

Parameters

- -PackageId <String>

  Optionally specifies the ID of the package that is to be returned. If not specified, all packages are returned.

  – Required? false

  – Position? 1

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

None

Outputs

Hitachi.UCP.CLI.Domain.Package

Notes

This command requires the UCP View privilege.

Example: List packages

```
C:\PS>$Packages = Get-UCPPackage

C:\PS>$Packages | Select-Object Id, @{n="Name";e={$_.Name}},
@{n="Vendor";e={$_.Vendor}} | Format-Table -AutoSize
```

```
Id                                                          Name
Vendor
--                                                          ----
------
VMware_bootbank_scsi-bnx2i_1.9.1d.v50.1-5vmw.510.0.0.799733     scsi-
bnx2i                   VMware
VMware_bootbank_sata-sata-promise_2.12-3vmw.510.0.0.799733     sata-
sata-promise            VMware
VMware_bootbank_ipmi-ipmi-devintf_39.1-4vmw.510.0.0.799733     ipmi-
ipmi-devintf            VMware
Hitachi_bootbank_scsi-hfcldd_4.28.16.1156-1OEM.500.0.0.472560  scsi-
hfcldd                  Hitachi
VMware_bootbank_misc-cnic-register_1.1-1vmw.510.0.0.799733     misc-
cnic-register           VMware
VMware_bootbank_esx-xlibs_5.1.0-0.0.799733                    esx-
xlibs                   VMware
VMware_bootbank_scsi-megaraid-mbox_2.20.5.1-6vmw.510.0.0.799733 scsi-
megaraid-mbox           VMware
VMware_bootbank_scsi-ips_7.12.05-4vmw.510.0.0.799733   scsi-ips
VMware
VMware_bootbank_sata-ahci_3.0-13vmw.510.0.0.799733           sata-
ahci                    VMware
VMware_bootbank_sata-sata-svw_2.3-3vmw.510.0.0.799733        sata-
sata-svw                VMware
VMware_locker_tools-light_5.1.0-1.12.1065491                tools-
light                   VMware
VMware_bootbank_net-cnic_1.10.2j.v50.7-3vmw.510.0.0.799733 net-cnic
VMware
VMware_bootbank_net-e1000_8.0.3.1-2vmw.510.0.0.799733        net-
e1000                   VMware
VMware_bootbank_ata-pata-serverworks_0.4.3-3vmw.510.0.0.799733 ata-
pata-serverworks        VMware
VMware_bootbank_scsi-megaraid-sas_5.34-4vmw.510.1.12.1065491   scsi-
megaraid-sas            VMware
VMware_bootbank_scsi-mptspi_4.23.01.00-6vmw.510.0.0.799733     scsi-
mptspi                  VMware
```

```
VMware_bootbank_ata-pata-hpt3x2n_0.3.4-3vmw.510.0.0.799733        ata-
pata-hpt3x2n            VMware
VMware_bootbank_net-s2io_2.1.4.13427-3vmw.510.0.0.799733  net-s2io
VMware
VMware_bootbank_net-bnx2x_1.61.15.v50.3-1vmw.510.0.11.1063671    net-
bnx2x                   VMware
VMware_bootbank_net-bnx2_2.0.15g.v50.11-7vmw.510.1.12.1065491 net-bnx2
VMware
VMware_bootbank_scsi-aic79xx_3.1-5vmw.510.0.0.799733             scsi-
aic79xx                 VMware
VMware_bootbank_net-igb_2.1.11.1-3vmw.510.1.12.1065491    net-igb
VMware
VMware_bootbank_scsi-megaraid2_2.00.4-9vmw.510.0.0.799733        scsi-
megaraid2               VMware
VMware_bootbank_ata-pata-amd_0.3.10-3vmw.510.0.0.799733          ata-
pata-amd                VMware
VMware_bootbank_esx-dvfilter-generic-fastpath_5.1.0-0.0.799733 esx-
dvfilter-generic-fastpath VMware
VMware_bootbank_net-tg3_3.123b.v50.1-1vmw.510.1.12.1065491 net-tg3
VMware
VMware_bootbank_scsi-lpfc820_8.2.3.1-127vmw.510.0.0.799733       scsi-
lpfc820                 VMware
Hitachi_bootbank_hfc_1.28.16-30                          hfc
Hitachi
VMware_bootbank_misc-drivers_5.1.0-1.12.1065491                 misc-
drivers                 VMware
VMware_bootbank_esx-tboot_5.1.0-0.0.799733                      esx-
tboot                   VMware
VMware_bootbank_net-forcedeth_0.61-2vmw.510.0.0.799733           net-
forcedeth               VMware
VMware_bootbank_scsi-qla2xxx_902.k1.1-9vmw.510.0.0.799733        scsi-
qla2xxx                 VMware
VMware_bootbank_net-r8169_6.011.00-2vmw.510.0.0.799733           net-
r8169                   VMware
VMware_bootbank_scsi-mpt2sas_10.00.00.00-5vmw.510.0.0.799733     scsi-
mpt2sas                 VMware
VMware_bootbank_net-e1000e_1.1.2-3vmw.510.1.12.1065491           net-
e1000e                  VMware
VMware_bootbank_scsi-hpsa_5.0.0-21vmw.510.0.0.799733             scsi-
hpsa                    VMware
VMware_bootbank_ata-pata-via_0.3.3-2vmw.510.0.0.799733           ata-
pata-via                VMware
VMware_bootbank_scsi-aacraid_1.1.5.1-9vmw.510.0.0.799733         scsi-
aacraid                 VMware
VMware_bootbank_scsi-rste_2.0.2.0088-1vmw.510.0.0.799733         scsi-
rste                    VMware
VMware_bootbank_ata-pata-cmd64x_0.2.5-3vmw.510.0.0.799733        ata-
pata-cmd64x             VMware
VMware_bootbank_net-ixgbe_3.7.13.6iov-10vmw.510.1.12.1065491     net-
ixgbe                   VMware
VMware_bootbank_scsi-mptsas_4.23.01.00-6vmw.510.0.0.799733       scsi-
mptsas                  VMware
```

```
VMware_bootbank_scsi-adp94xx_1.0.8.12-6vmw.510.0.0.799733      scsi-
adp94xx              VMware
VMware_bootbank_scsi-qla4xxx_5.01.03.2-4vmw.510.0.0.799733     scsi-
qla4xxx              VMware
VMware_bootbank_block-cciss_3.6.14-10vmw.510.0.0.799733        block-
cciss                VMware
VMware_bootbank_uhci-usb-uhci_1.0-3vmw.510.0.0.799733          uhci-
usb-uhci             VMware
VMware_bootbank_net-vmxnet3_1.1.3.0-3vmw.510.0.0.799733        net-
vmxnet3              VMware
VMware_bootbank_net-sky2_1.20-2vmw.510.0.0.799733     net-sky2
VMware
VMware_bootbank_esx-base_5.1.0-1.12.1065491           esx-base
VMware
VMware_bootbank_sata-sata-nv_3.5-4vmw.510.0.0.799733           sata-
sata-nv              VMware
VMware_bootbank_ipmi-ipmi-si-drv_39.1-4vmw.510.1.12.1065491    ipmi-
ipmi-si-drv          VMware
VMware_bootbank_sata-sata-sil24_1.1-1vmw.510.0.0.799733        sata-
sata-sil24           VMware
VMware_bootbank_ata-pata-pdc2027x_1.0-3vmw.510.0.0.799733      ata-
pata-pdc2027x        VMware
VMware_bootbank_sata-ata-piix_2.12-6vmw.510.0.0.799733         sata-
ata-piix             VMware
VMware_bootbank_ata-pata-atiixp_0.4.6-4vmw.510.0.0.799733      ata-
pata-atiixp          VMware
VMware_bootbank_ata-pata-sil680_0.4.8-3vmw.510.0.0.799733      ata-
pata-sil680          VMware
VMware_bootbank_ipmi-ipmi-msghandler_39.1-4vmw.510.0.0.799733  ipmi-
ipmi-msghandler      VMware
VMware_bootbank_net-enic_1.4.2.15a-1vmw.510.0.0.799733    net-enic
VMware
VMware_bootbank_esx-xserver_5.1.0-0.11.1063671           esx-
xserver              VMware
VMware_bootbank_net-nx-nic_4.0.558-3vmw.510.0.0.799733         net-nx-
nic                  VMware
VMware_bootbank_ima-qla4xxx_2.01.31-1vmw.510.0.0.799733        ima-
qla4xxx              VMware
VMware_bootbank_sata-sata-sil_2.3-4vmw.510.0.0.799733          sata-
sata-sil             VMware
VMware_bootbank_ehci-ehci-hcd_1.0-3vmw.510.0.0.799733          ehci-
ehci-hcd             VMware
VMware_bootbank_ohci-usb-ohci_1.0-3vmw.510.0.0.799733          ohci-
usb-ohci             VMware
VMware_bootbank_net-r8168_8.013.00-3vmw.510.0.0.799733         net-
r8168                VMware
Emulex_bootbank_net-be2net_4.2.327.0-1OEM.500.0.0.472560       net-
be2net               Emulex
VMware_bootbank_scsi-fnic_1.5.0.3-1vmw.510.0.0.799733          scsi-
fnic                 VMware
VMware_bootbank_vmware-fdm_5.1.0-1064983                       vmware-
fdm                  VMware
```

Example: List packages from vendors other than VMware

```
C:\PS>Get-UCPPackage | where {$_.Vendor -notlike "VMware"}
```

```
Name               : scsi-hfcldd
Version            : 4.28.16.1156-1OEM.500.0.0.472560
ReleaseDate        : 2/17/2012 8:57:04 AM
Vendor             : Hitachi
Description        : ESX Driver
Summary            : hfcldd: scsi driver for VMware ESX
AcceptanceLevel    : VMwareCertified
StatelessReady     : False
Id                 : Hitachi_bootbank_scsi-hfcldd_4.28.16.1156-
1OEM.500.0.0.472560
GlobalResourceId   : inst.v2ProductionB-123-456-789.pkg.Hitachi_bootbank_
scsi-hfcldd_4.28.16.1156-1OEM.500.0.0.472560
ResourceType       : Package
InstanceId         : v2ProductionB-123-456-789

Name               : hfc
Version            : 1.28.16-30
ReleaseDate        : 3/20/2012 12:59:54 PM
Vendor             : Hitachi
Description        : Hitachi CIM Provider for FC-HBA
Summary            : Hitachi FC-HBA 1.28.16-30
AcceptanceLevel    : VMwareAccepted
StatelessReady     : False
Id                 : Hitachi_bootbank_hfc_1.28.16-30
GlobalResourceId   : inst.v2ProductionB-123-456-789.pkg.Hitachi_bootbank_
hfc_1.28.16-30
ResourceType       : Package
InstanceId         : v2ProductionB-123-456-789

Name               : net-be2net
Version            : 4.2.327.0-1OEM.500.0.0.472560
ReleaseDate        : 8/11/2012 5:02:55 AM
Vendor             : Emulex
Description        : OneConnect 10G Network Driver
Summary            : be2net: net driver for VMware ESX
AcceptanceLevel    : VMwareCertified
StatelessReady     : False
Id                 : Emulex_bootbank_net-be2net_4.2.327.0-
1OEM.500.0.0.472560
GlobalResourceId   : inst.v2ProductionB-123-456-789.pkg.Emulex_bootbank_
net-be2net_4.2.327.0-1OEM.500.0.0.472560
ResourceType       : Package
InstanceId         : v2ProductionB-123-456-789
```

Related Links

Get-UCPPerformanceCounter

Gets the performance counter information for a resource type.

Syntax

Get-UCPPerformanceCounter [-ResourceType] <MonitorResourceType> [<CommonParameters>]

Description

Gets the performance counter information for a specified resource type. This includes Id, Metric Unit, Name, Performance Counter Threshold

Parameters

- -ResourceType <MonitorResourceType>

  Specifies the resource type for which to display performance counters. Resource types that have performance counters are: StorageVolume, StorageSystem, FibreChannelSwitchPort, StoragePort, StoragePool, StorageProcessor, EthernetSwitchPort, StorageParityGroup, StorageJournal, EthernetSwitch.

  – Required? true

  – Position? 1

  – Default value

  – Accept pipeline input? true (ByPropertyName)

  – Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

Hitachi.UCP.CLI.Domain.MonitorResourceType

Outputs

Hitachi.UCP.CLI.Domain.PerformanceCounter

Example: Get performance counters for StoragePool

```
C:\PS>Get-UCPPerformanceCounter -ResourceType StoragePool | select -
First 1 | fl
```

```
Name                      : ReadResponseRate
DisplayName               : Read Response Rate
MetricUnit                : µsec
PerformanceCounterThreshold : {IsThresholdEnabled:True,
DampingThreshold:1, DampingHistory:1,...}
```

Example: Get performance counters for EthernetSwitch

```
C:\PS>Get-UCPPerformanceCounter -ResourceType EthernetSwitch | fl
```

```
Name                      : CPUUsage
DisplayName               : CPU Usage
MetricUnit                : %
PerformanceCounterThreshold : {IsThresholdEnabled:True,
DampingThreshold:1, DampingHistory:1,...}

Name                      : MemoryUsage
DisplayName               : Memory Usage
MetricUnit                : %
```

```
PerformanceCounterThreshold : {IsThresholdEnabled:True,
DampingThreshold:1, DampingHistory:1,...}
```

Related Links

Set-UCPPerformanceCounter

Get-UCPResourceType

Get-UCPPerformanceData

Get-UCPPerformanceData

Gets the performance data for a performance counter of a specific resource.

Syntax

Get-UCPPerformanceData [-ResourceType] <PerformanceMonitorResourceType> [-GlobalResourceId] <String> [-PerformanceCounterName] <String> [-AggregationFrequency <String>] [-FromTime <DateTime>] [-ToTime <DateTime>] [-Offset <Int64>] [-PageSize <Int64>] [<CommonParameters>]

Description

At regular intervals, UCP collects raw performance data for a variety of resources. Parameters associated with this cmdlet are used for specifying the resource and performance counters to query performance data from.

Parameters

- -ResourceType <PerformanceMonitorResourceType>

  Use one of the following resource types in this cmdlet along with its associated PerformanceCounterName.

  Performance counters exist for the following resource types:

  StorageVolume, StorageSystem, FibreChannelSwitchPort, StoragePort, StoragePool, StorageProcessor, EthernetSwitchPort, StorageParityGroup, StorageJournal, EthernetSwitch.

  – Required? true

- — Position? 1

- — Default value

- — Accept pipeline input? true (ByPropertyName)

- — Accept wildcard characters? false

- -GlobalResourceId <String>

  The global resource ID of the resource for which performance counter data is to be returned. A valid GlobalResourceId must be supplied along with its correct ResourceType.

  - — Required? true

  - — Position? 2

  - — Default value

  - — Accept pipeline input? true (ByPropertyName)

  - — Accept wildcard characters? false

- -PerformanceCounterName <String>

  Use a PerformanceCounterName along with its associated ResourceType and an applicable GlobalResourceId of a resource.

  Multiple performance counters can be requested in a comma separated list. Use the Get-UCPPerformanceCounter cmdlet for a list of PerformanceCounterNames along with their associated ResourceType.

  - — Required? true

  - — Position? 3

  - — Default value

  - — Accept pipeline input? true (ByPropertyName)

  - — Accept wildcard characters? false

- -AggregationFrequency <String>

  Different performance counters are measured at regular fixed intervals. Use these time intervals as query criteria. For example, query for all performance counters which are collected at a specified frequency. Values are 30Minutes, 2Hours, Daily, Weekly.

    – Required? false

    – Position? named

    – Default value

    – Accept pipeline input? false

    – Accept wildcard characters? false

- -FromTime <DateTime>

  Specifies a start time for performance data to display.

    – Required? false

    – Position? named

    – Default value

    – Accept pipeline input? false

    – Accept wildcard characters? false

- -ToTime <DateTime>

  Specifies an end time for performance data to display.

    – Required? false

    – Position? named

    – Default value

    – Accept pipeline input? false

    – Accept wildcard characters? false

- -Offset <Int64>

  Specifies a data point to start from in the request.

  – Required? false

  – Position? named

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- -PageSize <Int64>

  Specifies how many data points to return in one request.

  – Required? false

  – Position? named

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

None

Outputs

Hitachi.UCP.CLI.Domain.PerformanceData

Example: Get performance data for specified resource

```
C:\PS>$perfData = Get-UCPPerformanceData -ResourceType EthernetSwitch -
GlobalResourceId inst.30RC-podc-3687.eth.1.net.4 -PerformanceCounterName
CPUUsage

C:\PS>$perfData.PerformanceCounterData


# CPUUsage is returned for the specified Ethernet Switch.
```

PerformanceCounterName	DateTime	Value	AggregationDataType
CPUUsage	9/8/2013 12:39:17 AM +00:00	3	
CPUUsage	9/8/2013 12:44:20 AM +00:00	3	
CPUUsage	9/8/2013 12:49:01 AM +00:00	2	
CPUUsage	9/8/2013 12:54:10 AM +00:00	3	
CPUUsage	9/8/2013 12:58:56 AM +00:00	3	
CPUUsage	9/8/2013 1:04:06 AM +00:00	3	
CPUUsage	9/8/2013 1:09:22 AM +00:00	2	
CPUUsage	9/8/2013 1:13:55 AM +00:00	3	
CPUUsage	9/8/2013 1:19:05 AM +00:00	3	
CPUUsage	9/8/2013 1:23:52 AM +00:00	3	
CPUUsage	9/8/2013 1:29:11 AM +00:00	3	
CPUUsage	9/8/2013 1:33:52 AM +00:00	3	
CPUUsage	9/8/2013 1:39:16 AM +00:00	3	
CPUUsage	9/8/2013 1:43:54 AM +00:00	2	
CPUUsage	9/8/2013 1:49:08 AM +00:00	3	
CPUUsage	9/8/2013 1:53:54 AM +00:00	2	
CPUUsage	9/8/2013 1:59:01 AM +00:00	3	
CPUUsage	9/8/2013 2:03:55 AM +00:00	3	

```
CPUUsage                    9/8/2013 2:09:40 AM +00:00
19
```

Related Links

Get-UCPPerformanceCounter

Set-UCPPerformanceCounter

Get-UCPProtectedVolume

Gets all protected volumes.

Syntax

Get-UCPProtectedVolume [-Id] <String> [<CommonParameters>]

Description

Gets the volumes protected by the Disaster Recovery Manager.

Parameters

- -Id <String>

  Id of the Disaster Recovery Manager that is being used

  – Required? true

  – Position? 1

  – Default value

  – Accept pipeline input? true (ByPropertyName)

  – Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

String

Outputs

Hitachi.UCP.CLI.Domain.ProtectedVolume

Notes

This requires UCP View privileges.

Example: Get the protected volumes for Disaster Recovery Manager with Id 1

```
C:\PS>Get-UCPProtectedVolume -Id 1
```

```
ManagerId        : 1
StorageSystemId  : 53102
VolumeId         : 62775
Id               : 62775
GlobalResourceId : inst.v2ProductionD-123-456-
789.dr.1.ss.53102.vol.62775
ResourceType     : ProtectedVolume
InstanceId       : v2ProductionD-123-456-789
```

Related Links

Get-UCPDisasterRecoveryManager

Get-UCPRepositoryLocation

List the user-defined repository locations for ESXi images.

Syntax

Get-UCPRepositoryLocation [<CommonParameters>]

Description

UCP contains an internal location for ESXi images created by UCP. However, more ESXi images may be included by adding a repository location. A repository location may be a network share or an online location, for example the VMware online VUM depot.

Parameters

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

None

Outputs

String

Example: Get repository locations

```
C:\PS>Get-UCPRepositoryLocation
```

```
\\10.21.24.241\ESXiShare
```

Related Links

Get-UCPImage

Set-UCPRepositoryLocation

Get-UCPResourceType

Gets monitor information on a specified resource type.

Syntax

Get-UCPResourceType [[-ResourceType] <MonitorResourceType>]
[<CommonParameters>]

Description

Returns the Monitor Mode, Performance Counters, and SNMP configuration
for a specified resource type.

Parameters

- -ResourceType <MonitorResourceType>

  When not specified, monitor information is returned for all resource
  types.

  Valid resource types are: StorageVolume, Compute, StorageSystem,
  FibreChannelSwitchPort, StoragePort, StoragePhysicalDevice,
  StoragePool, Ethernet, FibreChannelSwitch, StorageProcessor, Storage,
  Server, EthernetSwitchPort, Chassis, StorageParityGroup,
  FibreChannel, Ucp, StorageJournal, EthernetSwitch.

  – Required? false

  – Position? 1

  – Default value

  – Accept pipeline input? true (ByPropertyName)

  – Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug,
  ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer,
  PipelineVariable, and OutVariable. For more information, see about_
  CommonParameters (http://go.microsoft.com/fwlink/
  ?LinkID=113216).

Inputs

None

Outputs

Hitachi.UCP.CLI.Domain.MonitorResourceType

Example: Get monitor information for specified resource type

```
C:\PS>Get-UCPResourceType -ResourceType Ethernet


# Gets the monitor information for resource type Ethernet.


ResourceType                 : Ethernet
PerformanceCounters          : {}
MonitorMode                  : Report
SnmpConfiguration            :
UCP.OrchestratorServiceContracts.UcpMonitor.SnmpConfiguration
SupportedAuthenticationProtocols : MD5,NoAuth,SHA1
SupportedPrivacyProtocols    : AES128,DES,NoPriv
```

Example: Get all UCP resource types

```
C:\PS>Get-UCPResourceType


Lists all UCP resource types.


ResourceType                 : StorageVolume
PerformanceCounters          : {RandomTotalIoRate,
RandomTotalXferRate, ReadHitPct, ReadIoRate...}
MonitorMode                  : Report
SnmpConfiguration            :
SupportedAuthenticationProtocols :
SupportedPrivacyProtocols    :

ResourceType                 : Compute
PerformanceCounters          : {}
MonitorMode                  : Report
SnmpConfiguration            :
UCP.OrchestratorServiceContracts.UcpMonitor.SnmpConfiguration
SupportedAuthenticationProtocols : None
SupportedPrivacyProtocols    : None

ResourceType                 : StorageSystem
PerformanceCounters          : {CacheMemoryUsage,
CacheMemoryUsagePct, CacheWritePending,
CacheWritePendingPct...}
MonitorMode                  : Report
SnmpConfiguration            :
```

```
                SupportedAuthenticationProtocols :
                SupportedPrivacyProtocols        :

                ResourceType                     : FibreChannelSwitchPort
                PerformanceCounters              : {DataTransmitRate,
        DataReceiveRate, FrameTransmitRate, FrameReceiveRate...}
            MonitorMode                          : Report
            SnmpConfiguration                    :
            SupportedAuthenticationProtocols     :
            SupportedPrivacyProtocols            :

                ResourceType                     : StoragePort
                PerformanceCounters              : {AvgIoRate, AvgXferRate}
                MonitorMode                      : Report
                SnmpConfiguration                :
                SupportedAuthenticationProtocols :
                SupportedPrivacyProtocols        :

                ResourceType                     : StoragePhysicalDevice
                PerformanceCounters              : {AvgTagCount, BusyPct}
                MonitorMode                      : Report
                SnmpConfiguration                :
                SupportedAuthenticationProtocols :
                SupportedPrivacyProtocols        :

                ResourceType                     : StoragePool
                PerformanceCounters              : {ReadResponseRate,
        WriteResponseRate, ReadIoRate, WriteIoRate...}
            MonitorMode                          : Report
            SnmpConfiguration                    :
            SupportedAuthenticationProtocols     :
            SupportedPrivacyProtocols            :

                ResourceType                     : Ethernet
                PerformanceCounters              : {}
                MonitorMode                      : Report
                SnmpConfiguration                :
        UCP.OrchestratorServiceContracts.UcpMonitor.SnmpConfiguration
            SupportedAuthenticationProtocols     : MD5,NoAuth,SHA1
            SupportedPrivacyProtocols            : AES128,DES,NoPriv

                ResourceType                     : FibreChannelSwitch
                PerformanceCounters              : {}
                MonitorMode                      : Report
                SnmpConfiguration                :
                SupportedAuthenticationProtocols :
                SupportedPrivacyProtocols        :

                ResourceType                     : StorageProcessor
                PerformanceCounters              : {ProcessorBusyPct}
                MonitorMode                      : Report
                SnmpConfiguration                :
                SupportedAuthenticationProtocols :
```

```
    SupportedPrivacyProtocols      :

    ResourceType                   : Storage
    PerformanceCounters            : {}
    MonitorMode                    : Report
    SnmpConfiguration              :
UCP.OrchestratorServiceContracts.UcpMonitor.SnmpConfiguration
    SupportedAuthenticationProtocols : None
    SupportedPrivacyProtocols      : None

    ResourceType                   : Server
    PerformanceCounters            : {}
    MonitorMode                    : Report
    SnmpConfiguration              :
    SupportedAuthenticationProtocols :
    SupportedPrivacyProtocols      :

    ResourceType                   : EthernetSwitchPort
    PerformanceCounters            : {DataReceiveRate,
UnicastReceives, MulticastReceives, BroadcastReceives...}
    MonitorMode                    : Report
    SnmpConfiguration              :
    SupportedAuthenticationProtocols :
    SupportedPrivacyProtocols      :

    ResourceType                   : Chassis
    PerformanceCounters            : {}
    MonitorMode                    : Report
    SnmpConfiguration              :
    SupportedAuthenticationProtocols :
    SupportedPrivacyProtocols      :

    ResourceType                   : StorageParityGroup
    PerformanceCounters            : {BusyPct, RandomReadIoPct,
RandomReadIoRate, RandomReadXferPct...}
    MonitorMode                    : Report
    SnmpConfiguration              :
    SupportedAuthenticationProtocols :
    SupportedPrivacyProtocols      :

    ResourceType                   : FibreChannel
    PerformanceCounters            : {}
    MonitorMode                    : Report
    SnmpConfiguration              :
UCP.OrchestratorServiceContracts.UcpMonitor.SnmpConfiguration
    SupportedAuthenticationProtocols : MD5,NoAuth,SHA1
    SupportedPrivacyProtocols      : AES128,DES,NoPriv

    ResourceType                   : Ucp
    PerformanceCounters            : {}
    MonitorMode                    : Report
    SnmpConfiguration              :
    SupportedAuthenticationProtocols :
```

```
           SupportedPrivacyProtocols         :

           ResourceType                      : StorageJournal
           PerformanceCounters               : {UsedPercentage}
           MonitorMode                       : Report
           SnmpConfiguration                 :
           SupportedAuthenticationProtocols  :
           SupportedPrivacyProtocols         :

           ResourceType                      : EthernetSwitch
           PerformanceCounters               : {CPUUsage, MemoryUsage}
           MonitorMode                       : Report
           SnmpConfiguration                 :
           SupportedAuthenticationProtocols  :
           SupportedPrivacyProtocols         :
```

Related Links

Get-UCPPerformanceCounter

Get-UCPMonitorMode

Get-UCPSnmpSetting

Get-UCPScheduledJob

Gets the details for a scheduled UCP job

Syntax

Get-UCPScheduledJob [[-Name] <String>] [<CommonParameters>]

Description

Gets the details for a scheduled UCP job

Parameters

- -Name <String>

  Optionally specifies the name of the scheduled UCP job that is to be returned. If not specified, all scheduled jobs are returned.

  – Required? false

  – Position? 1

- – Default value

- – Accept pipeline input? false

- – Accept wildcard characters? false

- • <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

None

Outputs

Hitachi.UCP.CLI.Domain.ScheduledUcpJob

Notes

This command requires the UCP View privilege.

Example: Get scheduled job information

```
C:\PS>Get-UCPScheduledJob
```

```
Name          : ImageUpdate
JobType       : ImageUpdate
IntervalType  : Daily
IntervalValue : 30
RunAt         : 1/4/1900 12:00:00 AM +00:00
```

Example: Get scheduled job information for ImageUpdate

```
C:\PS>Get-UCPScheduledJob -Name ImageUpdate
```

```
Name          : ImageUpdate
JobType       : ImageUpdate
IntervalType  : Daily
IntervalValue : 30
RunAt         : 1/4/1900 12:00:00 AM +00:00
```

Related Links

Set-UCPScheduledJob

Get-UCPServer

Gets information about servers in UCP Director inventory.

Syntax

Get-UCPServer [[-ServerId] <String>] [<CommonParameters>]

Description

Gets information about servers in UCP Director inventory. If a ServerId is specified, that server is returned. Otherwise, all servers are returned in an array.

Parameters

- -ServerId <String>

  Optionally specifies the ID of the server that is to be returned. If not specified, all servers are returned.

  – Required? false

  – Position? 1

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

None

Outputs

Hitachi.UCP.CLI.Domain.Server

Notes

This command requires the UCP View privilege.

Example: List health state, name and maintenance mode for all servers

```
C:\PS>Get-UCPServer | Select-Object ServerId, @{n="HostName";e={$_
.HostInformation.HostName}},
   @{n="HostId";e={$_.HostInformation.HostId}},
@{n="InMaintenanceMode";e={$_.HostInformation.InMaintenanceMode}},
   Health | Format-Table -AutoSize


   # Select-Object is used to retrieve identification and health
information for all servers in UCP Director
   inventory.



   ServerId                                  HostName
HostId   InMaintenanceMode Health
   --------                                  --------              --
----   ----------------- ------
   5e21dabd-90bc-11e1-901a-f947807ab247 r1-hi-cb500-1-b02.podb.local
host-884           True Healthy
   4b757475-8fa9-11e1-b9b4-f518649264e1 r1-hi-cb500-1-b00.podb.local
host-355           True Healthy
   e0b1045c-90a7-11e1-a61b-8249a74ae29a r1-hi-cb500-1-b04.podb.local
host-885           True Healthy
   2515af28-8fec-11e1-8a03-90259a41924f r1-hi-cb500-1-b03.podb.local
host-918           True Healthy
```

```
     35bf1653-90a1-11e1-b69b-b32c6ab9a5e3 r1-hi-cb500-1-b05.podb.local
host-915              True Healthy
     9547efca-8f49-11e1-87dd-f56064181daf r1-hi-cb500-1-b01.podb.local
host-912              True Healthy
     dc62699b-8fbf-11e1-8af8-8d51dd9b5240 r1-hi-cb500-2-b03.podb.local
host-909              False Healthy
     f3ffb4d9-90c3-11e1-8c2d-eb3e73f635f4 r1-hi-cb500-2-b02.podb.local
host-906              False Healthy
   a87788f9-9093-11e1-a6a5-a0c2cccb9995
False Healthy
     420904c6-8fe8-11e1-b8a6-f3397e44dc5d r1-hi-cb500-2-b04.podb.local
host-903              False Healthy
  5ca1ee5b-8f7d-11e1-8972-b4d25e4bd7d7 Windows_LOMIP_10.21.24.26
False Healthy
     f912356c-8fed-11e1-b5f4-a1de70d1e7f3 r1-hi-cb500-2-b01.podb.local
host-900              False Healthy
     7f64390f-8fde-11e1-8272-b5312d5c8368 r1-hi-cb500-2-b00.podb.local
host-897              False Healthy
     cd1fc428-904a-11e1-8be0-a6b1dfa5d0a3 r1-hi-cb500-1-b07.podb.local
host-894              True Healthy
  adaadd1d-8ff3-11e1-a013-b14256e36145 Windows_LOMIP_10.21.24.27
False Healthy
     c78de152-8fcc-11e1-97f8-9025f430fc6d r1-hi-cb500-1-b06.podb.local
host-888              True Healthy
```

Example: Get a server by UUID

```
C:\PS>Get-UCPServer -ServerId a962454b-04ba-11e2-96ea-8fb57d1ab050


# Given a server ID, you may retrieve information about that server.


HostInformation              : r1-hi-cb500-1-b00.podh.local
ServerDeploymentInformation  : HitachiESXiImage-520HB1
ServerId                     : a962454b-04ba-11e2-96ea-8fb57d1ab050
SerialNumber                 : 323GGAGC0B1-TNNX14Y00000490
ServerUuid                   : a962454b-04ba-11e2-96ea-8fb57d1ab050
Manufacturer                 : HITACHI
Model                        : Compute Blade 520HB1
ModelNumber                  : GGAGC0B1-TNNX14Y
BootType                     : ESXiStateless
ChassisSerialNumber          : 323GG-RE3A1NBX1-Y00000056
PartitionNumber              : 0
PrimarySlot                  : 0
PartitionWidth               : 1
PartitionValid               : True
CpuType                      : Intel(R) Xeon(R) CPU E5-2640 0 @
2.50GHz
CoresPerCPU                  : 6
NumberOfCpus                 : 0
```

```
CpuFrequencyInGHz          : 2.5
CpuCacheSizeInMB           : 30
MemoryAmountInGB           : 96
BmcIp                      : 10.21.84.11
BmcSubnetMask              : 255.255.255.0
BmcDefaultGateway          : 10.21.84.1
BmcDhcpEnabled             : False
PowerState                 : On
LIDState                   : Off
LIDColor                   : Blue
Health                     : Healthy
ErrorCount                 : 0
WarningCount               : 0
InformationCount           : 0
LastRefreshed              : 6/11/2014 8:34:09 PM
CurrentFirmwareVersion     : 01-96
PendingFirmwareVersion     :
AvailableFirmwareVersion   :
EfiFirmwareVersionCurrent  : 07-43
EfiFirmwareVersionPending  :
BmcFirmwareVersionCurrent  : 01-87
BmcFirmwareVersionPending  :
HardwareMaintenanceMode    :
MacType                    : Additional
WwnType                    : Additional
UuidType                   : Additional
OperatingMode              : Basic
ConsoleUri                 : https://10.21.24.13/
NicInformationList         : {10Gb Onboard LAN, 10Gb Onboard LAN}
HbaInformationList         : {Hitachi 8Gb 2-port fibre channel
mezzanine card, Hitachi 8Gb 2-port fibre channel
    mezzanine card}
CurrentServerProfileId     : 3
Id                         : 5e21dabd-90bc-11e1-901a-f947807ab247
GlobalResourceId           : inst.v2ProductionB-123-456-
789.cmp.1.ser.5e21dabd-90bc-11e1-901a-f947807ab247
ResourceType               : Server
InstanceId                 : v2ProductionB-123-456-789
```

Example: Get servers with host name starting with "Custom"

```
C:\PS>Get-UCPServer | where {$_.HostInformation -like "Windows*"}


    # This command uses the HostInformation field as a filter. When a
server is not an ESXi host, UCP generates a host
    name which starts with the OS type.  For example: OS_LOMIP_<LOMIP-
Address>_IpAddress.



    HostInformation            : Windows_LOMIP_10.21.24.26
```

```
ServerDeploymentInformation :
ServerId                      : 5ca1ee5b-8f7d-11e1-8972-b4d25e4bd7d7
SerialNumber                  : 323GGAGC0B1-TNNX14Y00000095
ServerUuid                    : 5ca1ee5b-8f7d-11e1-8972-b4d25e4bd7d7
Manufacturer                  : HITACHI
Model                         : Compute Blade 520HB1
ModelNumber                   : GGAGC0B1-TNNX14Y
BootType                      : Custom
ChassisSerialNumber           : 323GG-RE3A1NBX1-Y00000016
PartitionNumber               : 5
PrimarySlot                   : 5
PartitionWidth                : 1
PartitionValid                : True
CpuType                       : Intel(R) Xeon(R) CPU E5-2640 0 @
2.50GHz
CoresPerCPU                   : 6
NumberOfCpus                  : 0
CpuFrequencyInGHz             : 2.5
CpuCacheSizeInMB              : 30
MemoryAmountInGB              : 96
BmcIp                         : 10.21.24.26
BmcSubnetMask                 : 255.255.255.0
BmcDefaultGateway             : 10.21.24.1
BmcDhcpEnabled                : False
PowerState                    : Off
LIDState                      : Off
LIDColor                      : Blue
Health                        : Healthy
ErrorCount                    : 0
WarningCount                  : 0
InformationCount              : 0
LastRefreshed                 : 9/26/2013 9:59:49 PM
CurrentFirmwareVersion        : 01-59
PendingFirmwareVersion        :
AvailableFirmwareVersion      :
EfiFirmwareVersionCurrent     : 04-06
EfiFirmwareVersionPending     :
BmcFirmwareVersionCurrent     : 01-56
BmcFirmwareVersionPending     :
HardwareMaintenanceMode       :
MacType                       : Additional
WwnType                       : Additional
UuidType                      : Additional
OperatingMode                 : Basic
ConsoleUri                    : https://10.21.24.26/
NicInformationList            : {10Gb Onboard LAN, 10Gb Onboard LAN}
HbaInformationList            : {Hitachi 8Gb 2-port fibre channel
mezzanine card, Hitachi 8Gb 2-port fibre channel
mezzanine card}
CurrentServerProfileId        : 6
Id                            : 5ca1ee5b-8f7d-11e1-8972-b4d25e4bd7d7
GlobalResourceId              : inst.v2ProductionB-123-456-
789.cmp.1.ser.5ca1ee5b-8f7d-11e1-8972-b4d25e4bd7d7
```

```
ResourceType                 : Server
InstanceId                   : v2ProductionB-123-456-789
```

Example: Get servers that are Off and not Deploying

```
C:\PS>$server = Get-UCPServer | where {$_.IsDeploying -notlike
"True" -And $_.BootType -eq "Custom" -And
$_.PowerState -eq "Off"}

$server


# When a server is in the state of "Custom" boot type, it may only
apply templates if the server is Off.  This
query helps find servers that are Custom and off.
```

```
HostInformation              : Windows_LOMIP_10.21.24.26
ServerDeploymentInformation  :
ServerId                     : 5ca1ee5b-8f7d-11e1-8972-b4d25e4bd7d7
SerialNumber                 : 323GGAGC0B1-TNNX14Y00000095
ServerUuid                   : 5ca1ee5b-8f7d-11e1-8972-b4d25e4bd7d7
Manufacturer                 : HITACHI
Model                        : Compute Blade 520HB1
ModelNumber                  : GGAGC0B1-TNNX14Y
BootType                     : Custom
ChassisSerialNumber          : 323GG-RE3A1NBX1-Y00000016
PartitionNumber              : 5
PrimarySlot                  : 5
PartitionWidth               : 1
PartitionValid               : True
CpuType                      : Intel(R) Xeon(R) CPU E5-2640 0 @
2.50GHz
CoresPerCPU                  : 6
NumberOfCpus                 : 0
CpuFrequencyInGHz            : 2.5
CpuCacheSizeInMB             : 30
MemoryAmountInGB             : 96
BmcIp                        : 10.21.24.26
BmcSubnetMask                : 255.255.255.0
BmcDefaultGateway            : 10.21.24.1
BmcDhcpEnabled               : False
PowerState                   : Off
LIDState                     : Off
LIDColor                     : Blue
Health                       : Healthy
ErrorCount                   : 0
WarningCount                 : 0
InformationCount             : 0
LastRefreshed                : 9/24/2013 1:01:40 AM
CurrentFirmwareVersion       : 01-59
```

```
PendingFirmwareVersion     :
AvailableFirmwareVersion   :
EfiFirmwareVersionCurrent  : 04-06
EfiFirmwareVersionPending  :
BmcFirmwareVersionCurrent  : 01-56
BmcFirmwareVersionPending  :
HardwareMaintenanceMode    :
MacType                    : Additional
WwnType                    : Additional
UuidType                   : Additional
OperatingMode              : Basic
ConsoleUri                 : https://10.21.24.26/
NicInformationList         : {10Gb Onboard LAN, 10Gb Onboard LAN}
HbaInformationList         : {Hitachi 8Gb 2-port fibre channel
mezzanine card, Hitachi 8Gb 2-port fibre channel
    mezzanine card}
CurrentServerProfileId     : 18
Id                         : 5ca1ee5b-8f7d-11e1-8972-b4d25e4bd7d7
GlobalResourceId           : inst.v2ProductionB-123-456-
789.cmp.1.ser.5ca1ee5b-8f7d-11e1-8972-b4d25e4bd7d7
ResourceType               : Server
InstanceId                 : v2ProductionB-123-456-789
```

Related Links

Reset-UCPServer

Start-UCPServer

Stop-UCPServer

Set-UCPServerImage

Deploy-UCPServer

Set-UCPServerLocationId

Get-UCPServerBootPolicy

Get the boot policy for a server.

Syntax

Get-UCPServerBootPolicy [-MacAddress] <String>
[<CommonParameters>]

Description

Given a MAC address for a server, return the server's boot policy information.

Parameters

- -MacAddress <String>

  The MAC address of an Ethernet port on the server.

  – Required? true

  – Position? 1

  – Default value

  – Accept pipeline input? true (ByPropertyName)

  – Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

Hitachi.UCP.CLI.Domain.MacAddress

Outputs

String

Notes

This command requires the UCP View privilege.

Example: Get the boot policy for a server whose boot type is ESXiStateless

```
C:\PS>Get-UCPServerBootPolicy -MacAddress 00:00:c9:da:bc:28
```

```
#!ipxe
set autodeploy 1
chain tftp://${next-server}/tramp
```

Related Links

Set-UCPServerBootType

Get-UCPServer

Get-UCPServerElementManager

Gets server element manager connection information.

Syntax

Get-UCPServerElementManager [[-ServerElementManagerId] <String>] [<CommonParameters>]

Description

Gets server element manager connection information.

Parameters

- -ServerElementManagerId <String>

  The Id of the server element manager. Supplying the ID is optional.

  – Required? false

  – Position? 1

- – Default value

- – Accept pipeline input? false

- – Accept wildcard characters? false

- • <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

None

Outputs

Hitachi.UCP.CLI.Domain.ServerElementManager

Notes

This command requires the UCP View privilege.

Example: Get server element manager information

```
C:\PS>Get-UCPServerElementManager
```

```
Username         : ucpadmin
ApplicationUrl   : http://10.21.24.245:23015/ComputeSystemsManager/
index.jsp
ServiceUrl       : http://10.21.24.245:23015/ComputeSystemsManager/
Id               : 1
GlobalResourceId : inst.v2ProductionB-123-456-789.cmp.1.sem.1
ResourceType     : ServerElementManager
InstanceId       : v2ProductionB-123-456-789
```

Related Links

Set-UCPServerElementManager

Get-UCPServer

Get-UCPChassis

Get-UCPServerHierarchy

Gets server hierarchy.

Syntax

Get-UCPServerHierarchy [<CommonParameters>]

Description

Gets server hierarchy in the virtual platform manager hierarchy. Needed when deploying hypervisor hosts.

Parameters

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

None

Outputs

Hitachi.UCP.CLI.Domain.ServerHierarchy

Notes

Requires the UCP View privilege.

Example: Get server hierarchy in vCenter

```
C:\PS>Get-UCPServerHierarchy | fl
```

```
Id        : group-d1
Name      : Datacenters
ParentId  :
Type      : Folder

Id        : datacenter-7
Name      : UCP Compute
ParentId  : group-d1
Type      : Datacenter

Id        : datacenter-2
Name      : UCP Management
ParentId  : group-d1
Type      : Datacenter

Id        : group-h9
Name      : host
ParentId  : datacenter-7
Type      : Folder

Id        : group-h4
Name      : host
ParentId  : datacenter-2
Type      : Folder

Id        : domain-s290
Name      : 10.21.74.33
ParentId  : group-h9
Type      : ComputeResource

Id        : domain-s286
Name      : 10.21.74.35
ParentId  : group-h9
Type      : ComputeResource

Id        : domain-s283
Name      : 10.21.74.31
ParentId  : group-h9
Type      : ComputeResource
```

Example: Get server hierarchy in SCVMM

```
C:\PS>Get-UCPServerHierarchy | ft -Autosize
```

```
        Id                    Name                  ParentId
Type
        --                    ----                  --------
----
     group-d1          Datacenters
Folder
     datacenter-7          UCP Compute          group-d1
Datacenter
     datacenter-2          UCP Management          group-d1
Datacenter
      group-h9                 host
datacenter-7              Folder
      group-h4                 host
datacenter-2              Folder
     domain-s527      r1-hi-cb500-2-b05.podb.local group-h9
ComputeResource
     domain-s420      r1-hi-cb500-2-b00.podb.local group-h9
ComputeResource
     domain-s418      r1-hi-cb500-2-b01.podb.local group-h9
ComputeResource
     domain-s416      r1-hi-cb500-2-b02.podb.local group-h9
ComputeResource
     domain-s350      r1-hi-cb500-2-b04.podb.local group-h9
ComputeResource
     domain-c245          Cluster1             group-h9
ClusterComputeResource
     group-h61          Folder1Test             group-h9
Folder
     group-h490          Folder2Test             group-h9
Folder
     group-h439          Folder3Test             group-h9
Folder
     domain-c54          UCPManagement             group-h4
ClusterComputeResource
      host-529                 r1-hi-cb500-2-b05.podb.local
      host-238                 r1-hi-cb500-2-b00.podb.local  domain-
s420              HostSystem
      host-244                 r1-hi-cb500-2-b01.podb.local  domain-
s418              HostSystem
      host-241                 r1-hi-cb500-2-b02.podb.local  domain-
s416              HostSystem
```

Related Links

Apply-UCPClusterServiceTemplate

Apply-UCPWindowsHyperVServiceTemplate

Get-UcpServerProfile

Returns details on server profiles.

Syntax

Get-UcpServerProfile [[-ServerProfileId] <String>]
[<CommonParameters>]

Description

This cmdlet returns detailed information on Server Profile(s). This includes the ID of the profile, name and description, EFI and CNA Settings, and Server Identity information (IP, MAC, WWN). If ServerProfileId is specified, only that Server Profile will be returned. Else, all Server Profiles will be returned in an array.

Parameters

- -ServerProfileId <String>

  ID of a specific Server Profile to returns details about.

  – Required? false

  – Position? 1

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

None

Outputs

Hitachi.UCP.CLI.Domain.UcpServerProfile

Notes

Requires the UCP View privilege.

Example: Get specified server profile

```
C:\PS>Get-UCPServerProfile -ServerProfileId 1
```

```
ServerProfileId    : 1
Name               : Blade00
Description        :
ServerUuid         : AD344998-D46A-412C-9DFF-1A341068A703
EfiSettings        : EfiSettings: ProcessorTurboMode - Enable,
ProcessorHyperThreading - Enable,
                     ProcessorHardwarePrefetcher - Enable,
MemoryMode - Independent, MemorySpeed - Force DDR3 1600,
                     NodeInterleaveMode - NUMA, RASDeconfiguredMode
- Enable, DDRVoltageLevel - Force to 1.50V
    IpAddressSettings  : IpAddressSettings: UsePool - False,
IdentityPoolId - , IdentityPoolRangeId - , SubnetMask -
                     255.255.255.0, DefaultGateway - 10.21.20.1,
IpAddress - 10.21.20.11, DnsAddress - 10.21.20.246
    NonHypervisor      : False
    CnaSettings        : {Hitachi.UCP.CLI.Domain.CnaSettings}
    MacAddressSettings : {Hitachi.UCP.CLI.Domain.MacAddressSettings,
Hitachi.UCP.CLI.Domain.MacAddressSettings}
    WwnAddressSettings : {True, False, True, False}
```

Example: Get all server profiles

```
C:\PS>Get-UCPServerProfile
```

```
ServerProfileId    : 1
Name               : Blade00
Description        :
ServerUuid         : AD344998-D46A-412C-9DFF-1A341068A703
EfiSettings        : EfiSettings: ProcessorTurboMode - Enable,
ProcessorHyperThreading - Enable,
```

```
                              ProcessorHardwarePrefetcher - Enable,
MemoryMode - Independent, MemorySpeed - Force DDR3 1600,
                              NodeInterleaveMode - NUMA, RASDeconfiguredMode
- Enable, DDRVoltageLevel - Force to 1.50V
    IpAddressSettings  : IpAddressSettings: UsePool - False,
IdentityPoolId - , IdentityPoolRangeId - , SubnetMask -
                              255.255.255.0, DefaultGateway - 10.21.20.1,
IpAddress - 10.21.20.11, DnsAddress - 10.21.20.246
    NonHypervisor      : False
    CnaSettings        : {Hitachi.UCP.CLI.Domain.CnaSettings}
    MacAddressSettings : {Hitachi.UCP.CLI.Domain.MacAddressSettings,
Hitachi.UCP.CLI.Domain.MacAddressSettings}
    WwnAddressSettings : {True, False, True, False}


    ServerProfileId    : 2
    Name               : Blade01
    Description        :
    ServerUuid         : F2F9E43B-8E8D-4D45-8A5B-D7BDE54FB75E
    EfiSettings        : EfiSettings: ProcessorTurboMode - Enable,
ProcessorHyperThreading - Enable,
                              ProcessorHardwarePrefetcher - Enable,
MemoryMode - Independent, MemorySpeed - Force DDR3 1600,
                              NodeInterleaveMode - NUMA, RASDeconfiguredMode
- Enable, DDRVoltageLevel - Force to 1.50V
    IpAddressSettings  : IpAddressSettings: UsePool - False,
IdentityPoolId - , IdentityPoolRangeId - , SubnetMask -
                              255.255.255.0, DefaultGateway - 10.21.20.1,
IpAddress - 10.21.20.12, DnsAddress - 10.21.20.246
    NonHypervisor      : False
    CnaSettings        : {Hitachi.UCP.CLI.Domain.CnaSettings}
    MacAddressSettings : {Hitachi.UCP.CLI.Domain.MacAddressSettings,
Hitachi.UCP.CLI.Domain.MacAddressSettings}
    WwnAddressSettings : {True, False, True, False}


    ServerProfileId    : 3
    Name               : Blade02
    Description        :
    ServerUuid         : C35DFC4F-9CEB-4E10-AF98-40659D7DE546
    EfiSettings        : EfiSettings: ProcessorTurboMode - Enable,
ProcessorHyperThreading - Enable,
                              ProcessorHardwarePrefetcher - Enable,
MemoryMode - Independent, MemorySpeed - Force DDR3 1600,
                              NodeInterleaveMode - NUMA, RASDeconfiguredMode
- Enable, DDRVoltageLevel - Force to 1.50V
    IpAddressSettings  : IpAddressSettings: UsePool - False,
IdentityPoolId - , IdentityPoolRangeId - , SubnetMask -
                              255.255.255.0, DefaultGateway - 10.21.20.1,
IpAddress - 10.21.20.13, DnsAddress - 10.21.20.246
    NonHypervisor      : False
    CnaSettings        : {Hitachi.UCP.CLI.Domain.CnaSettings}
    MacAddressSettings : {Hitachi.UCP.CLI.Domain.MacAddressSettings,
Hitachi.UCP.CLI.Domain.MacAddressSettings}
    WwnAddressSettings : {True, False, True, False}
```

Example: Get unused server profiles

```
C:\PS># Build array:
$usedServerProfileIdArray = @()

# For loop:
foreach ($server in Get-UCPServer){ $usedServerProfileIdArray +=
$server.CurrentServerProfileId }

# Show profiles from array that are not used by any server:
Get-UcpServerProfile | where {$usedServerProfileIdArray -notcontains
$_.Id} | Select-Object @{n="Id";e={$_.Id}},
  @{n="NonHypervisor";e={$_.NonHypervisor}} | ft -Autosize

Id   NonHypervisor
-- ---------------
2           False
3           False
4           False
5           False
6           False
```

Related Links

New-UCPServerProfile

Remove-UCPServerProfile

Apply-UCPServerProfile

Move-UCPServerProfile

Set-UCPServerProfile

Get-UCPServerType

Gets server type details.

Syntax

Get-UCPServerType [[-ServerTypeId] <String>] [<CommonParameters>]

Description

Gets server type details.

Parameters

- -ServerTypeId <String>

  Optionally specifies the ID of the server type that is to be returned.

  – Required? false

  – Position? 1

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

None

Outputs

Hitachi.UCP.CLI.Domain.ServerType

Notes

This command requires the UCP View privilege.

Example: Get information for server type

```
C:\PS>Get-UCPServerType


DefaultImageName : HitachiESXiImage
DefaultImageId   : 1
Id               : Compute Blade 520HB1
GlobalResourceId : inst.v2ProductionB-123-456-789.cmp.1.st.Compute Blade
520HB1
```

```
ResourceType       : ServerType
InstanceId         : v2ProductionB-123-456-789
```

Related Links

Set-UCPServerTypeImage

Get-UCPServer

New-UCPEsxiHostServiceTemplate

New-UCPClusterServiceTemplate

Remove-UCPServiceTemplate

Get-UCPServiceTemplateVolume

Gets the volumes associated with a template.

Syntax

Get-UCPServiceTemplateVolume [-ServiceTemplateId] <String> [[-ServiceTemplateVolumeId] <String>] [<CommonParameters>]

Description

Volumes associated with a template are not shown when using the cmdlet Get-UCPServiceTemplate. The are listed with this cmdlet and they can be either volumes to create or volumes to attach.

Parameters

- -ServiceTemplateId <String>

  List volumes associated with this service template.

  – Required? true

  – Position? 1

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- -ServiceTemplateVolumeId <String>

  Gets details on a specific volume associated with a specified service template.

  – Required? false

  – Position? 2

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

Hitachi.UCP.CLI.Domain.UcpServiceTemplate

Outputs

Hitachi.UCP.CLI.Domain.UcpServiceTemplateVolume

Notes

Use Get-UCPServiceTemplateVolume if you wish to pipe into New-UCPServiceTemplateVolumeInformation a list of volumes already used by a specific service template.

Example: List volumes from service template 1

```
C:\PS>Get-UCPServiceTemplateVolume -ServiceTemplateId 3


Id                 : 1
StorageSystemId    : 66716
PoolId             : 1
CapacitySizeInBytes : 140949672960
```

```
FileSystem            : VMFS
VolumeName            : TestDataStore1
StorageSystemPortIds  :
VolumeInformation     :
GlobalResourceId      : inst.v2ProductionA-123-456-789.svctmplt.3.vol.1
ResourceType          : ServiceTemplateVolume
InstanceId            : v2ProductionA-123-456-789

Id                    : 2
StorageSystemId       : 66716
PoolId                : 1
CapacitySizeInBytes   : 140949672960
FileSystem            : VMFS
VolumeName            : TestDataStore2
StorageSystemPortIds  :
VolumeInformation     :
GlobalResourceId      : inst.v2ProductionA-123-456-789.svctmplt.3.vol.2
ResourceType          : ServiceTemplateVolume
InstanceId            : v2ProductionA-123-456-789
```

Example: Get specific volume associated with specified service template

```
C:\PS>Get-UCPServiceTemplateVolume -ServiceTemplateVolumeId 2 -
ServiceTemplateId 1
```

```
Id                    : 1
StorageSystemId       : 66716
PoolId                : 1
CapacitySizeInBytes   : 140949672960
FileSystem            : VMFS
VolumeName            : TestDataStore1
StorageSystemPortIds  :
VolumeInformation     :
GlobalResourceId      : inst.v2ProductionA-123-456-789.svctmplt.3.vol.1
ResourceType          : ServiceTemplateVolume
InstanceId            : v2ProductionA-123-456-789
```

Related Links

Get-UCPServiceTemplate

New-UCPServiceTemplateVolumeInformation

Get-UCPSnmpSetting

Gets the Snmp Setting for the specified top level resource type.

Syntax

Get-UCPSnmpSetting [-ResourceType] <TopLevelMonitorResourceType>
[<CommonParameters>]

Description

Gets the Snmp information for the specified top level resource type.

The valid top level resource types are Ethernet, FibreChannel, Compute,
Storage.

Parameters

- -ResourceType <TopLevelMonitorResourceType>

  Valid values are: Ethernet, FibreChannel, Compute, Storage.

  – Required? true

  – Position? 1

  – Default value

  – Accept pipeline input? true (ByPropertyName)

  – Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug,
  ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer,
  PipelineVariable, and OutVariable. For more information, see about_
  CommonParameters (http://go.microsoft.com/fwlink/
  ?LinkID=113216).

Inputs

None

Outputs

Hitachi.UCP.CLI.Domain.Monitor.SnmpSetting

Example: Get the Snmp setting information for Ethernet

```
C:\PS>Get-UCPSnmpSetting -ResourceType Ethernet | ft -Autosize


SnmpVersion AuthenticationProtocol PrivacyProtocol UserName
----------- ---------------------- --------------- --------
V3          SHA1                   AES128          ucpsnmpuser
```

Example: Get the Snmp setting information for Compute

```
C:\PS>Get-UCPSnmpSetting -ResourceType Compute


SnmpVersion AuthenticationProtocol PrivacyProtocol UserName
----------- ---------------------- --------------- --------
V2c         None                   None
```

Example: Get the Snmp setting information for Storage

```
C:\PS>Get-UCPSnmpSetting -ResourceType Storage | ft -Autosize


SnmpVersion AuthenticationProtocol PrivacyProtocol UserName
----------- ---------------------- --------------- --------
V1          None                   None
```

Related Links

Set-UCPSnmpSetting

Get-UCPResourceType

Get-UCPSnmpTrapReceiver

Gets SNMP listener connection information.

Syntax

Get-UCPSnmpTrapReceiver [<CommonParameters>]

Description

By default, the UCP system listens for SNMP traps from system resources. The IP and port returned by this cmdlet are used when configuring element managers with the destination for SNMP traps.

Parameters

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

None

Outputs

Hitachi.UCP.CLI.Domain.MonitorSetting

Example: Get SNMP listener

```
C:\PS>Get-UCPSnmpTrapReceiver | fl



MonitorIpAddress   : 10.21.79.243
MonitorPortNumber  : 162
Id                 : 0
GlobalResourceId   : inst.v2ProductionG-123-456-789.mntrcfg
ResourceType       : MonitorSettings
InstanceId         : v2ProductionG-123-456-789
```

Related Links

Get-UCPMonitorMode

Set-UCPMonitorMode

Get-UCPSnmpSetting

Set-UCPSnmpSetting

Get-UCPStorageElementManager

Get-UCPServerElementManager

Get-UCPStorageElementManager

Gets storage element manager connection information.

Syntax

Get-UCPStorageElementManager [[-Id] <String>]
[<CommonParameters>]

Description

Gets storage element manager connection information.

Parameters

- -Id <String>

  Optionally specifies the ID of the storage element manager that is to be
  returned.

  – Required? false

  – Position? 1

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug,
  ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer,
  PipelineVariable, and OutVariable. For more information, see about_
  CommonParameters (http://go.microsoft.com/fwlink/
  ?LinkID=113216).

Inputs

None

Outputs

Hitachi.UCP.CLI.Domain.StorageElementManager

Notes

This command requires the UCP View privilege.

Example: Get storage element manager information

```
C:\PS>Get-UCPStorageElementManager | fl
```

```
ApplicationUrl    : http://HCS.PODB.LOCAL:23015/DeviceManagerWebService/
index.jsp
ServiceUrl        : http://HCS.PODB.LOCAL:2001/service/StorageManager
Username          : ucpadmin
Id                : 1
GlobalResourceId  : inst.v2ProductionB-123-456-789.sdm.1
ResourceType      : StorageElementManager
InstanceId        : v2ProductionB-123-456-789
```

Related Links

Get-UCPStorageElementManager

Get-UCPStorageSystem

Get-UCPStoragePool

Gets storage system pool details.

Syntax

Get-UCPStoragePool [-StorageSystemId] <String> [[-PoolId] <String>]
[<CommonParameters>]

Description

Gets storage system pool details.

Parameters

- -StorageSystemId <String>

  Specifies the ID of the storage system with the pool that is to be returned. Use Get-UCPStorageSystem to discover the storage system ID.

  – Required? true

  – Position? 1

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- -PoolId <String>

  Optionally specifies the ID of the storage system pool that is to be returned. If not specified, all pools in the storage system are returned.

  – Required? false

  – Position? 2

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

None

Outputs

Hitachi.UCP.CLI.Domain.StoragePool

Notes

This command requires the UCP View privilege.

Example: List a storage system's pools

```
C:\PS>Get-UCPStoragePool 53106 | Format-Table Id, Status, Type,
CapacityInGB, UsedCapacityInGB, SubscribedCapacityInGB –AutoSize
```

```
Id Status Type CapacityInGB UsedCapacityInGB SubscribedCapacityInGB
-- ------ ---- ------------ ---------------- ----------------------
1  Normal Hdp          4283               27                1165.12
2  Normal Hdp           532                0                      0
```

Example: Get a pool from a storage system

```
C:\PS>Get-UCPStoragePool 53106 2
```

```
StorageSystemId               : 93040480
Status                        : Normal
UsedPercentage                : 0
CurrentSubscriptionPercentage :
SubscriptionLimitPercentage   : 51
Type                          : Hdp
CapacityInGB                  : 532
UsedCapacityInGB              : 0
SubscribedCapacityInGB        : 0
StorageSystemPoolDiskDetails  : {Sas}
Id                            : 2
GlobalResourceId              : inst.v2ProductionB-123-456-
789.stor.1.ss.93040480.pool.2
ResourceType                  : StoragePool
InstanceId                    : v2ProductionB-123-456-789
```

Related Links

Get-UCPStorageSystem

Get-UCPStoragePort

Get-UCPStoragePort

Gets storage system port details.

Syntax

Get-UCPStoragePort [-StorageSystemId] <String> [[-PortId] <String>]
[<CommonParameters>]

Description

Gets storage system port details.

Parameters

- -StorageSystemId <String>

  Specifies the ID of the storage system with the port that is to be
  returned. Use Get-UCPStorageSystem to discover the storage system
  ID.

  – Required? true

  – Position? 1

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- -PortId <String>

  Optionally specifies the ID of the storage system port that is to be
  returned. If not specified, all ports in the storage system are returned.

  – Required? false

– Position? 2

– Default value

– Accept pipeline input? false

– Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

None

Outputs

Hitachi.UCP.CLI.Domain.StoragePort

Notes

This command requires the UCP View privilege.

Example: List a storage system's ports

```
C:\PS>Get-UCPStoragePort 53106 | Format-Table Id, PortWwn -AutoSize


# All of the ports in your storage system may be listed by providing
Get-UCPStoragePort with the storage system's ID. Get-UCPStorageSystem
may be used to discover that ID.


Id    PortWwn
--    -------
CL2-C 50.06.0E.80.06.CF.72.12
CL4-C 50.06.0E.80.06.CF.72.32
CL6-C 50.06.0E.80.06.CF.72.52
CL8-C 50.06.0E.80.06.CF.72.72
CL1-C 50.06.0E.80.06.CF.72.02
CL3-C 50.06.0E.80.06.CF.72.22
CL5-C 50.06.0E.80.06.CF.72.42
```

```
CL7-C 50.06.0E.80.06.CF.72.62
```

Example: Get a port on a storage system

```
C:\PS>Get-UCPStoragePort 93040480 CTL1-C
```

```
StorageSystemId   : 93040480
PortName          : CTL1-C
PortWwn           : 50.06.0E.80.10.1A.F9.0A
Type              : Fibre
Speed             : EightGbps
Attribute         : Target
Id                : CTL1-C
GlobalResourceId  : inst.v2ProductionB-123-456-
789.stor.1.ss.93040480.port.CTL1-C
ResourceType      : StoragePort
InstanceId        : v2ProductionB-123-456-789
```

Related Links

Get-UCPStorageSystem

Get-UCPStoragePool

Get-UCPStorageSystem

Gets storage system information.

Syntax

Get-UCPStorageSystem [[-StorageSystemId] <String>]
[<CommonParameters>]

Description

Gets storage system information.

Parameters

- -StorageSystemId <String>

  Optionally specifies the ID of the storage system that is to be returned.

  – Required? false

  – Position? 1

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

None

Outputs

Hitachi.UCP.CLI.Domain.StorageSystem

Notes

This command requires the UCP View privilege.

Example: Get storage system information

```
C:\PS>Get-UCPStorageSystem
```

```
SerialNumber        : 93040480
Status              : Normal
```

```
Name                 : HUS150@10.21.24.252
SystemIpAddresses    : {10.21.24.253, 10.21.24.252}
SystemType           : HUS
ArrayFamily          : D850
ControllerVersion    : 0945/B-H
MicrocodeVersion     :
AllocatedSpaceInGB   : 2502
UnallocatedSpaceInGB : 723.01
ReservedSpaceInGB    : 0
FreeSpaceInGB        : 0
PhysicalSpaceInGB    : 3225.01
Id                   : 93040480
GlobalResourceId     : inst.v2ProductionB-123-456-789.stor.1.ss.93040480
ResourceType         : StorageSystem
InstanceId           : v2ProductionB-123-456-789
```

Related Links

Get-UCPStoragePool

Get-UCPStoragePort

Get-UCPVolume

Get-UCPStorageElementManager

Get-UCPSupportedDdrVoltageLevels

Gets a list of applicable settings for EFI DDR voltage levels.

Syntax

Get-UCPSupportedDdrVoltageLevels [[-DdrVoltageLevelId] <String>] [<CommonParameters>]

Description

This is one of the EFI settings to supply when creating a server profile.

To conserve energy, the DDR voltage is sometimes reduced to a lower value than the maximum supported by the installed DIMMs. Auto is the default setting on blades from the factory. Check blade hardware documentation before using any other voltage level.

Parameters

- -DdrVoltageLevelId <String>

  Optional ID of a particular voltage level.

  – Required? false

  – Position? 1

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

None

Outputs

Hitachi.UCP.CLI.Domain.DdrVoltageLevel

Notes

Requires UCP View privilege.

Example: Get supported DDR voltage levels

```
C:\PS>Get-UCPSupportedDdrVoltageLevels
```

```
DdrVoltageLevelId : 1
Name              : AsIs
```

```
DdrVoltageLevelId : 2
Name              : Auto

DdrVoltageLevelId : 4
Name              : Force to 1.35V

DdrVoltageLevelId : 3
Name              : Force to 1.50V
```

Related Links

New-UCPServerProfile

Set-UCPServerProfile

New-UCPEfiSetting

Get-UCPSupportedMemoryModes

Get supported memory modes.

Syntax

Get-UCPSupportedMemoryModes [[-MemoryModeId] <String>]
[<CommonParameters>]

Description

This is one of the EFI settings to supply when creating a server profile.
"Independent" is the default setting on blades from the factory. Mirroring
and Sparing are used as DIMM failover techniques. Hitachi blades use rank
sparing. Please see the server hardware documentation and ensure the
installed DIMM layout is appropriate for Mirroring or Sparing.

Parameters

- -MemoryModeId <String>

  Id of a specific memory mode to retrieve or use.

  – Required? false

  – Position? 1

- – Default value

- – Accept pipeline input? false

- – Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

None

Outputs

Hitachi.UCP.CLI.Domain.MemoryMode

Notes

Requires UCP View privilege

Example: Get supported UCP memory modes

```
C:\PS>Get-UCPSupportedMemoryModes


MemoryModeId : 1
Name         : AsIs

MemoryModeId : 2
Name         : Independent

MemoryModeId : 3
Name         : Mirroring

MemoryModeId : 4
Name         : Sparing
```

Related Links

New-UCPServerProfile

Set-UCPServerProfile

New-UCPEfiSetting

Get-UCPSupportedMemorySpeeds

Get supported list of memory speeds.

Syntax

Get-UCPSupportedMemorySpeeds [<CommonParameters>]

Get-UCPSupportedMemorySpeeds -ServerTypeId <String>
[<CommonParameters>]

Get-UCPSupportedMemorySpeeds -MemorySpeedId <String>
[<CommonParameters>]

Description

This is one of the EFI settings to supply when creating a server profile. To conserve energy, the memory speed is sometimes reduced below the maximum of the installed DIMMs. More than one blade type may exist and there may be a different set of memory speeds per blade type. Use Get-UCPServerType and supply the Id in the parameter -ServerTypeId.

Parameters

- -ServerTypeId <String>

  The type of server for which the supported memory speeds should be retrieved.

  – Required? true

  – Position? named

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- -MemorySpeedId <String>

  Id of a specific memory speed to retrieve.

  – Required? true

  – Position? named

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

None

Outputs

Hitachi.UCP.CLI.Domain.MemorySpeed

Notes

The UCP View privilege is required.

Example: Get supported UCP memory modes

```
C:\PS>Get-UCPSupportedMemorySpeeds | fl


MemorySpeedId : 1
Name          : AsIs

MemorySpeedId : 2
Name          : AUTO

MemorySpeedId : 4
```

```
Name            : Force DDR3 1066

MemorySpeedId : 5
Name            : Force DDR3 1333

MemorySpeedId : 6
Name            : Force DDR3 1600

MemorySpeedId : 7
Name            : Force DDR3 1866

MemorySpeedId : 3
Name            : Force DDR3 800
```

Related Links

New-UCPServerProfile

Set-UCPServerProfile

New-UCPEfiSetting

Get-UCPSupportedNodeInterleaveModes

Gets supported Node Interleave modes.

Syntax

Get-UCPSupportedNodeInterleaveModes [[-NodeInterleaveModeId] <String>] [<CommonParameters>]

Description

This is one of the EFI settings to supply when creating a server profile.

A node is defined as a CPU with its assigned local memory. With NUMA enabled, a map is provided to the OS that defines what memory is local to each CPU. This improves host and application performance. NUMA is the optimal setting in most cases, so carefully test Non-NUMA before deciding to use it.

Parameters

• -NodeInterleaveModeId <String>

Id of a specific node interleave mode to retrieve.

- – Required? false

- – Position? 1

- – Default value

- – Accept pipeline input? false

- – Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

None

Outputs

Hitachi.UCP.CLI.Domain.NodeInterleaveMode

Notes

Requires UCP View privilege

Example: Get supported node interleave modes

```
C:\PS>Get-UCPSupportedNodeInterleaveModes | fl


NodeInterleaveModeId : 1
Name                 : AsIs

NodeInterleaveModeId : 3
Name                 : Non-NUMA

NodeInterleaveModeId : 2
Name                 : NUMA
```

Related Links

New-UCPServerProfile

Set-UCPServerProfile

New-UCPEfiSetting

Get-SupportedProcessorHardwarePrefetcherModes

Gets the supported list of processor hardware prefetcher modes

Syntax

Get-UCPSupportedProcessorHardwarePrefetcherModes
[<CommonParameters>]

Description

This is one of the EFI settings to supply when creating a server profile.

Intel CPUs have a processor hardware prefetcher which helps to boost performance in most situations. The default setting on blades from the factory is Enable.

Parameters

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

None

Outputs

Hitachi.UCP.CLI.Domain.ProcessorHardwarePrefetcherMode

Notes

Requires the UCP View privilege.

Example: Get supported processor hardware prefetcher modes

```
C:\PS>Get-UCPSupportedProcessorHardwarePrefetcherModes
Name            : AsIs
Id              : 0
GlobalResourceId : inst.PODF-04687.processorhardwareprefetchermode.0
ResourceType    : ProcessorHardwarePrefetcherMode
InstanceId      : PODF-04687

Name            : Enable
Id              : 1
GlobalResourceId : inst.PODF-04687.processorhardwareprefetchermode.1
ResourceType    : ProcessorHardwarePrefetcherMode
InstanceId      : PODF-04687

Name            : Disable
Id              : 2
GlobalResourceId : inst.PODF-04687.processorhardwareprefetchermode.2
ResourceType    : ProcessorHardwarePrefetcherMode
InstanceId      : PODF-04687
```

Related Links

New-UCPServerProfile

Set-UCPServerProfile

New-UCPEfiSetting

Get-UCPSupportedProcessorHyperThreadingModes

Gets the supported hyper-threading modes.

Syntax

Get-UCPSupportedProcessorHyperThreadingModes
[<CommonParameters>]

Description

This is one of the EFI settings to supply when creating a server profile.

This Intel feature enables CPUs to process more than a single thread per core. The default setting on blades from the factory is hyper-threading Enabled since this boosts performance for most applications.

Parameters

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

None

Outputs

Hitachi.UCP.CLI.Domain.ProcessorHyperThreadingMode

Notes

Requires the UCP View privilege.

Example: Get supported hyperthreading modes

```
C:\PS>Get-UCPSupportedProcessorHyperThreadingModes

Name              : AsIs
Id                : 0
GlobalResourceId  : inst.PODF-04687.processorhyperthreadingmode.0
ResourceType      : ProcessorHyperThreadingMode
InstanceId        : PODF-04687

Name              : Enable
Id                : 1
GlobalResourceId  : inst.PODF-04687.processorhyperthreadingmode.1
ResourceType      : ProcessorHyperThreadingMode
InstanceId        : PODF-04687

Name              : Disable
Id                : 2
GlobalResourceId  : inst.PODF-04687.processorhyperthreadingmode.2
ResourceType      : ProcessorHyperThreadingMode
InstanceId        : PODF-04687
```

Related Links

New-UCPServerProfile

Set-UCPServerProfile

New-UCPEfiSetting

Get-UCPSupportedProcessorTurboModes

Gets the supported processor turbo modes.

Syntax

Get-UCPSupportedProcessorTurboModes [<CommonParameters>]

Description

This is one of the EFI settings to supply when creating a server profile.

The default on blades from the factory is processor turbo mode Enabled since this is optimal for performance in most cases.

Parameters

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

None

Outputs

Hitachi.UCP.CLI.Domain.ProcessorTurboMode

Notes

Requires the UCP View privilege.

Example: Get-UCPSupportedProcessorTurboModes

```
C:\PS>Get-UCPSupportedProcessorTurboModes

Name            : AsIs
Id              : 0
GlobalResourceId : inst.PODF-04687.processorturbomode.0
ResourceType    : ProcessorTurboMode
InstanceId      : PODF-04687

Name            : Enable
Id              : 1
GlobalResourceId : inst.PODF-04687.processorturbomode.1
ResourceType    : ProcessorTurboMode
InstanceId      : PODF-04687

Name            : Disable
Id              : 2
GlobalResourceId : inst.PODF-04687.processorturbomode.2
ResourceType    : ProcessorTurboMode
InstanceId      : PODF-04687
```

Related Links

New-UCPServerProfile

Set-UCPServerProfile

New-UCPEfiSetting

Get-UCPSupportedRasDeconfiguredModes

Get supported RAS Deconfigured modes.

Syntax

Get-UCPSupportedRasDeconfiguredModes [<CommonParameters>]

Description

This is one of the EFI settings to supply when creating a server profile.

RAS is defined as Reliability, Availability, and Serviceability. The term is an industry standard that includes memory correction technologies like EEC, Mirroring and Sparing.

The default setting on blades from the factory is Enabled. This allows the blade to quarantine bad components and potentially prevent the host from crashing.

When disabled, the server can't quarantine bad components and will not boot if any component is bad. This ensures that the server will never boot with less than the maximum resources.

Parameters

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

None

Outputs

Hitachi.UCP.CLI.Domain.RasDeconfiguredMode

Notes

Requires the UCP View privilege.

Example: Get supported RAS Deconfigured modes

```
C:\PS>Get-UCPSupportedRasDeconfiguredModes


Name             : AsIs
Id               : 0
GlobalResourceId : inst.PODF-04687.rasdeconfiguredmode.0
ResourceType     : RasDeconfiguredMode
InstanceId       : PODF-04687


Name             : Enable
```

```
Id                : 1
GlobalResourceId : inst.PODF-04687.rasdeconfiguredmode.1
ResourceType      : RasDeconfiguredMode
InstanceId        : PODF-04687

Name              : Disable
Id                : 2
GlobalResourceId : inst.PODF-04687.rasdeconfiguredmode.2
ResourceType      : RasDeconfiguredMode
InstanceId        : PODF-04687
```

Related Links

New-UCPServerProfile

Set-UCPServerProfile

New-UCPEfiSetting

Get-UCPSysLog

Get detailed information from UCP syslog.

Syntax

Get-UCPSysLog [-StartTime] <DateTime> [[-EndTime] <DateTime>] [[-Keyword] <String>] [<CommonParameters>]

Description

The UCP internal syslog contains more detailed messaging than the events reported in the virtual platform. This cmdlet returns all syslog information reported during the specified start and end times. Maximum range is 120 minutes. If EndTime is not specified, the current time is used as the EndTime.

Parameters

- -StartTime <DateTime>

  Gives a specific start time for syslog messages.

  – Required? true

  – Position? 1

- – Default value

- – Accept pipeline input? false

- – Accept wildcard characters? false

- -EndTime <DateTime>

  Gives a specific end time for syslog messages.

  - – Required? false

  - – Position? 2

  - – Default value

  - – Accept pipeline input? false

  - – Accept wildcard characters? false

- -Keyword <String>

  Displays only syslog messages which contain the specified string.

  - – Required? false

  - – Position? 3

  - – Default value

  - – Accept pipeline input? false

  - – Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

None

Outputs

String

Example: Get UCP syslog messages with start time

```
C:\PS>Get-UCPSysLog -StartTime "09/09/2013 01:46:33"
```

```
Will give all syslog messages between the time of 09/09/2013 01:46:33 to
current time of now.
```

Example: Get UCP syslog messages with keyword

```
C:\PS>Get-UCPSysLog -StartTime "09/09/2013 15:08:43" -Keyword "Monitor
refresh UCP health"
```

```
# Returns syslog messages between the specified times which contain the
specified keyword phrase.
```

Related Links

Get-UCPEvent

Get-UCPJob

Get-UCPUserPrivilege

Lists user privileges.

Syntax

Get-UCPUserPrivilege [<CommonParameters>]

Description

Lists privileges for the currently logged in user.

Parameters

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

None

Outputs

Hitachi.UCP.CLI.Domain.UserPermissionList

Example: Get permissions of the currently logged in user

```
C:\PS>$P = (Get-UCPUserPrivilege).Permissions
$P


# The platform manager in this example is vCenter.

# Note that when the platform manager is SCVMM, the same list will
be displayed. However, the UCP Administrator is
 the only role possible for UCP and it is granted all privileges.



UCP.SystemAdministration
UCP.ServerAdministration
UCP.ServerConsole
UCP.NetworkAdministration
UCP.NetworkConsole
UCP.StorageAdministration
UCP.StorageConsole
UCP.View
UCP.Service
```

Get-UcpUuidIdentityPool

Gets details on UUID pools.

Syntax

Get-UcpUuidIdentityPool [[-IdentityPoolId] <String>]
[<CommonParameters>]

Description

This cmdlet returns details on UUID Pools. If a UUID Pool Id is provided, details on that individual pool will be returned. Otherwise, all UUID Pools are returned in an array.

This pool is needed when making a server profile.

Parameters

- -IdentityPoolId <String>

  Optionally specifies the ID of the Identity Pool to retrieve details from. If not specified, details on all Identity Pools are returned.

  – Required? false

  – Position? 1

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

None

Outputs

Hitachi.UCP.CLI.Domain.IdentityPool

Notes

This command requires the UCP View privilege.

Example: Get all UUID pools

```
C:\PS>Get-UCPUuidIdentityPool

Ranges           :
IdentityPoolId   : 3
Name             : Default Uuids
Type             : Uuid
Id               : 3
GlobalResourceId : inst.UCP-12345.idpool.3
ResourceType     : IdentityPool
InstanceId       : UCP-12345
```

Related Links

Get-UCPIdentity

Get-UCPVirtualDistributedSwitch

Gets virtual distributed switch information.

Syntax

Get-UCPVirtualDistributedSwitch [[-DistributedSwitchId] <String>] -VirtualManagerId <String> [<CommonParameters>]

Description

Gets information about virtual distributed switches in UCP Director inventory. If a DistributedSwitchId is specified, that switch is returned. Otherwise, all virtual distributed switches are returned in an array.

Applicable only when the platform manager is VMware.

Parameters

- -DistributedSwitchId <String>

  Optionally specifies the ID of the virtual distributed switch that is to be returned. Otherwise, all virtual distributed switches are returned in an array.

  – Required? false

  – Position? 1

  – Default value

  – Accept pipeline input? true (ByPropertyName)

  – Accept wildcard characters? false

- -VirtualManagerId <String>

  – Required? true

  – Position? named

  – Default value

  – Accept pipeline input? true (ByPropertyName)

  – Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

String

Outputs

Hitachi.UCP.CLI.Domain.VirtualDistributedSwitch

Example: Get Virtual distributed switch information

```
C:\PS>$manager=(Get-UCPVirtualPlatformManager)

C:\PS>Get-UCPVirtualDistributedSwitch -VirtualManagerId $manager.id


Name              : VDS without vMotion
PortGroupNames    : {dvpg-SampleCluster-634-Management, dvpg-
SampleCluster-634-Compute-VLAN27}
Id                : dvs-636
GlobalResourceId  : inst.v2ProductionB-123-456-789.vmgr.1.vswitch.dvs-
636
ResourceType      : VirtualSwitch
InstanceId        : v2ProductionB-123-456-789

Name              : dvSwitch-ClusterNewVDSWithVMotionWithHA-669
PortGroupNames    : {dvpg-ClusterNewVDSWithVMotionWithHA-669-Management,
dvpg-ClusterNewVDSWithVMotionWithHA-669-Compute-VLAN27, dvpg-
ClusterNewVDSWithVMotionWithHA-669-VMotion}
Id                : dvs-671
GlobalResourceId  : inst.v2ProductionB-123-456-789.vmgr.1.vswitch.dvs-
671
ResourceType      : VirtualSwitch
InstanceId        : v2ProductionB-123-456-789
```

Related Links

New-UCPVirtualDistributedSwitch

Get-UCPVirtualMachines

Gets the virtual machines from the specified virtual platform manager. Supported in vCenter only.

Syntax

Get-UCPVirtualMachines [-PlatformId] <String> [<CommonParameters>]

Description

Gets a virtual machine by Id or lists all virtual machines.

The management VMs will also be displayed if the current user's role has at least the UCP View privilege added to the UCP Management datacenter.

Applicable only when the platform manager is VMware.

Parameters

- -PlatformId <String>

  Id of the virtual platform manager.

  – Required? true

  – Position? 1

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

String

The ID of the virtual platform manager.

Outputs

Hitachi.UCP.CLI.Domain.Infrastructure.VirtualMachine

Notes

This command requires the UCP View privilege.

Example: List first 3 virtual machines

```
C:\PS>Get-UCPVirtualMachines -PlatformId 1 | Select-Object -First 3
```

```
Name              : Test_VM
ContextId         : vm-867
VirtualNics       : {ffffffff-ffff-ffff-ffff-d43d7e0885fa-4000}
Id                : 422063f8-7b1c-df99-e6b9-3f58e0fd6616
GlobalResourceId : UCP-123-456-789.vmgr.1.vm.422063f8-7b1c-df99-e6b9-
3f58e0fd6616
ResourceType      : VirtualMachine
InstanceId        : UCP-123-456-789

Name              : Dev_VM
ContextId         : vm-877
VirtualNics       : {ffffffff-ffff-ffff-ffff-d43d7e0885fa-4000}
Id                : 4220f66e-e5ca-dfd1-43fa-1e79e7bf1e47
GlobalResourceId : UCP.vmgr.1.vm.4220f66e-e5ca-dfd1-43fa-1e79e7bf1e47
ResourceType      : VirtualMachine
InstanceId        : UCP-123-456-789

Name              : Backup_VM
ContextId         : vm-866
VirtualNics       : {ffffffff-ffff-ffff-ffff-d43d7e0885fa-4000}
Id                : 42202045-66ed-f3c3-622a-16d49692358d
GlobalResourceId : inst.UCP-123-456-789.vmgr.1.vm.42202045-66ed-f3c3-
622a-16d49692358d
ResourceType      : VirtualMachine
InstanceId        : UCP-123-456-789"
```

Related Links

Get-UCPVirtualPlatformManager

Get-UCPVirtualPlatformManager

Gets virtual platform manager connection information.

Syntax

Get-UCPVirtualPlatformManager [[-PlatformId] <String>]
[<CommonParameters>]

Description

Gets virtual platform manager connection information.

Parameters

- -PlatformId <String>

  Optionally specifies the ID of the virtual platform manager that is to be returned.

  – Required? false

  – Position? 1

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

None

Outputs

Hitachi.UCP.CLI.Domain.VirtualPlatformManager

Notes

This command requires the UCP View privilege.

Example: Get virtual platform manager information, vCenter

```
C:\PS>Get-UCPVirtualPlatformManager


# This example is of a vCenter platform manager.


PlatformServer   :
```

```
PlatformType     : VMware
PlatformUrl      : https://vcenter.ucp.local/sdk
PlatformUsername : pode\ucpadmin
WebClientUrl     : https://vcenter.ucp.local/vsphere-client
PluginExtension  : {}
Id               : 1
GlobalResourceId : inst.UCP-123-456-789.vmgr.1
ResourceType     : VirtualManager
InstanceId       : UCP-123-456-789
```

Example: Get virtual platform manager information, SCVMM

```
C:\PS>Get-UCPVirtualPlatformManager


# This platform manager is SCVMM.


PlatformServer   : scvmm.pode.local
PlatformType     : SCVMM
PlatformUrl      :
PlatformUsername : ucp\ucpadmin
WebClientUrl     :
PluginExtension  : {https://scvmm.ucp.local/ui/extension/
get?platform=SCVMM&version=V2012R2&client=UiConsole}
Id               : 1
GlobalResourceId : inst.UCP-123-456-789.vmgr.1
ResourceType     : VirtualManager
InstanceId       : UCP-123-456-789
```

Related Links

Set-UCPVirtualPlatformManager

Get-UCPVolume

Gets volume details.

Syntax

Get-UCPVolume [-StorageSystemId] <String> [[-VolumeId] <String>] [-PoolId <String>] [-ServerId <String>] [-ClusterId <String>] [<CommonParameters>]

Description

Gets volume details. Use optional filter parameters to manage the number of volumes returned.

Parameters

- -StorageSystemId <String>

  Specifies the ID of the storage system with the volumes that are to be returned. Use Get-UCPStorageSystem to discover the storage system ID.

  – Required? true

  – Position? 1

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- -VolumeId <String>

  Optionally specifies the ID of the volume to be returned. Makes optional filter parameters invalid.

  – Required? false

  – Position? 2

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- -PoolId <String>

  Optional filter that specifies the ID of a pool. Volumes attached to that server are to be returned. Invalid if VolumeId is specified.

  – Required? false

  – Position? named

– Default value

– Accept pipeline input? false

– Accept wildcard characters? false

- -ServerId <String>

  Optional filter that specifies the ID of a server. Volumes attached to that server are to be returned. Invalid if VolumeId is specified.

  – Required? false

  – Position? named

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- -ClusterId <String>

  Optional filter that specifies the ID of a cluster. Volumes attached to at least one of the servers in the cluster are to be returned. Invalid if VolumeId is specified.

  – Required? false

  – Position? named

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

None

Outputs

Hitachi.UCP.CLI.Domain.Volume

Notes

This command requires the UCP View privilege.

Example: List all volumes in a storage system pool

```
C:\PS>Get-UCPVolume 53106 -PoolId 3


AttachedServerIds : {6e37f410-b4a7-11e1-94b0-c6aca3093fbb}
StorageSystemId   : 53106
LDev              : 00:3A:00
PoolId            : 3
Name              : HRWeb
TotalCapacityInGB : 150
UsedCapacityInGB  : 0.9
UsedPercentage    : 0
IsBootVolume      : False
IsReplicatedVolume: False
VolumeType        : HDP
Id                : 14848
GlobalResourceId  : inst.v2ProductionB-123-456-
789.stor.1.ss.93040480.vol.14848
ResourceType      : StorageVolume
InstanceId        : v2ProductionB-123-456-789

AttachedServerIds : {a00a087e-b42f-11e1-b5b5-de6c62e1293f, c92fe2c0-
b391-11e1-b1cc-8c192ba3b146, 7939714f-b3cf-11e1-b0e7-c85aebf97785}
StorageSystemId   : 53106
LDev              : 00:3A:01
PoolId            : 3
Name              : HRServices
TotalCapacityInGB : 200
UsedCapacityInGB  : 0.82
UsedPercentage    : 0
IsBootVolume      : False
IsReplicatedVolume: False
VolumeType        : HDP
Id                : 14849
GlobalResourceId  : inst.v2ProductionB-123-456-
789.stor.1.ss.93040480.vol.114849
ResourceType      : StorageVolume
```

```
       InstanceId        : v2ProductionB-123-456-789


       AttachedServerIds : {}
       StorageSystemId   : 53106
       LDev              : 00:3A:02
       PoolId            : 3
       Name              :
       TotalCapacityInGB : 50
       UsedCapacityInGB  : 0
       UsedPercentage    : 0
       IsBootVolume      : False
       IsReplicatedVolume: False
       VolumeType        : HDP
       Id                : 14850
       GlobalResourceId  : inst.v2ProductionB-123-456-
789.stor.1.ss.93040480.vol.14850
       ResourceType      : StorageVolume
       InstanceId        : v2ProductionB-123-456-789
```

Example: List all volumes in a storage system that are attached to a server

```
C:\PS>Get-UCPVolume 53106 -ServerId 6e37f410-b4a7-11e1-94b0-c6aca3093fbb


       AttachedServerIds : {6e37f410-b4a7-11e1-94b0-c6aca3093fbb}
       StorageSystemId   : 53106
       LDev              : 00:3A:00
       PoolId            : 3
       Name              : HRWeb
       TotalCapacityInGB : 150
       UsedCapacityInGB  : 0.9
       UsedPercentage    : 0
       IsBootVolume      : True
       IsReplicatedVolume: False
       VolumeType        : HDP
       Id                : 14848
       GlobalResourceId  : inst.v2ProductionB-123-456-
789.stor.1.ss.93040480.vol.14848
       ResourceType      : StorageVolume
       InstanceId        : v2ProductionB-123-456-789
```

Example: List all volumes in a storage system that are attached to a cluster

```
C:\PS>Get-UCPVolume 53106 -ClusterId domain-c93

       AttachedServerIds : {a00a087e-b42f-11e1-b5b5-de6c62e1293f, c92fe2c0-
b391-11e1-b1cc-8c192ba3b146, 7939714f-b3cf-11e1-b0e7-c85aebf97785}
       StorageSystemId   : 53106
       LDev              : 00:3A:01
```

```
PoolId            : 3
Name              : HRServices
TotalCapacityInGB : 200
UsedCapacityInGB  : 0.82
UsedPercentage    : 0
IsBootVolume      : False
IsReplicatedVolume: False
VolumeType        : HDP
Id                : 14849
GlobalResourceId  : inst.v2ProductionB-123-456-
789.stor.1.ss.93040480.vol.14849
ResourceType      : StorageVolume
InstanceId        : v2ProductionB-123-456-789
```

Example: Get a volume

```
C:\PS>Get-UCPVolume 53106 14850
```

```
AttachedServerIds : {}
StorageSystemId   : 53106
LDev              : 00:3A:02
PoolId            : 3
Name              :
TotalCapacityInGB : 50
UsedCapacityInGB  : 0
UsedPercentage    : 0
Id                : 14850
GlobalResourceId  : inst.v2ProductionB-123-456-
789.stor.1.ss.93040480.vol.14850
ResourceType      : StorageVolume
InstanceId        : v2ProductionB-123-456-789
```

Related Links

New-UCPVolume

Attach-UCPVolume

Detach-UCPVolume

Expand-UCPVolume

Remove-UCPVolume

Get-UCPStorageSystem

Get-UCPWindowsHyperVServiceTemplate

Lists Windows Hyper-V service templates.

Syntax

Get-UCPWindowsHyperVServiceTemplate [[-ServiceTemplateId] <String>]
[<CommonParameters>]

Description

Applicable with the platform manager is SCVMM. Hyper-V service
templates deploy the associated Windows image, configure the host with
the Hyper-V role, and add the hosts to SCVMM inventory.

Parameters

- -ServiceTemplateId <String>

  – Required? false

  – Position? 1

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug,
  ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer,
  PipelineVariable, and OutVariable. For more information, see about_
  CommonParameters (http://go.microsoft.com/fwlink/
  ?LinkID=113216).

Inputs

None

Outputs

Hitachi.UCP.CLI.Domain.UcpWindowsHyperVServiceTemplate

Notes

Requires UCP View privilege.

Example: Get Windows Hyper-V service templates

```
C:\PS>Get-UCPWindowsHypervServiceTemplate

BootVolumeStorageSystemId : 92232278
BootVolumePoolId          : 0
BootVolumeSizeInBytes     : 52949672960
BootUnattendFileLocation  : \\wds\REMINST\Boot\x64\Windows\
BootUnattendFiles\Windows2012R2DatacenterBootUnattend.xml
ImageUnattendFileLocation : \\wds\REMINST\Boot\x64\Windows\
ImageUnattendFiles\Windows2012R2DatacenterImageUnattend.xml
Id                        : 3
Name                      : WindowsHyperVTemplate
BootImageId               : 7
BootImageName             : Windows2012R2
BootImageType             : Windows
ServiceTemplateType       : Windows
ComputeVlanIds            : 100
GlobalResourceId          : inst.UCP-12311.svctmplt.3
ResourceType              : ServiceTemplate
InstanceId                : UCP-12311
```

Related Links

Copy-UCPServiceTemplate

Remove-UCPServiceTemplate

Apply-UCPWindowsHyperVServiceTemplate

Get-UCPWindowsServiceTemplate

Returns a list of Windows service templates.

Syntax

Get-UCPWindowsServiceTemplate [[-ServiceTemplateId] <String>]
[<CommonParameters>]

Description

Windows service templates can be used if the platform manager is either SCVMM or vCenter. Note that hosts deployed with a Windows service template will not be listed in the platform manager inventory. Also, the WDS server within UCP needs to be configured with boot unattend and image unattend files for your Windows image.

Parameters

- -ServiceTemplateId <String>

  Optionally specifies the ID of one Windows template to get.

  – Required? false

  – Position? 1

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

None

Outputs

Hitachi.UCP.CLI.Domain.UcpWindowsServiceTemplate

Notes

Requires UCP View privilege.

Example: Get Windows service templates

```
C:\PS>Get-UCPWindowsHyperVServiceTemplate

BootVolumeStorageSystemId : 92232278
BootVolumePoolId          : 0
BootVolumeSizeInBytes     : 52949672960
BootUnattendFileLocation  : \\wds\REMINST\Boot\x64\Windows\
BootUnattendFiles\Windows2012R2DatacenterBootUnattend.xml
ImageUnattendFileLocation : \\wds\REMINST\Boot\x64\Windows\
ImageUnattendFiles\Windows2012R2DatacenterImageUnattend.xml
Id                        : 1
Name                      : Windows Service Template
BootImageId               : 7
BootImageName             : Windows2012R2
BootImageType             : Windows
ServiceTemplateType       : WindowsHyperV
ComputeVlanIds            :
GlobalResourceId          : inst.UCP-12311.svctmplt.1
ResourceType              : ServiceTemplate
InstanceId                : UCP-12311
```

Related Links

Copy-UCPServiceTemplate

Remove-UCPServiceTemplate

Apply-UCPWindowsServiceTemplate

Get-UcpWwnAddressIdentityPool

Gets details on WWN Address Pools

Syntax

Get-UcpWwnAddressIdentityPool [[-IdentityPoolId] <String>]
[<CommonParameters>]

Description

This cmdlet returns details on WWN Address Pools. If a WWN Address Pool
Id is provided, details on that individual pool will be returned. Otherwise,
all WWN Address Pools are returned in an array.

This pool is needed when making a server profile that automatically pulls
WWPNs and WWNNs from the pool.

Parameters

- -IdentityPoolId <String>

  Optionally specifies the ID of the Identity Pool to retrieve details from. If not specified, details on all Identity Pools are returned.

  – Required? false

  – Position? 1

  – Default value   Accept pipeline input? false

  – Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

None

Outputs

Hitachi.UCP.CLI.Domain.IdentityPool

Notes

This command requires the UCP View privilege.

Example: Get all WWN address pools

```
C:\PS>Get-UCPWwnAddressIdentityPool

Ranges          : {2}
IdentityPoolId  : 4
Name            : Default WwnAddresses
Type            : WwnAddress
Id              : 4
GlobalResourceId : inst.UCP-12345.idpool.4
ResourceType    : IdentityPool
```

```
InstanceId        : UCP-12345
```

Related Links

Get-UCPWWNAddressIdentityPoolRange

Get-UCPWWNAddressIdentityPoolRange

Gets details on WWN address ranges.

Syntax

Get-UcpWwnAddressIdentityPoolRange -IdentityPoolId <String>
[<CommonParameters>]

Get-UcpWwnAddressIdentityPoolRange -IdentityPoolRangeId <String> -
IdentityPoolId <String> [<CommonParameters>]

Description

This cmdlet returns details on WWN address ranges. If a WWN address
pool Id is provided, details of all ranges within that pool will be returned.
Otherwise, you may specify a range id to retrieve details on a single range.

Parameters

- -IdentityPoolId <String>

  Specifies the ID of an Identity Pool to retrieve all range details from. If
  not specified, IdentityPoolRangeId must be provided.

  – Required? true

  – Position? named

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- -IdentityPoolRangeId <String>

  Optionally specifies the ID of an Identity Pool Range to retrieve details from. If not specified, IdentityPoolId must be provided.

  – Required? true

  – Position? named

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

None

Outputs

Hitachi.UCP.CLI.Domain.IdentityPoolRange

Notes

This command requires the UCP View privilege.

Example: Get all ranges in WWN address pool

```
C:\PS>Get-UcpWwnAddressIdentityPool -IdentityPoolId 4

Ranges            : {2}
IdentityPoolId    : 4
Name              : Default WwnAddresses
Type              : WwnAddress
Id                : 4
GlobalResourceId  : inst.UCP-12345.idpool.4
ResourceType      : IdentityPool
```

```
InstanceId      : UCP-12345
```

Related Links

Get-UCPWwnAddressIdentityPool

Get-UCPZone

Gets zone details.

Syntax

Get-UCPZone [-FabricId] <String> [[-ZoneId] <String>] [-ServerId <String>] [<CommonParameters>]

Description

Gets zone details.

Parameters

- -FabricId <String>

  Specifies the ID of the fabric with the zones that are to be returned. Use Get-UCPFabric to discover fabric IDs.

  – Required? true

  – Position? 1

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- -ZoneId <String>

  Optionally specifies the ID of the zone that is to be returned. Invalid if ServerId is specified.

  – Required? false

  – Position? 2

- – Default value

- – Accept pipeline input? false

- – Accept wildcard characters? false

- -ServerId <String>

  Optional filter that specifies the ID of the server that zones must include to be returned. Invalid if ZoneId is specified.

  - – Required? false

  - – Position? named

  - – Default value

  - – Accept pipeline input? false

  - – Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

None

Outputs

Hitachi.UCP.CLI.Domain.Zone

Notes

This command requires the UCP View privilege.

Example: List all zones in a fabric

```
C:\PS>Get-UCPZone 2 | Format-Table Id, InitiatorWWN, TargetWWN -AutoSize
```

```
# Using the ID of a fabric, you can list all of the zones in that
fabric.


Id                                             InitiatorWWN
TargetWWN
--                                             ------------          -----
----
Port0_esx01_ucp_local_CL2C_VSP_10_20_90_67 50.00.08.70.00.53.7A.18
50.06.0E.80.06.CF.72.12
Port0_esx01_ucp_local_CL5C_VSP_10_20_90_67 50.00.08.70.00.53.7A.18
50.06.0E.80.06.CF.72.42
Port0_esx02_ucp_local_CL1C_VSP_10_20_90_67 50.00.08.70.00.53.7A.08
50.06.0E.80.06.CF.72.02
Port0_esx02_ucp_local_CL2C_VSP_10_20_90_67 50.00.08.70.00.53.7A.08
50.06.0E.80.06.CF.72.12
Port0_esx03_ucp_local_CL2C_VSP_10_20_90_67 50.00.08.70.00.53.7B.48
50.06.0E.80.06.CF.72.12
Port0_esx03_ucp_local_CL5C_VSP_10_20_90_67 50.00.08.70.00.53.7B.48
50.06.0E.80.06.CF.72.42
Port0_esx04_ucp_local_CL1C_VSP_10_20_90_67 50.00.08.70.00.53.79.F0
50.06.0E.80.06.CF.72.02
Port0_esx04_ucp_local_CL2C_VSP_10_20_90_67 50.00.08.70.00.53.79.F0
50.06.0E.80.06.CF.72.12
UCP_Compute_Placeholder
```

Example: List all zones in the fabric that are used by a server

```
C:\PS>Get-UCPZone 2 -ServerId 6e37f410-b4a7-11e1-94b0-c6aca3093fbb
```

```
Name            : Port0_5ca1ee5b_8f7d_11e1_8972_b4d25e4bd7d7_CTL0C_
HUS150_10_21_24
FabricId        : 2
PortMembers     : {50.00.08.70.00.53.7C.F0, 50.06.0E.80.10.1A.F9.02}
InitiatorWWN    : 50.00.08.70.00.53.7C.F0
TargetWWN       : 50.06.0E.80.10.1A.F9.02
Id              : Port0_5ca1ee5b_8f7d_11e1_8972_b4d25e4bd7d7_CTL0C_
HUS150_10_21_24
GlobalResourceId : inst.v2ProductionB-123-456-
789.fc.1.fab.2.zone.Port0_5ca1ee5b_8f7d_11e1_8972_b4d25e4bd7d7_CTL0C_
HUS150_1

                  0_21_24
ResourceType    : StorageZone
InstanceId      : v2ProductionB-123-456-789

Name            : Port0_5ca1ee5b_8f7d_11e1_8972_b4d25e4bd7d7_CTL1C_
HUS150_10_21_24
```

```
FabricId          : 2
PortMembers       : {50.00.08.70.00.53.7C.F0, 50.06.0E.80.10.1A.F9.0A}
InitiatorWWN      : 50.00.08.70.00.53.7C.F0
TargetWWN         : 50.06.0E.80.10.1A.F9.0A
Id                : Port0_5ca1ee5b_8f7d_11e1_8972_b4d25e4bd7d7_CTL1C_
HUS150_10_21_24
GlobalResourceId  : inst.v2ProductionB-123-456-
789.fc.1.fab.2.zone.Port0_5ca1ee5b_8f7d_11e1_8972_b4d25e4bd7d7_CTL1C_
HUS150_1
                  0_21_24
ResourceType      : StorageZone
InstanceId        : v2ProductionB-123-456-789

Name              : Port1_5ca1ee5b_8f7d_11e1_8972_b4d25e4bd7d7_CTL0C_
HUS150_10_21_24
FabricId          : 2
PortMembers       : {50.00.08.70.00.53.7C.F2, 50.06.0E.80.10.1A.F9.02}
InitiatorWWN      : 50.00.08.70.00.53.7C.F2
TargetWWN         : 50.06.0E.80.10.1A.F9.02
Id                : Port1_5ca1ee5b_8f7d_11e1_8972_b4d25e4bd7d7_CTL0C_
HUS150_10_21_24
GlobalResourceId  : inst.v2ProductionB-123-456-
789.fc.1.fab.2.zone.Port1_5ca1ee5b_8f7d_11e1_8972_b4d25e4bd7d7_CTL0C_
HUS150_1
                  0_21_24
ResourceType      : StorageZone
InstanceId        : v2ProductionB-123-456-789

Name              : Port1_5ca1ee5b_8f7d_11e1_8972_b4d25e4bd7d7_CTL1C_
HUS150_10_21_24
FabricId          : 2
PortMembers       : {50.00.08.70.00.53.7C.F2, 50.06.0E.80.10.1A.F9.0A}
InitiatorWWN      : 50.00.08.70.00.53.7C.F2
TargetWWN         : 50.06.0E.80.10.1A.F9.0A
Id                : Port1_5ca1ee5b_8f7d_11e1_8972_b4d25e4bd7d7_CTL1C_
HUS150_10_21_24
GlobalResourceId  : inst.v2ProductionB-123-456-
789.fc.1.fab.2.zone.Port1_5ca1ee5b_8f7d_11e1_8972_b4d25e4bd7d7_CTL1C_
HUS150_1
                  0_21_24
ResourceType      : StorageZone
InstanceId        : v2ProductionB-123-456-789
```

Example: Get a zone in a fabric

```
C:\PS>Get-UCPZone 2 Port1_5ca1ee5b_8f7d_11e1_8972_b4d25e4bd7d7_CTL1C_
HUS150_10_21_24
```

```
Name              : Port1_5ca1ee5b_8f7d_11e1_8972_b4d25e4bd7d7_CTL1C_
HUS150_10_21_24
FabricId          : 2
PortMembers       : {50.00.08.70.00.53.7C.F2, 50.06.0E.80.10.1A.F9.0A}
InitiatorWWN      : 50.00.08.70.00.53.7C.F2
TargetWWN         : 50.06.0E.80.10.1A.F9.0A
Id                : Port1_5ca1ee5b_8f7d_11e1_8972_b4d25e4bd7d7_CTL1C_
HUS150_10_21_24
GlobalResourceId  : inst.v2ProductionB-123-456-
789.fc.1.fab.2.zone.Port1_5ca1ee5b_8f7d_11e1_8972_b4d25e4bd7d7_CTL1C_
HUS150_1
                    0_21_24
ResourceType      : StorageZone
InstanceId        : v2ProductionB-123-456-789
```

Related Links

Set-UCPZone

Remove-UCPZone

Get-UCPFabric

Move-UCPServerProfile

Moves a server profile from its current location to a new server.

Syntax

Move-UCPServerProfile [-ServerProfileId] <String> -ServerId <String> [<CommonParameters>]

Description

For a variety of reasons, a server's identity may need to be moved to a different server. One example is when upgrading to a server with a newer CPU revision.

Rather than re-deploying the server's image, storage, and networking, simply move the server profile. The new server will adopt the storage volumes, EFI settings, CNA settings, and networking configurations of the former server.

Prerequisites:

- The server that the profile is currently applied to may or might not be installed in the chassis.

- The destination blade should be off and should have no storage attached.

Parameters

- -ServerProfileId <String>

  ID of the server profile to be moved.

  – Required? true

  – Position? 1

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- -ServerId <String>

  ID of the destination server. This is the server's current UUID, which will be changed after the profile is applied.

  – Required? true

  – Position? named

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

String

Outputs

None

Notes

Requires UCP Administrator privilege.

Example: Move server profile to server in slot 7

```
C:\PS>#  Build variable with ID of server in slot 7:
$ServerId = (Get-UCPServer | where {$_.ChassisSerialNumber -eq "323GG-
RE3A1NBX1-Y00000017" -And $_.PrimarySlot -eq "7"}).Id

# Move server profile 12 to the above server.
Move-UCPServerProfile -ServerProfileId 12 -ServerId $ServerId
```

Related Links

Get-UCPServer

Get-UCPServer

New-UCPClusterServiceTemplate

Creates a service template which will form an ESXi cluster when applied to servers.

Syntax

New-UCPClusterServiceTemplate -HostProfileId <String> -VirtualDistributedSwitch <VirtualDistributedSwitch> [-HighAvailabilityCluster <HighAvailabilityCluster>] [-EnableDistributedResourceScheduler] [-StorageCluster <StorageCluster>] [-AttachVolumes <UcpServiceTemplateVolumeInformation[]>] [-CreateAndAttachVolumes <UcpServiceTemplateVolumeInformation[]>] -Name <String> -BootImageId <String> [<CommonParameters>]

Description

This type of service template:

* Will configure switch VLAN IDs for Compute and vMotion,

* Either attaches hosts to an existing VDS or makes a new one,

* Creates new volumes or datastores and\or attaches to existing,

* Specifies HA parameters,

* Optionally creates an SDRS cluster (vSphere storage cluster)

Parameters

- -HostProfileId <String>

  Id of the vSphere host profile to use. This host profile will be copied when the template is applied. The new host profile will be edited and renamed for the new cluster.

  – Required? true

  – Position? named

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- -VirtualDistributedSwitch <VirtualDistributedSwitch>

  Specifies either an existing VDS or takes parameters to create a new one. Use helper cmdlet New-UCPVirtualDistributedSwitch.

  – Required? true

  – Position? named

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- -HighAvailabilityCluster <HighAvailabilityCluster>

  Specifies HA settings. Use helper command New-UCPHighAvailabilityClusterSetting.

  – Required? false

  – Position? named

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- -EnableDistributedResourceScheduler

  Boolean flag for optionally enabling DRS on the host cluster.

  – Required? false

  – Position? named

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- -StorageCluster <StorageCluster>

  Optionally specifies configuration information for an SDRS (storage) cluster. Use helper command New-UCPStorageClusterSetting.

  – Required? false

  – Position? named

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- -AttachVolumes <UcpServiceTemplateVolumeInformation[]>

  Optionally specifies existing datastores to attach to the cluster when template is applied. (Do not attach existing non-VMFS volumes.) Use helper command New-UCPServiceTemplateVolumeInformation.

  – Required? false

  – Position? named

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- -CreateAndAttachVolumes <UcpServiceTemplateVolumeInformation[]>

  Optionally specifies volumes or datastores to create and attach to servers when template is applied. Use helper command New-UCPServiceTemplateVolumeInformation.

  – Required? false

  – Position? named

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- -ComputeVlanIds <String>

  When trunk VLAN IDs are supplied with this parameter, the template will make a new VDS with a port group for each VLAN ID, but will not make a vMotion port group. If a vMotion port group is needed, use the VirtualDistributedSwitch parameter instead, and supply necessary values with helper cmdlet New-UCPVirtualDistributedSwitch. VLANs can be a single digit, a range, or a comma-separated list.

  – Required? false

  – Position? named

  – Default value

- – Accept pipeline input? false

- – Accept wildcard characters? false

- -Description <String>

  - – Required? false

  - – Position? named

  - – Default value

  - – Accept pipeline input? false

  - – Accept wildcard characters? false

- -Name <String>

  Name for this UCPClusterServiceTemplate.

  - – Required? true

  - – Position? named

  - – Default value

  - – Accept pipeline input? false

  - – Accept wildcard characters? false

- -BootImageId <String>

  ESXi image to load on all hosts in the cluster when template is applied.

  - – Required? true

  - – Position? named

  - – Default value

  - – Accept pipeline input? false

  - – Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

Hitachi.UCP.CLI.Domain.HighAvailabilityCluster, Hitachi.UCP.CLI.Domain.UcpServiceTemplateVolumeInformation, Hitachi.UCP.CLI.Domain.ServiceTemplate.VirtualDistributedSwitch, Hitachi.UCP.CLI.Domain.StorageCluster

Outputs

Hitachi.UCP.CLI.Domain.UcpESXiStatelessClusterServiceTemplate

Notes

The UCP System Administrator and UCP View privileges are required.

Example: Create new cluster service template

```
C:\PS># Specify VDS to create:

C:\PS>$VDS = New-UCPVirtualDistributedSwitch -VmotionVlanId 26 -
ComputeVlanIds "27-29"

# Prepare SDRS settings:

C:\PS>$SDRSCluster = New-UCPStorageClusterSetting -CreateStorageCluster
-EnableStorageDrs -AutomateStorageDrs -EnableStorageDrsIoMetric

# Prepare HA cluster settings:

C:\PS>$HASettings = New-UCPHighAvailabiltyClusterSetting -
FailoverRamPercentage 25 -FailoverCpuPercentage 25

# Prepare two new datastores to attach:

C:\PS>$Datastore1 = New-UCPServiceTemplateVolumeInformation -
StorageSystemId 93040480 -PoolId 2 -Size 140949672960 -FileSystem VMFS -
VolumeName Datastore1
```

```
C:\PS>$Datastore2 = New-UCPServiceTemplateVolumeInformation -
StorageSystemId 93040480 -PoolId 2 -Size 140949672960 -FileSystem VMFS -
VolumeName Datastore2

# Create UCP cluster service template:

C:\PS>New-UCPClusterServiceTemplate -Name HACluster -BootImageId 1 -
HostProfileId hostprofile-53 -VirtualDistributedSwitch $VDS -
HighAvailabilityCluster $HASettings -EnableDistributedResourceScheduler
-StorageCluster $SDRSCluster -CreateAndAttachVolumes
@($Datastore1,$Datastore2)
```

```
Id                                     : 18
Name                                   : HACluster
ComputeVlanIds                         : 27-29
BootImageId                            : 1
BootImageName                          : HitachiESXiImage-520HB1
NativeVlanId                           :
BootVolumeStorageSystemId              :
BootVolumePoolId                       :
BootVolumeSizeInBytes                  : 0
BootUnattendFileLocation               :
ImageUnattendFileLocation              :
KickstartFileLocation                  :
HostProfileName                        : hostprofile-53
DistributedSwitchId                    :
VmotionVlanId                          : 26
ManagementPortGroupName                :
FailoverRamPercentage                  : 25
FailoverCpuPercentage                  : 25
HighAvailabilityEnabled                : True
EnableDistributedResourceScheduler     : True
CreateStorageCluster                   : True
EnableStorageDrs                       : True
AutomateStorageDrs                     : True
EnableStorageDrsIOMetric               : True
VmotionPortGroupName                   :
GlobalResourceId                       : inst.UCP-123-456-
789.servicetemplate.18
ResourceType                           : ServiceTemplate
InstanceId                             : UCP-123-456-789
```

Related Links

New-UCPVirtualDistributedSwitch

New-UCPStorageClusterSetting

New-UCPHighAvailabiltyClusterSetting

New-UCPServiceTemplateVolumeInformation

Get-UCPHostProfile

Get-UCPImage

New-UCPCnaControllerSetting

Helper cmdlet for passing Converged Network Adapter (CNA) settings into a server profile.

Syntax

New-UCPCnaControllerSetting -PhysicalPortSettings <CnaPhysicalPortSetting[]> [<CommonParameters>]

Description

The nature of the hardware dictates the usage of this cmdlet. Use Get-UCPConvergedSwitch to verify if the appliance uses converged networking.

If using converged networking, the CNA card provides both FCoE connection to storage as well as Ethernet. When the networking type is converged, it is possible to either partition the CNA into multiple virtual channels per port, or leave the ports physical.

Parameters

- -PhysicalPortSettings <CnaPhysicalPortSetting[]>

  This parameter expects input from New-UCPCnaPhysicalPortSetting. See the help for that cmdlet.

  – Required? true

  – Position? named

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- • <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

Hitachi.UCP.CLI.Domain.ServerProfile.CnaPhysicalPortSetting

Array of physical CNA port settings.

Outputs

Hitachi.UCP.CLI.Domain.CnaControllerSettings

The UCP System Administrator and UCP View privileges are required.

Example: For nonhypervisor server profile with 2port CNA partitioned

```
    C:\PS># Take variable from New-UCPCnaPhysicalPortSetting (see
example 1 for that cmdlet)

    $CNA_Settings_for_NonHypervisor = New-UCPCnaControllerSetting -
PhysicalPortSettings $Physical_CNA_Port1




    # View array for PhysicalPortSettings.VirtualPortSettings:

    $CNA_Settings_for_
NonHypervisor.PhysicalPortSettings.VirtualPortSettings | fl


    EnableLogicalLink : True
    Bandwidth         : 10
    VlanId            : 20

    EnableLogicalLink : True
    Bandwidth         : 40
    VlanId            : 0

    EnableLogicalLink : True
```

```
Bandwidth        : 25
VlanId           : 100


EnableLogicalLink : True
Bandwidth        : 25
VlanId           : 101
```

Example: For nonhypervisor server profile with 4port CNA partitioned

```
C:\PS># Take the array built by New-UCPVirtualPortSetting (see
example 2 for that cmdlet)

$Physical_CNA_Port1 = New-UCPCnaPhysicalPortSetting -
EnableVirtualPorts -VirtualPortSettings $Array_Of_Channels


# Because this is a 4port CNA, the array for virtual settings needs
to contain values for 8 channels - that is - 4
virtual channels per port for the first 2 ports only. UCP mirrors
the configuration to physical ports 3 and 4.



# Examine contents of new variable:

$Physical_CNA_Port1.VirtualPortSettings | fl


EnableLogicalLink : True
Bandwidth        : 10
VlanId           : 20

EnableLogicalLink : True
Bandwidth        : 40
VlanId           : 0

EnableLogicalLink : True
Bandwidth        : 25
VlanId           : 100

EnableLogicalLink : True
Bandwidth        : 25
VlanId           : 101

EnableLogicalLink : True
Bandwidth        : 10
VlanId           : 21

EnableLogicalLink : True
Bandwidth        : 40
VlanId           : 0
```

```
        EnableLogicalLink : True
        Bandwidth         : 25
        VlanId            : 102

        EnableLogicalLink : True
        Bandwidth         : 25
        VlanId            : 103
```

Example: For hypervisor server profile with 4port CNA not partitioned

```
        C:\PS># Use the variable built with New-UCPCnaPhysicalPortSetting
    (see example 3 for that cmdlet)

        $CNASettings_for_Profile = New-UCPCnaControllerSetting -
    PhysicalPortSettings $Array_of_Ports


        Since this is a 4 port CNA, it requires settings for the first two
    physical ports. UCP mirrors the configuration
        for ports 3 and 4.



        # Examine contents of variable:

        $CNASettings_for_Profile.PhysicalPortSettings | fl

        EnableVirtualPorts  : False
        VirtualPortSettings :
        VlanId              : 0

        EnableVirtualPorts  : False
        VirtualPortSettings :
        VlanId              : 0
```

Example: For hypervisor server profile with 2port CNA not partitioned

```
        C:\PS># Use the variable built with New-UCPCnaPhysicalPortSetting
    (see example 4 for that cmdlet)

        $CNASettings_for_Profile = New-UCPCnaControllerSetting -
    PhysicalPortSettings $Physical_CNA_Port1


        For a 2port adapter, supply configurations only for the first port.
    UCP mirrors the configuration to the 2nd port.
```

```
$CNASettings_for_Profile.PhysicalPortSettings | fl


EnableVirtualPorts  : False
VirtualPortSettings :
VlanId              : 0
```

Related Links

New-UCPCnaPhysicalPortSetting

New-UCPCnaPhysicalPortSetting

Helper cmdlet used for passing Converged Network Adapter port settings into New-UCPCnaControllerSetting, which, in turn, is provided to a server profile.

Syntax

New-UCPCnaPhysicalPortSetting -VlanId <Int32> [<CommonParameters>]

New-UCPCnaPhysicalPortSetting -EnableVirtualPorts -VirtualPortSettings <VirtualPortSetting[]> [<CommonParameters>]

Description

The type of hardware in the appliance dictates the usage of this cmdlet. If converged switches exist, the physical ports of the CNA can either be partitioned into virtual channels or left physical. See descriptions for EnableVirtualPorts and VirtualPortSettings.

When the CNA has 2 ports, build one variable with this cmdlet. When the CNA has 4 ports, build two variables with this cmdlet. The first 2 ports of a 4-port adapter are connected to one switch while the next 2 ports are connected to the other switch. Supply a configuration for the first half of the adapter and UCP will mirror the configuration to the 2nd half of the adapter. To discover the number of CNA ports on the target server(s), use Get-UCPServer and examine the NicInformationList property.

The type of server profile also dictates the values that should be input to this cmdlet. See description of the VlanId parameter for details.

Parameters

- -VlanId <Int32>

  Only supply a VLAN ID when EnableVirtualPorts is false.

  When the CNA is not partitioned, the management VLAN ID is supplied here. If the intended server profile is for Hypervisors, use the same management VLAN ID as the UCP management block. Use Get-UCPDirectorConfiguration to learn the ManagementVlanId.

  – Required? true

  – Position? named

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- -EnableVirtualPorts

  Expects Boolean value.

  When true, the physical CNA port will be divided into 4 virtual partitions. If so, the VirtualPortSettings parameter needs information from New-UCPVirtualPortSetting helper cmdlet.

  – Required? true

  – Position? named

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- -VirtualPortSettings <VirtualPortSetting[]>

  This parameter needs information supplied from helper cmdlet New-UCPVirtualPortSetting.

  When the CNA has 2 physical ports, supply 4 variables; one for each virtual channel on the first half of the adapter.

When the CNA has 4 physical ports, supply 8 variables; one for each virtual channel on the first half of the adapter.

- – Required? true

- – Position? named

- – Default value

- – Accept pipeline input? false

- – Accept wildcard characters? false

- <CommonParameters>

This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

Hitachi.UCP.CLI.Domain.ServerProfile.VirtualPortSetting

Outputs

Hitachi.UCP.CLI.Domain.ServerProfile.CnaPhysicalPortSetting

Notes

The UCP System Administrator and UCP View privileges are required.

Example: For non-hypervisor server profile with 2port CNA, partitioned

```
    C:\PS># Take the variable built by New-UCPVirtualPortSetting (see
the example for that cmdlet)

    $Physical_CNA_Port1 = New-UCPCnaPhysicalPortSetting -
EnableVirtualPorts -VirtualPortSettings $Array_Of_Channels
```

```
$Physical_CNA_Port1.EnableVirtualPorts
True

$Physical_CNA_Port1.VirtualPortSettings | ft -Autosize

EnableLogicalLink Bandwidth VlanId
----------------- --------- ------
           True 10         20
           True 40          0
           True 25        100
           True 25        101
```

Example: For non-hypervisor server profile with 4port CNA, partitioned

```
C:\PS>Will be implemented in UCP version 3.5.1.
```

Example: For hypervisor profile with 4port CNA not partitioned

```
C:\PS># Build variables for first 2 physical CNA ports on a 4port
card:

$Physical_CNA_Port1 = New-UCPCnaPhysicalPortSetting -VlanId 0

$Physical_CNA_Port2 = New-UCPCnaPhysicalPortSetting -VlanId 0

# Build array of above two variables
$Array_of_Ports = @($Physical_CNA_Port1,$Physical_CNA_Port2)


# For hypervisor profiles, supply 0 for -VlanId. It will be ignored
and UCP will configure the proper Management
VLAN ID for use by hypervisors in your appliance.


# Examine contents of variable:

$Array_of_Ports | fl


EnableVirtualPorts  : False
VirtualPortSettings :
VlanId              : 0

EnableVirtualPorts  : False
VirtualPortSettings :
VlanId              : 0
```

Example: For hypervisor profile with 2port CNA, not partitioned

```
C:\PS># Build variables for first physical CNA port on a 2port card:

$Physical_CNA_Port1 = New-UCPCnaPhysicalPortSetting -VlanId 0




# Check contents of the new variable:

$Physical_CNA_Port1 | fl

EnableVirtualPorts  : False
VirtualPortSettings :
VlanId              : 0
```

Related Links

New-UCPVirtualPortSetting

New-UCPCnaControllerSetting

New-UCPConvergedSwitch

Adds a converged switch to inventory.

Syntax

New-UCPConvergedSwitch [-IPAddress] <String> -Credential <PSCredential> [<CommonParameters>]

Description

The process of adding a converged switch to inventory includes:

- Verifying the make, model, and OS version are supported

- Ensuring that all ports are enabled

- Ensuring that the link layer discovery protocol (LLDP/CDP) is enabled

- When monitoring is enabled, the switch is also configured to report SNMP traps to UCP Director

When a converged switch is successfully added to inventory, its state is set to initializing. Once inventory is successfully refreshed (via a regularly scheduled job or by using Refresh-UCPInventory -Type ConvergedSwitch), it becomes active.

Parameters

- -IPAddress <String>

  – Required? true

  – Position? 1

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- -Credential <PSCredential>

  – Required? true

  – Position? named

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

None

Outputs

Hitachi.UCP.Domain.ConvergedSwitch

Notes

The UCP Network Administrator and UCP View privileges are required.

Example: Add a converged switch to inventory

```
C:\PS>$cred = Get-Credential

C:\PS>New-UCPConvergedSwitch -IpAddress 10.21.80.213 -Credential
$cred | Format-List
```

```
Type               : Access
Status             : Active
Name               : R1-CS-5548-B-U41
Make               : Cisco
Model              : Nexus5548
SerialNumber       : FOC170279DV
FirmwareVersion    : 6.0(2)N2(3)
IpAddress          : 10.21.80.213
UserName           : ucpadmin
EthernetPorts      : {Ethernet1/1, Ethernet1/2, Ethernet1/3,
Ethernet1/4...}
FibreChannelPorts : {fc1/25, fc1/26, fc1/27, fc1/28...}
FCoEPorts          : {Ethernet1/11, Ethernet1/12, Ethernet1/17,
Ethernet1/18...}
Id                 : 3
GlobalResourceId   : inst.PODG-1234.conv.1.net.3
ResourceType       : ConvergedSwitch
InstanceId         : PODG-1234
```

Related Links

Get-UCPConvergedSwitch

New-UCPCustomServiceTemplate

Creates a custom service template.

Syntax

New-UCPCustomServiceTemplate [-ComputeVlanIds <String>] -Name <String> [-Description <String>] -BootImageId <String> [<CommonParameters>]

Description

Custom service templates are used when a server is not intended to deploy images by means of the WDS or Auto Deploy services within UCP. The user will manually deploy operating systems to blades using this service template.

Parameters

- -ComputeVlanIds <String>

  Compute VLAN Ids to be used by blades applying this template.

  – Required? false

  – Position? named

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- -Name <String>

  Name for this Custom service template.

  – Required? true

  – Position? named

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- -Description <String>

    – Required? false

    – Position? named

    – Default value

    – Accept pipeline input? false

    – Accept wildcard characters? false

- -BootImageId <String>

    Boot image Id associated with the concept of Custom. (No actual image). Generally Id 2.

    – Required? true

    – Position? named

    – Default value

    – Accept pipeline input? false

    – Accept wildcard characters? false

- <CommonParameters>

    This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

None

Outputs

Hitachi.UCP.CLI.Domain.UcpCustomServiceTemplate

Notes

The UCP System Administrator and UCP View privileges are required.

Benefits of using Custom service template: Blade is removed from the list of servers that UCP will deploy images to, the VLAN Ids will be configured for the blade according to template instructions. Application of this template will override the unmanaged port setting long enough to apply new VLANs.

Example: Create new custom service template

```
C:\PS># Get the Id of 'Custom' image type:

C:\PS>Get-UCPImage -ImageType custom


Name              : Custom Image
Description       : Custom Image
ImageType         : Custom
Id                : 3
GlobalResourceId  : inst.UCP-123-456-789.cmp.1.img.3
ResourceType      : ServerImage
InstanceId        : UCP-123-456-789


# Make new custom template:

   C:\PS>New-UCPCustomServiceTemplate -BootImageId 3 -ComputeVlanIds 22
-Name "Custom Template 03"
```

```
Id                              : 11
Name                            : Custom Template 03
BootImageId                     : 3
BootImageName                   : Custom Image
BootImageType                   : Custom
ServiceTemplateType             : Custom
ComputeVlanIds                  : 22
GlobalResourceId                : inst.UCP-123-456-
789.svctmplt.11
ResourceType                    : ServiceTemplate
InstanceId                      : UCP-123-456-789
```

Related Links

Get-UCPImage

Apply-UCPCustomServiceTemplate

Get-UCPCustomServiceTemplate

Remove-UCPServiceTemplate

Set-UCPCustomServiceTemplate

New-UCPDisasterRecoveryManager

Adds a new disaster recovery manager to UCP.

Syntax

New-UCPDisasterRecoveryManager -ServiceUrl <String> -Credential <PSCredential> [<CommonParameters>]

Description

When a UCP site includes the disaster recovery service, it relies upon a replication server to control volume replication. When the platform manager is VMWare, the replication server also includes VMware Site Recovery Manager (SRM).

This cmdlet updates UCP Director with connection information for the replication server. In the management stack, this service is hosted by a VM named "Repl" by default.

Parameters

- -ServiceUrl <String>

    – Required? true

    – Position? named

    – Default value

    – Accept pipeline input? true (ByPropertyName)

    – Accept wildcard characters? false

- -Credential <PSCredential>

    – Required? true

- – Position? named

- – Default value

- – Accept pipeline input? false

- – Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

String

Outputs

Hitachi.UCP.CLI.Domain.DisasterRecoveryManager

Notes

The UCP System Administrator and UCP View privileges are required.

Example: Add disaster recovery manager information

```
C:\PS>C:\PS> $SRMcred = Get-Credential

cmdlet Get-Credential at command pipeline position 1
Supply values for the following parameters:
Credential
C:\PS> New-UCPDisasterRecoveryManager -ServiceUrl https://
10.21.74.248:9007 -Credential $SRMcred
```

```
ServiceUrl        : https://10.21.74.248:9007/
Username          : ucp\svc_srm
Id                : 1
GlobalResourceId  : inst.ucp-123-456-789.dr.1
ResourceType      : DisasterRecoveryManager
```

```
InstanceId       : UCP-123-456-789
```

Related Links

Get-UCPDisasterRecoveryManager

Set-UCPDisasterRecoveryManager

New-UCPEfiSetting

Helper cmdlet for adding EFI settings to a server profile.

Syntax

New-UCPEfiSetting -ProcessorTurboMode <String> -ProcessorHyperThreading <String> -ProcessorHardwarePrefetcher <String> -MemoryMode <String> -MemorySpeed <String> -NodeInterleaveMode <String> -RASDeconfiguredMode <String> -DDRVoltageLevel <String> [<CommonParameters>]

Description

When the server profile is applied to a server, this collection of EFI settings will be configured onto the server. See the description for each parameter to know the default setting.

All parameters will accept the value of "AsIs". Use AsIs when UCP should ignore that setting. Appropriate when a profile is moved to a different server model that has a larger or different collection of values for a particular setting. In such case, use AsIs for the setting and UCP will not configure a value for it on the server. Instead, the factory default is left in place, or the user manually boots to the EFI and changes the setting.

Parameters

- -ProcessorTurboMode <String>

  Processor Turbo Mode is an Intel feature that improves CPU performance.

  Options: Enable, Disable

  Factory default for blades is Enable, which provides optimal performance in most applications.

- Required? true

- Position? named

- Default value

- Accept pipeline input? false

- Accept wildcard characters? false

- -ProcessorHyperThreading <String>

Hyper-threading is an Intel feature that enables a CPU core to process more than one thread at a time. When enabled, a 16-core blade appears to the operating system as though it has 32 CPUs.

Options: Enable, Disable

Factory default for blades is Enable, which provides optimal performance in most applications.

- Required? true

- Position? named

- Default value

- Accept pipeline input? false

- Accept wildcard characters? false

- -ProcessorHardwarePrefetcher <String>

Processor Hardware Prefetcher is an Intel feature that improves CPU performance.

Options: Enable, Disable

Factory default for blades is Enable, which provides optimal performance in most applications.

- Required? true

- Position? named

- Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- -MemoryMode <String>

  This is a memory DIMM redundancy feature.

  Mirroring configures half the DIMMs as standby, so that if any primary DIMM fails, the system can revert to the standby DIMM. This mode reduces the total usable memory quantity by half.

  Sparing mode reserves a rank of DIMMs as standby. It requires the DIMMs to be installed in precise patterns. (See blade hardware documentation.

  Factory default settings for blades is Independent, which configures no DIMM redundancy.

  – Required? true

  – Position? named

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- -MemorySpeed <String>

  To reduce power consumption, memory speed can be reduced below the DIMMs' maximum capability.

  The factory default value may be different per blade type. See Get-UCPSupportedMemorySpeed with -ServerTypeId.

  – Required? true

  – Position? named

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- -NodeInterleaveMode <String>

  A CPU with its assigned local memory is considered a "node".

  In NUMA mode, the computer builds a table to instruct the operating system which memory addresses are local to each CPU. For hypervisors and most applications, this speeds performance.

  In non-NUMA mode, all installed memory is treated as one continuous bank, which can be suitable for time sharing applications accessed by multiple clients. It can be used to speed up the execution of a single large program in time critical applications.

  – Required? true

  – Position? named

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- -RASDeconfiguredMode <String>

  RAS stands for Reliability, Availability, and Serviceability.

  Options are: Enable, Disable.

  RASDeconfiguredMode (Enabled) allows the computer to "deconfigure" a CPU or DIMM if one becomes faulty. The operating system can avoid a system crash if the hardware is allowed to quarantine such a resource. However, the system will be able to boot with less than maximum resources if a component is "deconfigured".

  Default factory setting on blades is Enable.

  – Required? true

  – Position? named

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- -DDRVoltageLevel <String>

  To reduce power consumption, memory voltage can be reduced below the DIMMs' maximum capability.

  The factory default value for blades is Auto. See Get-UCPSupportedDdrVoltageLevel for options.

  – Required? true

  – Position? named

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_CommonParameters (http://go.microsoft.com/fwlink/?LinkID=113216).

Inputs

None

Outputs

Hitachi.UCP.CLI.Domain.EfiSettings

Notes

Requires UCP Administrator privilege.

Example: Build variable with all default blade EFI settings

```
C:\PS>$EfiSettings = New-UCPEfiSetting -ProcessorTurboMode Enable -
ProcessorHyperThreading Enable -ProcessorHardwarePrefetcher Enable -
MemoryMode Independent -MemorySpeed AUTO -NodeInterleaveMode NUMA -
RASDeconfiguredMode Enable -DDRVoltageLevel Auto

# Check contents of variable:
```

```
$EfiSettings | fl

ProcessorTurboMode        : Enable
ProcessorHyperThreading   : Enable
ProcessorHardwarePrefetcher : Enable
MemoryMode                : Independent
MemorySpeed               : AUTO
NodeInterleaveMode        : NUMA
RASDeconfiguredMode       : Enable
DDRVoltageLevel           : Auto
```

Related Links

Get-UCPSupportedProcessorTurboModes

Get-UCPSupportedProcessorHyperThreadingModes

Get-UCPSupportedProcessorHardwarePrefetcherModes

Get-UCPSupportedMemoryModes

Get-UCPSupportedMemorySpeeds

Get-UCPSupportedDdrVoltageLevels

Get-UCPSupportedNodeInterleaveModes

Get-UCPSupportedRasDeconfiguredModes

New-UCPEsxiStatelessServiceTemplate

Creates a new UCP ESXi service template for deployment to stand-alone hosts.

Syntax

New-UCPEsxiStatelessServiceTemplate [-AttachVolumes <UcpServiceTemplateVolumeInformation[]>] [-CreateAndAttachVolumes <UcpServiceTemplateVolumeInformation[]>] [-ComputeVlanIds <String>] -Name <String> -BootImageId <String> [<CommonParameters>]

Description

The template will dictate the ESXi image to use, the storage to attach to the host, and the trunk VLAN IDs to configure.

This template type does not attach hosts to a vSphere host profile or a virtual distributed switch (VDS).

Parameters

- -AttachVolumes <UcpServiceTemplateVolumeInformation[]>

  Parameter for attachment of exiting volumes to the template. Use helper cmdlet New-UCPServiceTemplateVolumeInformation.

  – Required? false

  – Position? named

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- -CreateAndAttachVolumes <UcpServiceTemplateVolumeInformation[]>

  Parameter for designing creation and attachment of new volumes to the template.

  Use helper cmdlet New-UCPServiceTemplateVolumeInformation.

  – Required? false

  – Position? named

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- -ComputeVlanIds <String>

  VLAN, VLAN range, or VLAN list for configuring as trunk VLAN IDs on hosts' attached Ethernet switch ports.

  – Required? false

  – Position? named

- – Default value

- – Accept pipeline input? false

- – Accept wildcard characters? false

- -Name <String>

  Name for the service template.

  - – Required? true

  - – Position? named

  - – Default value

  - – Accept pipeline input? false

  - – Accept wildcard characters? false

- -Description <String>

  - – Required? false

  - – Position? named

  - – Default value

  - – Accept pipeline input? false

  - – Accept wildcard characters? false

- -BootImageId <String>

  Image to deploy on servers that apply this template.

  - – Required? true

  - – Position? named

  - – Default value

  - – Accept pipeline input? false

  - – Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

Hitachi.UCP.CLI.Domain.UcpServiceTemplateVolumeInformation

Outputs

Hitachi.UCP.CLI.Domain.UcpEsxiStatelessServiceTemplate

Notes

Requires UCP System Administrator privilege.

Example: Create ESXi standalone service template

```
C:\PS># Put volume details in a variable:
$Vol = New-UCPServiceTemplateVolumeInformation -StorageSystemId 210016 -
PoolId 1 -Size 107374182400 -VolumeName TestVol100

# Create template:
New-UCPEsxiStatelessServiceTemplate -CreateAndAttachVolumes $Vol -Name
ESXiStandaloneHostTemplate -ComputeVlanIds 100 -BootImageId 1


Id                   : 3
Name                 : ESXiStandaloneHostTemplate
BootImageId          : 1
BootImageName        : HitachiESXiImage-520HB1
BootImageType        : ESXiStateless
ServiceTemplateType  : EsxiStateless
ComputeVlanIds       : 100
GlobalResourceId     : inst.ucp12345.svctmplt.3
ResourceType         : ServiceTemplate
InstanceId           : ucp12345
```

Related Links

Get-UCPImage

New-UCPServiceTemplateVolumeInformation

New-UCPEthernetSwitch

Adds an Ethernet switch to inventory.

Syntax

New-UCPEthernetSwitch [-IPAddress] <String> -Credential <PSCredential> [<CommonParameters>]

Description

Adds an Ethernet switch to inventory. The process of adding an Ethernet switch to inventory includes:

- Verifying that the make, model, and OS version are supported.

- Ensuring that all ports are enabled.

- Ensuring that link layer discovery protocol (LLDP/CDP) is enabled.

- When monitoring is enabled, the switch is also configured to report SNMP traps to UCP Director.

When an Ethernet switch is successfully added to inventory, its state is set to Initializing. Once inventory is successfully refreshed (via a regularly scheduled job or by using Refresh-UCPInventory -Type EthernetSwitch), it becomes active.

Parameters

- -IPAddress <String>

  Specifies the management IP address of the Ethernet switch that is to be added to inventory.

  – Required? true

  – Position? 1

  – Default value

  – Accept pipeline input? false

— Accept wildcard characters? false

- -Credential <PSCredential>

  Specifies the username and password to be used to manage the Ethernet switch.

  — Required? true

  — Position? named

  — Default value

  — Accept pipeline input? false

  — Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_CommonParameters (http://go.microsoft.com/fwlink/?LinkID=113216).

Inputs

None

Outputs

Hitachi.UCP.CLI.Domain.EthernetSwitch

Notes

The UCP Network Administrator and UCP View privileges are required.

Example: Add an Ethernet switch to inventory

```
C:\PS>$cred = Get-Credential

C:\PS>New-UCPEthernetSwitch -IpAddress 10.21.24.212 -Credential $cred |
Format-List
```

```
Type                      : Aggregate
Status                    : Active
Name                      : R1-BR-6720-A-U41
Make                      : Brocade
Model                     : VDX6720-60
SerialNumber              : BKS2505H006
OSVersion                 : 3.0.1aa
AvailableFirmwareVersion  :
IpAddress                 : 10.21.24.212
UserName                  : ucpadmin
Ports                     : {TenGigabitEthernet 0/1, TenGigabitEthernet
0/2, TenGigabitEthernet 0/3,
                            TenGigabitEthernet0/4...}
Id                        : 6
GlobalResourceId          : inst.v2ProductionB-123-456-789.eth.1.net.6
ResourceType              : EthernetSwitch
InstanceId                : v2ProductionB-123-456-789
```

Related Links

Get-UCPEthernetSwitch

Set-UCPEthernetSwitchConnectionInformation

Remove-UCPEthernetSwitch

New-UCPEthernetSwitchBackup

Creates a new configuration backup of the specified Ethernet switch.

Syntax

New-UCPEthernetSwitchBackup [-SwitchId] <String> [-Description]
<String> [[-Pinned]] [<CommonParameters>]

Description

A configuration backup contains metadata regarding the settings that UCP
has applied to the switch.

A description may be optionally specified. The new backup may be
optionally marked as pinned.

The oldest pinned backups will be automatically deleted based on the value of NumberOfPinnedBackupsPerSwitch, as specified using Set-UCPEthernetSwitchBackupRetentionPolicy. The oldest non-pinned backups will be automatically deleted based on the value of TotalNumberOfBackupsPerSwitch, as specified using Get-UCPEthernetSwitchBackupRetentionPolicy.

If not specified, the backup will not be pinned by default.

Parameters

- -SwitchId <String>

  Specifies the ID of the Ethernet switch that is to be backed up.

  – Required? true

  – Position? 1

  – Default value

  – Accept pipeline input? true (ByPropertyName)

  – Accept wildcard characters? false

- -Description <String>

  Specifies an optional description for the new backup.

  – Required? true

  – Position? 2

  – Default value

  – Accept pipeline input? true (ByPropertyName)

  – Accept wildcard characters? false

- -Pinned

  Specifies whether the new backup will be pinned, to prevent it from being automatically deleted based on the configuration of UCP Director's Ethernet switch backup retention policy.

  – Required? false

- Position? 3

- Default value

- Accept pipeline input? true (ByPropertyName)

- Accept wildcard characters? false

- \<CommonParameters\>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

None

Outputs

Hitachi.UCP.CLI.Domain.EthernetSwitchBackup

Notes

The UCP Network Administrator and UCP View privileges are required.

Example: Create a new pinned backup of an Ethernet switch

```
C:\PS>New-UCPEthernetSwitchBackup -SwitchId 4 -Description 'Initial VLAN
Changes' -Pinned
```

```
Content           : Hitachi.UCP.CLI.Domain.EthernetSwitchBackupContent
CreatedBy         : UCP\UCPNetworkAdmin
CreatedDate       : 9/26/2013 4:39:11 PM
Description       : Initial VLAN Changes
SwitchOSVersion   : 3.0.0_dcb
BackupId          : 17
Pinned            : True
SwitchId          : 4
Id                : 17
GlobalResourceId  : inst.v2ProductionB-123-456-789.eth.1.net.4.bak.17
```

```
ResourceType        : EthernetSwitchBackup
InstanceId          : v2ProductionB-123-456-789
```

Related Links

Get-UCPEthernetSwitchBackup

Set-UCPEthernetSwitchBackup

Get-UCPEthernetSwitchBackupRetentionPolicy

Set-UCPEthernetSwitchBackupRetentionPolicy

New-UCPFibreChannelSwitch

Adds a Fibre Channel switch to inventory.

Syntax

New-UCPFibreChannelSwitch [-IPAddress] <String> -Credential
<PSCredential> [<CommonParameters>]

Description

Adds a Fibre Channel switch to inventory. When monitoring is enabled, the switch is also configured to report SNMP traps to UCP Director.

Parameters

- -IPAddress <String>

  Specifies the management IP address of the Fibre Channel switch that is to be added to inventory.

  – Required? true

  – Position? 1

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- -Credential <PSCredential>

  Specifies the username and password to be used to manage the Fibre Channel switch.

  – Required? true

  – Position? named

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

None

Outputs

Hitachi.UCP.CLI.Domain.FibreChannelSwitch

Notes

The UCP Storage Administrator and UCP View privileges are required.

Example: Add a Fibre Channel switch to inventory

```
C:\PS>$cred = Get-Credential

C:\PS>New-UCPFibreChannelSwitch -IpAddress 10.21.24.170 -Credential
$cred | Format-List
```

```
IpAddress                 : 10.21.24.170
Username                  : ucpadmin
FirmwareVersion           : v7.1.1
AvailableFirmwareVersion  :
Manufacturer              : Brocade
Model                     : Brocade 6510
Name                      : R1-BR-6510-A-U38
SerialNumber              : BRW2513H06H
Status                    : Active
SwitchTopologyRole        : Core Switch
FabricId                  : 2
SwitchPorts               : {0, 1, 2, 3...}
Id                        : 6
GlobalResourceId          : inst.v2ProductionB-123-456-789.fc.1.fcs.6
ResourceType              : FibreChannelSwitch
InstanceId                : v2ProductionB-123-456-789
```

Related Links

Get-UCPFibreChannelSwitch

Set-UCPFibreChannelSwitchConnectionInformation

Remove-UCPFibreChannelSwitch

New-UCPHighAvailabiltyClusterSetting

Defines how a cluster service template sets its high availability configuration.

Syntax

New-UCPHighAvailabiltyClusterSetting -FailoverRamPercentage <Int32> -FailoverCpuPercentage <Int32> [<CommonParameters>]

Description

The cmdlet accepts values from 1 to 99 but the user must calculate appropriate values per each cluster.

Applicable only when the platform manager is VMWare.

Parameters

- -FailoverRamPercentage <Int32>

  Percentage of cluster RAM reserved as failover spare capacity.

  – Required? true

  – Position? named

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- -FailoverCpuPercentage <Int32>

  Percentage of cluster CPU reserved as failover spare capacity.

  – Required? true

  – Position? named

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

String

Outputs

Hitachi.UCP.CLI.Domain.HighAvailabilityCluster

Notes

The UCP System Administrator and UCP View privileges are required.

Use this cmdlet to input values into a variable. The variable is passed into 'New-UCPClusterServiceTemplate' with the '-HighAvailabilityCluster' parameter.

Example: Set both values to 25%

```
C:\PS>$haSpec = New-UCPHighAvailabiltyClusterSetting -
FailoverRamPercentage 25 -FailoverCpuPercentage 25


# HA RAM and CPU failover reservations are both 25 percent.


FailoverRamPercentage          FailoverCpuPercentage
---------------------          -------
25                             25
```

Related Links

New-UCPClusterServiceTemplate

New-UCPVirtualDistributedSwitch

New-UCPServiceTemplateVolumeInformation

New-UCPStorageClusterSetting

New-UCPServiceTemplateVolumeInformation

New-UCPImage

Creates a new ESXi image in UCP Director's image inventory.

Syntax

New-UCPImage [-Name] <String> [-SourceImageId] <String> [-Description <String>] [<CommonParameters>]

Description

Creates a new ESXi image in UCP Director's image inventory. New image is a clone of an existing image. To edit the clone, use Set-UCPImage.

The ESXi image to be cloned may be specified in the pipeline. Alternatively, the SourceImageId parameter may be used. A new image is returned.

Parameters

- -Name <String>

  Specifies the name of the new image.

  – Required? true

  – Position? 1

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- -SourceImageId <String>

  Specifies the ID of the source image that is to be cloned to create the new image.

  – Required? true

  – Position? 2

  – Default value

  – Accept pipeline input? true (ByPropertyName)

  – Accept wildcard characters? false

- -Description <String>

  Specifies the description of the new image.

  – Required? false

  – Position? named

– Default value

– Accept pipeline input? true (ByPropertyName)

– Accept wildcard characters? false

• <CommonParameters>

This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

Hitachi.UCP.CLI.Domain.Image

Outputs

Hitachi.UCP.CLI.Domain.Image

Notes

The UCP Server Administrator and UCP View privileges are required.

Only ESXi images may be created with this cmdlet.

Example: Create a new ESXi image by cloning

```
C:\PS>Get-UCPImage 1 | New-UCPImage -Name "FDMHitachiESXiImage" -
Description "Hitachi base image with FDM"
```

```
Vendor              : Hitachi, Ltd.
AcceptanceLevel     : PartnerSupported
StatelessReady      : False
InUse               : False
IsUcpImage          : False
Packages            : {scsi-bnx2i, sata-sata-promise, ipmi-ipmi-
devintf, scsi-hfcldd...}
CreatedDate         : 3/23/2013 9:30:37 PM
UpdatedDate         : 4/27/2013 8:38:01 AM
AssociatedServerType :
```

```
ServerCount          : 0
Name                 : FDMHitachiESXiImage
Description          : For more information, see http://kb.vmware.com/
kb/2041635.
ImageType            : EsxiStateless
Id                   : 29
GlobalResourceId     : inst.v2ProductionB-123-456-789.cmp.1.img.29
ResourceType         : ServerImage
InstanceId           : v2ProductionB-123-456-789
```

Related Links

Get-UCPImage

Set-UCPImage

Remove-UCPImage

Update-UCPActiveImages

Refresh-UCPInventory

New-UcpIpAddressIdentityPoolRange

Creates a new IP address range.

Syntax

New-UcpIpAddressIdentityPoolRange -IdentityPoolId <String> -StartAddress <String> -EndAddress <String> -DefaultGateway <String> -SubnetMask <String> -DnsAddress <String> [<CommonParameters>]

Description

This cmdlet will add a new user-specified IP address range to a pre-existing IP pool. Users provide a start and end address, a DNS server address, a subnet mask to be applied to the range, and the range's default gateway.

Note: When entering a value for the DNS Address, use the IP of the AD VM if it is accessible to the blade servers. If not, use the IP address of the UCPUtility VM.

Parameters

- -IdentityPoolId <String>

  The id of the IpAddressIdentityPool that the new range will be added to.

  – Required? true

  – Position? named

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- -StartAddress <String>

  The starting IP Address of the new range.

  – Required? true

  – Position? named

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- -EndAddress <String>

  The ending IP Address of the new range.

  – Required? true

  – Position? named

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- -DefaultGateway <String>

The IP address of the default gateway used by the new IP Address range.

- – Required? true

- – Position? named

- – Default value

- – Accept pipeline input? false

- – Accept wildcard characters? false

- -SubnetMask <String>

  The subnet mask to be applied to the new range.

  - – Required? true

  - – Position? named

  - – Default value

  - – Accept pipeline input? false

  - – Accept wildcard characters? false

- -DnsAddress <String>

  - – IP address of the DNS server used by the IP range.

  - – Required? true

  - – Position? named

  - – Default value

  - – Accept pipeline input? false

  - – Accept wildcard characters? false

- <CommonParameters>

This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

None

Outputs

Hitachi.UCP.CLI.Domain.IdentityPoolRange

Notes

The UCP Administrator privilege is required.

Example: Add an IP address range to the IP pool

```
C:\PS>#Get the IP Address Identity Pool Id
$IdentityPoolId = (Get-UcpIpAddressIdentityPool).IdentityPoolId

#Now create the new range in the above Identity Pool
New-UcpIpAddressIdentityPoolRange -IdentityPoolId $IdentityPoolId -
StartAddress 10.24.21.70 -EndAddress 10.24.21.80 -DefaultGateway
10.24.21.1 -Dns 10.70.70.10 -SubnetMask 255.255.255.0


SubnetMask          : 255.255.255.0
DefaultGateway      : 10.24.21.1
Dns                 : 10.70.70.10
IdentityPoolRangeId : 5
StartAddress        : 10.24.21.70
EndAddress          : 10.24.21.80
IdentityPoolId      : 1
Allocated           : {}
Available           : 11
Total               : 11
Id                  : 5
GlobalResourceId    : inst.UCP-12345.idpoolrange.5
ResourceType        : IdentityPoolRange
InstanceId          : UCP-12345
```

Related Links

Get-UcpIpAddressIdentityPoolRange

Get-UcpIpAddressIdentityPool

Remove-UcpIpAddressIdentityPoolRange

New-UCPIpAddressSetting

Helper cmdlet for adding IP address settings to a server profile.

Syntax

New-UCPIpAddressSetting [-UsePool] [-IdentityPoolId] <String> [-IdentityPoolRangeId] <String> [<CommonParameters>]

New-UCPIpAddressSetting -UserValue <String> -DefaultGateway <String> -DnsAddress <String> -SubnetMask <String> [<CommonParameters>]

Description

Build a variable with this helper cmdlet for supplying IP address settings to a server profile. The setting either dictates a pool and range to automatically take an IP address from or it adds a manually typed IP address.

Parameters

- -UsePool

  Using this flag dictates that the server profile's IP address should be taken from the IP address pool.

  – Required? true

  – Position? 1

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- -IdentityPoolId <String>

  If using the pool, this parameter dictates the pool ID from which to take an IP address.

- – Required? true

- – Position? 2

- – Default value

- – Accept pipeline input? true (ByPropertyName)

- – Accept wildcard characters? false

- -IdentityPoolRangeId <String>

  When taking an IP from a pool, supply the range ID with this
  parameter. It must be a range from within the specified IP address
  pool.

  - – Required? true

  - – Position? 3

  - – Default value

  - – Accept pipeline input? true (ByPropertyName)

  - – Accept wildcard characters? false

- -UserValue <String>

  When not using an IP address pool, use this parameter to manually
  specify an IP address.

  - – Required? true

  - – Position? named

  - – Default value

  - – Accept pipeline input? false

  - – Accept wildcard characters? false

- -DefaultGateway <String>

  When manually specifying a host IP address for the server profile, use
  this parameter to add the appropriate default gateway in the form of an
  IP address.

- – Required? true

- – Position? named

- – Default value

- – Accept pipeline input? false

- – Accept wildcard characters? false

- -DnsAddress <String>

  When manually specifying a host IP address for the server profile, use this parameter to add the appropriate DNS IP address.

  - – Required? true

  - – Position? named

  - – Default value

  - – Accept pipeline input? false

  - – Accept wildcard characters? false

- -SubnetMask <String>

  When manually specifying a host IP address for the server profile, use this parameter to add the appropriate subnet mask.

  - – Required? true

  - – Position? named

  - – Default value

  - – Accept pipeline input? false

  - – Accept wildcard characters? false

- <CommonParameters>

This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

String

Outputs

Hitachi.UCP.CLI.Domain.IpAddressSettings

Notes

Requires UCP System Administrator privilege.

Example: Build variable with automatic IP address settings for server profile using 2port CNA

```
C:\PS># Get ID of IP Pool:
$IPPoolId = (Get-UcpIpAddressIdentityPool).Id
# Get ID of IP Range:
$RangeId = (Get-UcpIpAddressIdentityPoolRange -IdentityPoolId
$IPPoolId).Id

# Build variable for IP settings:
$IPSetting = New-UCPIpAddressSetting -UsePool -IdentityPoolId $IPPoolId
-IdentityPoolRangeId $RangeId



# Examine contents of variable:

$IPSetting | fl

SubnetMask        :
DefaultGateway    :
IpAddress         :
DnsAddress        :
UsePool           : True
IdentityPoolRangeId : 3
IdentityPoolId    : 1
```

Related Links

Get-UcpIpAddressIdentityPool

Get-UcpIpAddressIdentityPoolRange

New-UCPServerProfile

Set-UCPServerProfile

New-UCPJournal

Creates a journal.

Syntax

New-UCPJournal [-StorageSystemId] <String> [-JournalVolumeIds]
<Int32[]> [<CommonParameters>]

Description

Creates a new journal using the specified journal volumes. The journals
are used during asynchronous replication between two UCP sites.

Parameters

- -StorageSystemId <String>

  Specify the Id of the storage system on which the specified journal
  volumes are present

  – Required? true

  – Position? 1

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- -JournalVolumeIds <Int32[]>

  Specify the Id(s) of the journal volumes that the journal will use. Either one or more journal volumes must be specified.

  – Required? true

  – Position? 2

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

None

Outputs

Hitachi.UCP.CLI.Domain.StorageSystemJournal

Notes

The UCP System Administrator and UCP View privileges are required.

Example: Create a new journal with a single journal volume

```
C:\PS>New-UCPJournal -StorageSystemId 53106 -JournalVolumeIds 15027



CapacityInBytes   : 53687091200
InflowControlFlag : 1
DataOverflowWatch : 60
StorageSystemId   : 53106
PairedJournals    : {}
```

```
JournalVolumeIds  : {15027}
Id                : 5
GlobalResourceId  : inst.blue-podf-3925.stor.1.ss.53106.journal.5
ResourceType      : StorageJournal
InstanceId        : blue-podf-3925
```

Related Links

Get-UCPJournalVolume

Get-UCPStorageSystem

Get-UCPJournal

New-UCPLinuxServiceTemplate

Creates a Linux service template.

Syntax

New-UCPLinuxServiceTemplate -KickstartFileLocation <String> -BootVolumeStorageSystemId <String> -BootVolumePoolId <Int32> -BootVolumeSize <Double> [-AttachVolumes <UcpServiceTemplateVolumeInformation[]>] [-CreateAndAttachVolumes <UcpServiceTemplateVolumeInformation[]>] [-ComputeVlanIds <String>] -Name <String> [-Description <String>] -BootImageId <String> [<CommonParameters>]

Description

Upon application of this service template, the Linux OS will be deployed by WDS. Also, the specified VLAN Ids will be applied to physical Ethernet switch ports used by the blade and the specified volume(s) will be created and attached.

Parameters

- -KickstartFileLocation <String>

  Location of the kickstart file for the specified Linux image.

  – Required? true

  – Position? named

- – Default value

- – Accept pipeline input? false

- – Accept wildcard characters? false

- -BootVolumeStorageSystemId <String>

  Storage system in which to create the boot volume.

  - – Required? true

  - – Position? named

  - – Default value

  - – Accept pipeline input? false

  - – Accept wildcard characters? false

- -BootVolumePoolId <Int32>

  Storage pool in which to create the boot volume.

  - – Required? true

  - – Position? named

  - – Default value

  - – Accept pipeline input? false

  - – Accept wildcard characters? false

- -BootVolumeSize <Double>

  Size of boot volume to create.

  - – Required? true

  - – Position? named

  - – Default value

  - – Accept pipeline input? false

- – Accept wildcard characters? false

- -AttachVolumes <UcpServiceTemplateVolumeInformation[]>

  Existing volumes to attach.

  - – Required? false

  - – Position? named

  - – Default value

  - – Accept pipeline input? false

  - – Accept wildcard characters? false

- -CreateAndAttachVolumes <UcpServiceTemplateVolumeInformation[]>

  New volumes to create and attach.

  - – Required? false

  - – Position? named

  - – Default value

  - – Accept pipeline input? false

  - – Accept wildcard characters? false

- -ComputeVlanIds <String>

  Compute VLAN Id or range of Ids applied to switch ports used by blades when this template is applied.

  - – Required? false

  - – Position? named

  - – Default value

  - – Accept pipeline input? false

  - – Accept wildcard characters? false

- -Name <String>

  Name for this service template.

  – Required? true

  – Position? named

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- -Description <String>

  Id of the Linux image that this service template will deploy.

  – Required? false

  – Position? named

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- -BootImageId <String>

  Id of the Linux image that this service template will deploy.

  – Required? true

  – Position? named

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

Hitachi.UCP.CLI.Domain.UcpServiceTemplateVolumeInformation

Outputs

Hitachi.UCP.CLI.Domain.UcpLinuxServiceTemplate

Notes

The UCP System Administrator and UCP View privileges are required.

CentOS and Red Hat are the supported versions of Linux.

Example: Make Red Hat service template

```
C:\PS># Set variable with Kickstart file location:

C:\PS>$Kickstart = "\\10.21.24.247\REMINST\Boot\x64\Linux\Images\
RHEL6.4\KickstartFiles\RHEL6.4_template.cfg"

    # Set variable with data volume to create using optionally specified
SAN ports:

    C:\PS>$NewVol = New-UCPServiceTemplateVolumeInformation -
StorageSystemId 93040480 -PoolId 2 -Size 140949672960
    -FileSystem none -PortIds "CTL0-C","CTL0-D","CTL0-E","CTL0-F"

    # Make RHEL template:

    C:\PS>New-UCPLinuxServiceTemplate -KickstartFileLocation $Kickstart
-BootVolumeStorageSystemId 93040480
    -BootVolumePool Id 2 -BootVolumeSize 82949672960 -ComputeVlanIds 27
-CreateAndAttachVolumes $NewVol -Name RHEL6.4
    -Boot ImageId 4
```

```
        BootVolumeStorageSystemId      : 93040480
        BootVolumePoolId               : 2
        BootVolumeSizeInBytes          : 82949672960
        KickstartFileLocation          :
        \\10.21.24.247\REMINST\Boot\x64\Linux\Images\RHEL6.4\KickstartFiles\
RHEL6.4_template.cfg
        Id                             : 3
        Name                           : RHEL6.4
        BootImageId                    : 4
        BootImageName                  : RHEL6.4
        BootImageType                  : Linux
        ServiceTemplateType            : Linux
        ComputeVlanIds                 : 27
        GlobalResourceId               : inst.UCP-123-456-
789.servicetemplate.3
        ResourceType                   : ServiceTemplate
        InstanceId                     : UCP-123-456-789
```

Example: Make basic Linux template

```
        C:\PS># Get Image information for Linux

        C:\PS>$imageInfo = Get-UCPImage -ImageType Linux -ImageId 3

        # Get storage system information

        C:\PS>$storageSystemInfo = Get-UCPStorageSystem | Select-Object -
First 1

        # Get storage pool information for the specific storage system

        C:\PS>$storagePoolInfo = Get-UCPStoragePool -StorageSystemId
$storageSystemInfo.Id | Select-Object -First 1

        # Make service template

        C:\PS>New-UCPLinuxServiceTemplate -KickstartFileLocation
$imageInfo.KickstartFilePaths[0]
        -BootVolumeStorageSystemId $storageSystemInfo.Id -BootVolumePoolId
$storagePoolInfo.Id -BootVolumeSize 9126805504
        -ComputeVlanIds 24 -Name CLITestLinuxTemplate -BootImageId
$imageInfo.Id


        # This example uses the kickstart file location from an existing
Linux image.


        BootVolumeStorageSystemId      : 93040480
        BootVolumePoolId               : 1
        BootVolumeSizeInBytes          : 9126805504
```

```
       KickstartFileLocation              :
       \\10.21.24.247\REMINST\Boot\x64\Linux\Images\CentOS6.4\
KickstartFiles\CentOS6.4_template.cfg
       Id                                 : 7
       Name                               : CLITestLinuxTemplate
       BootImageId                        : 3
       BootImageName                      : CentOS6.4
       BootImageType                      : Linux
       ServiceTemplateType                : Linux
       ComputeVlanIds                     : 24
       GlobalResourceId                   : inst.UCP-123-456-
789.servicetemplate.7
       ResourceType                       : ServiceTemplate
       InstanceId                         : UCP-123-456-789
```

Related Links

New-UCPServiceTemplateVolumeInformation

Set-UCPLinuxServiceTemplate

Apply-UCPLinuxServiceTemplate

Get-UCPImage

Get-UCPStorageSystem

Get-UCPStoragePool

New-UCPMacAddressSetting

Helper cmdlet for adding MAC address settings to a server profile.

Syntax

New-UCPMacAddressSetting [-UsePool] [-IdentityPoolId] <String> [-IdentityPoolRangeId] <String> [<CommonParameters>]

New-UCPMacAddressSetting -UserValue <String> [<CommonParameters>]

Description

Build a variable with this helper cmdlet. Either specify a pool from which to automatically take MAC addresses or manually enter MAC addresses. Supply the variable to New-UCPServerProfile with the parameter -MacAddressSetting.

Parameters

- -UsePool

  Using this flag indicates that a MAC address should be taken from the MAC address pool.

  – Required? true

  – Position? 1

  – Default value

  – Accept pipeline input? true (ByPropertyName)

  – Accept wildcard characters? false

- -IdentityPoolId <String>

  When the MAC address should be taken from the pool, this parameter specifies the ID of the MAC address pool.

  – Required? true

  – Position? 2

  – Default value

  – Accept pipeline input? true (ByPropertyName)

  – Accept wildcard characters? false

- -IdentityPoolRangeId <String>

  When the MAC address should be taken from the pool, this parameter specifies the ID of the MAC address range. Use a range from within the specified MAC address pool.

  – Required? true

  – Position? 3

  – Default value

  – Accept pipeline input? true (ByPropertyName)

— Accept wildcard characters? false

- -UserValue <String>

  When not automatically taking a MAC address from the pool, use this parameter to manually type a MAC address.

  — Required? true

  — Position? named

  — Default value

  — Accept pipeline input? true (ByPropertyName)

  — Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

Int32

Outputs

Hitachi.UCP.CLI.Domain.ServerProfile.MacAddressSetting

Notes

Requires UCP System Administrator privilege.

Example: Build array for 2port CNA, not partitioned, MAC IDs are taken from pool

```
C:\PS># Get ID of MAC Pool:
$MacPoolId = (Get-UcpMacAddressIdentityPool).Id

# Get ID of MAC Range:
```

```
    $MacRangeId = (Get-UcpMacAddressIdentityPoolRange -IdentityPoolId
$MacPoolId).Id

    # Build port 1 variable for New-UCPServerProfile:
    $MacSettings1 = New-UCPMacAddressSetting -UsePool -IdentityPoolId
$MacPoolId -IdentityPoolRangeId $MacRangeId

    # Build port 2 variable for New-UCPServerProfile:
    $MacSettings2 = New-UCPMacAddressSetting -UsePool -IdentityPoolId
$MacPoolId -IdentityPoolRangeId $MacRangeId

    # Build array with both MAC configurations:
    $MacSettingArray = @($MacSettings1,$MacSettings2)




    $MacSettingArray | ft -Autosize

    UsePool IdentityPoolId IdentityPoolRangeId UserValue
    ------- -------------- ------------------- ---------
       True 2                     1
       True 2                     1
```

Related Links

Get-UCPMacAddressPool

Get-UCPMacAddressPoolRange

New-UCPServerProfile

Set-UCPServerProfile

New-UCPServerForClusterSetting

A helper cmdlet for piping servers for cluster template deployment.

Syntax

New-UCPServerForClusterSetting [-ServerUuid] <String> [-ServerProfileId] <Int64> [[-VmotionIp] <String>] [[-VmotionSubnetMask] <String>] [<CommonParameters>]

Description

Use this helper cmdlet to pipe servers, vMotion IP address information, and server profile IDs into Apply-UCPClusterServiceTemplate.

Parameters

- -ServerUuid <String>

  Server Uuid which will be added to the variable created by this helper cmdlet.

  – Required? true

  – Position? 1

  – Default value

  – Accept pipeline input? true (ByPropertyName)

  – Accept wildcard characters? false

- -ServerProfileId <Int64>

  ID of the server to apply to the server during template deployment.

  – Required? true

  – Position? 2

  – Default value

  – Accept pipeline input? true (ByPropertyName)

  – Accept wildcard characters? false

- -VmotionIp <String>

  vMotion IP address to use for the provided server Id.

  – Required? false

  – Position? 3

  – Default value

– Accept pipeline input? false

– Accept wildcard characters? false

- -VmotionSubnetMask <String>

Subnet mask to use along with the provided vMotion Ip address.

– Required? false

– Position? 4

– Default value

– Accept pipeline input? false

– Accept wildcard characters? false

- <CommonParameters>

This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

String

Outputs

Hitachi.UCP.CLI.Domain.ServerForCluster

Notes

The UCP System Administrator and UCP View privileges are required.

To collect a suggestion of servers to use, try Get-UCPCandidateServerForCluster

Example: Set up a variable for piping into ApplyUCPClusterServiceTemplate

```
    C:\PS>Get-UCPCandidateServerForCluster -Count 3 | Select-Object
ServerId,
    @{n="Chassis";e={$_.ChassisSerialNumber}}, @{n="SlotNumber";e={$_
.PrimarySlot}}

  ServerId                  Chassis
    SlotNumber
  --------                  -------
    ----------
5e21dabd-90bc-11e1-901a-f947807ab247 323GG-RE3A1NBX1-Y00000015
      2
dc62699b-8fbf-11e1-8af8-8d51dd9b5240 323GG-RE3A1NBX1-Y00000016
      3
e0b1045c-90a7-11e1-a61b-8249a74ae29a 323GG-RE3A1NBX1-Y00000015
      4

    # Query for un-used server profiles:
    $usedServerProfileIdArray = @()
    foreach ($server in Get-UCPServer) { $usedServerProfileIdArray +=
$server.CurrentServerProfileId }
    Get-UcpServerProfile | where {$usedServerProfileIdArray -notcontains
$_.Id} | Select-Object -Property Id

    Id
    --
    6
    7
    8

    # Set variable containing servers for cluster:

    $Blade1 = New-UCPServerForClusterSetting -ServerUuid 5e21dabd-90bc-
11e1-901a-f947807ab247 -VMotionIp 10.21.24.21
    -VMotionSubnetMask 255.255.255.0 -ServerProfileId 6

    $Blade2 = New-UCPServerForClusterSetting -ServerUuid dc62699b-8fbf-
11e1-8af8-8d51dd9b5240 -VMotionIp 10.21.24.22
    -VMotionSubnetMask 255.255.255.0 -ServerProfileId 7

    $Blade3 = New-UCPServerForClusterSetting -ServerUuid e0b1045c-90a7-
11e1-a61b-8249a74ae29a -VMotionIp 10.21.24.23
```

```
        -VMotionSubnetMask 255.255.255.0 -ServerProfileId 8

    $Servers = @($Blade1,$Blade2,$Blade3)


    # The cluster service template receiving these piped settings must
point to (or plan to create) a VDS with a
    vMotion port group.

    # The above variable $Servers is used as follows:

    # Apply template:

    C:\PS>Apply-UCPClusterServiceTemplate -ServiceTemplateId 19 -Name
SampleCluster -ServersToUse $Servers
    -ClusterParentId datacenter-7 -ClusterParentType Datacenter
```

Example: Set up configuration where VDS does not have vMotion port group

```
    C:\PS>$Blade1 = New-UCPServerForClusterSetting -ServerUuid dc62699b-
8fbf-11e1-8af8-8d51dd9b5240 -ServerProfileId 15

    C:\PS>$Blade2 = New-UCPServerForClusterSetting -ServerUuid adaadd1d-
8ff3-11e1-a013-b14256e36145 -ServerProfileId 16

    C:\PS>$Blade3 = New-UCPServerForClusterSetting -ServerUuid f3ffb4d9-
90c3-11e1-8c2d-eb3e73f635f4 -ServerProfileId 17

    # Put all blade Ids into one variable:
    $Servers = @($Blade1,$Blade2,$Blade3)


    # In the rare case where a cluster should be created without
vMotion, use a cluster service template that points
    to (or will make) a VDS with no vMotion port group.  For applying
such a template, input a list of servers with no
    vMotion IP addresses like the above variable called "$Servers".

    The above variable $Servers is used as follows:

    # Apply template:
    C:\PS>Apply-UCPClusterServiceTemplate -ServiceTemplateId 19 -Name
SampleCluster -ServersToUse $Servers
    -ClusterParentId
     datacenter-7 -ClusterParentType Datacenter
```

Related Links

Get-UCPServerForCluster

Get-UCPServer

Apply-UCPClusterServiceTemplate

Get-UCPServerProfile

New-UCPServerProfile

Creates new server profile.

Syntax

New-UCPServerProfile -Name <String> -EfiSettings <EfiSettings> [-NonHypervisor] -CnaControllerSetting <CnaControllerSetting[]> -MacAddressSetting <MacAddressSetting[]> -UuidSetting <UuidSettings> -WwnAddressSetting <WwnAddressSetting[]> -IpAddressSetting <IpAddressSettings> [-Description <String>] [<CommonParameters>]

Description

Server profiles are used for abstracting server identities. A server profile can be moved from one server to another, thus making blade replacement easier and faster. Application of every service template requires a server profile per blade.

Server profiles also contain EFI settings and Converged Network Adapter settings that will be configured on the server it is applied to.

Server profiles are created for either hypervisor deployments or non-hypervisor. The service template expects to deploy a profile of the proper type. For example, ESXi or Windows Hyper-V service templates require the deployment of a hypervisor profile to each target blade.

Parameters

- -Name <String>

  Name for the server profile.

  – Required? true

  – Position? named

  – Default value

– Accept pipeline input? true (ByPropertyName)

– Accept wildcard characters? false

- -EfiSettings <EfiSettings>

  Adds EFI settings to the server profile. Build a variable with helper cmdlet New-UCPEfiSetting.

  – Required? true

  – Position? named

  – Default value

  – Accept pipeline input? true (ByPropertyName)

  – Accept wildcard characters? false

- -NonHypervisor

  Use this optional boolean flag to dictate that the server profile should be for Non-Hypervisor servers.

  – Required? false

  – Position? named

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- -CnaControllerSetting <CnaControllerSetting[]>

  Adds CNA (Converged Network Adapter) settings to the server profile. Build a variable with helper cmdlet New-UCPCnaControllerSetting.

  – Required? true

  – Position? named

  – Default value

  – Accept pipeline input? false

– Accept wildcard characters? false

- -MacAddressSetting <MacAddressSetting[]>

  Adds MAC address settings to the server profile. Build a variable with helper cmdlet New-UCPMacAddressSetting.

  – Required? true

  – Position? named

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- -UuidSetting <UuidSettings>

  Adds UUID settings to the server profile. Build a variable with helper cmdlet New-UCPUuidSetting.

  – Required? true

  – Position? named

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- -WwnAddressSetting <WwnAddressSetting[]>

  Adds WWN settings to the server profile. Build a variable with helper cmdlet New-UCPWwnAddressSetting.

  – Required? true

  – Position? named

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- -IpAddressSetting <IpAddressSettings>

  Adds IP address settings to the server profile. Build a variable with helper cmdlet New-UCPIpAddressSeting.

  – Required? true

  – Position? named

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- -Description <String>

  Optional description for the server profile.

  – Required? false

  – Position? named

  – Default value

  – Accept pipeline input? true (ByPropertyName)

  – Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

Hitachi.UCP.CLI.Domain.MacAddressSettings,
Hitachi.UCP.CLI.Domain.EfiSettings,
Hitachi.UCP.CLI.Domain.ServerProfile.UuidSettings,
Hitachi.UCP.CLI.Domain.IpAddressSettings,
Hitachi.UCP.CLI.Domain.CnaControllerSettings,
Hitachi.UCP.CLI.Domain.ServerProfile.WwnAddressSetting

Outputs

Hitachi.UCP.CLI.Domain.UcpServerProfile

Notes

Requires UCP System Administrator privilege.

Example: Server profile for Hypervisor, 2port CNA, not converged

```
C:\PS># Build variable with EFI settings:

$EfiSettings = New-UCPEfiSetting -ProcessorTurboMode Enable -
ProcessorHyperThreading Enable
    -ProcessorHardwarePrefetcher Enable -MemoryMode Independent -
MemorySpeed AUTO -NodeInterleaveMode NUMA
    -RASDeconfiguredMode Enable -DDRVoltageLevel Auto

# Build variable with IP address setting:
$IPPoolId = (Get-UcpIpAddressIdentityPool).Id
$RangeId = (Get-UcpIpAddressIdentityPoolRange -IdentityPoolId
$IPPoolId).Id
$IPSetting = New-UCPIpAddressSetting -UsePool -IdentityPoolId
$IPPoolId -IdentityPoolRangeId $RangeId

# Build variable with MAC settings:
$MacPoolId = (Get-UcpMacAddressIdentityPool).Id
$MacRangeId = (Get-UcpMacAddressIdentityPoolRange -IdentityPoolId
$MacPoolId).Id
$MacSettings1 = New-UCPMacAddressSetting -UsePool -IdentityPoolId
$MacPoolId -IdentityPoolRangeId $MacRangeId
$MacSettings2 = New-UCPMacAddressSetting -UsePool -IdentityPoolId
$MacPoolId -IdentityPoolRangeId $MacRangeId
$MacSettingArray = @($MacSettings1,$MacSettings2)

# Build array with WWN settings:
$WWNPool = (Get-UcpWwnAddressIdentityPool).Id
$WWNRange = (Get-UcpWwnAddressIdentityPoolRange -IdentityPoolId
$WWNPool).Id
$WWNN1 = New-UCPWwnAddressSetting -UsePool -IsNodeName -
IdentityPoolId $WWNPool -IdentityPoolRangeId $WWNRange
$WWPN1 = New-UCPWwnAddressSetting -UsePool -IdentityPoolId $WWNPool
-IdentityPoolRangeId $WWNRange
$WWNN2 = New-UCPWwnAddressSetting -UsePool -IsNodeName -
IdentityPoolId $WWNPool -IdentityPoolRangeId $WWNRange
$WWPN2 = New-UCPWwnAddressSetting -UsePool -IdentityPoolId $WWNPool
-IdentityPoolRangeId $WWNRange
$WWNArray = @($WWNN1,$WWPN1,$WWNN2,$WWPN2)

# Build variable with UUID settings:
$UuidSetting = New-UCPUuidSetting -AutoGenerate
```

```
# Build variable with CNA controller settings:
$Physical_CNA_Port1 = New-UCPCnaPhysicalPortSetting -VlanId 0
$CNASettings_for_Profile = New-UCPCnaControllerSetting -
PhysicalPortSettings $Physical_CNA_Port1

# Execute command to make one new server profile:

New-UCPServerProfile -Name HypervisorBlade1_2PortCNA -EfiSettings
$EfiSettings -CnaControllerSetting
$CNASettings_for_Profile –MacAddressSetting $MacSettingArray –
UuidSetting $UuidSetting -WwnAddressSetting
$WWNArray –IpAddressSetting $IPSetting -Description "Server profile
for Blade0. Hypervisor. EFI defaults. 2port
CNA, not partitioned."


# This example creates one server profile with default EFI settings
and a 2port CNA - not partitioned.



Name                 : HypervisorBlade1_2PortCNA
Description          : Server profile for Blade0. Hypervisor. EFI
defaults. 2port CNA, not partitioned.
ServerUuid          : 8DA8E275-DFA8-4A7A-988E-C5F7151C4A4F
EfiSettings         : EfiSettings: ProcessorTurboMode – Enable,
ProcessorHyperThreading - Enable,
ProcessorHardwarePrefetcher - Enable, MemoryMode - Independent,
MemorySpeed - AUTO,
                      NodeInterleaveMode - NUMA, RASDeconfiguredMode
- Enable, DDRVoltageLevel - Auto
IpAddressSettings  : IpAddressSettings: UsePool - False,
IdentityPoolId - , IdentityPoolRangeId - , SubnetMask -
255.255.255.0, DefaultGateway - 10.21.20.1, IpAddress - 10.21.20.19,
DnsAddress -
                      10.21.20.246
NonHypervisor       : False
CnaSettings         : {Hitachi.UCP.CLI.Domain.CnaSettings}
MacAddressSettings : {Hitachi.UCP.CLI.Domain.MacAddressSettings,
Hitachi.UCP.CLI.Domain.MacAddressSettings}
WwnAddressSettings : {True, False, True, False}
Id                  : 10
GlobalResourceId    : inst.UCP-12345.srvprofile.10
ResourceType        : ServerProfile
InstanceId          : UCP-12345
```

Example: Create 5 hypervisor server profiles with a "for" loop

```
C:\PS>for($i=1; $i -le 5 ; $i++) {New-UCPServerProfile –Name
Hypervisor_2PortCNA_Blade$i -EfiSettings $EfiSettings
```

```
    –CnaControllerSetting $CNASettings_for_Profile –MacAddressSetting
$MacSettingArray –UuidSetting $UuidSetting
    –WwnAddressSetting $WWNArray –IpAddressSetting $IPSetting –
Description "Server profile for Hypervisor. Blade $i.
    EFI defaults. 2port CNA, not partitioned."}


    # This example builds upon Example 1.
    # Example 1 shows how to construct the command for building the
first server profile. This example shows how to
    loop that command.



    # See output of Example 1.
```

Related Links

New-UCPIpAddressSetting

New-UCPMacAddressSetting

New-UCPUuidSetting

New-UCPWwnAddressSetting

New-UCPCnaControllerSetting

New-UCPEfiSetting

New-UCPServerProfileSetting

This helper cmdlet builds a variable or an array of variables for Extract-UCPServerProfile.

Syntax

New-UCPServerProfileSetting [-ServerId] <String> [-Name] <String> [[-Description] <String>] [<CommonParameters>]

Description

Each variable should contain one server Id, a name for the server profile, and an optional description for the server profile.

Parameters

- -ServerId <String>

  The Id of the server from which a profile will be extracted.

  - Required? true

  - Position? 1

  - Default value

  - Accept pipeline input? false

  - Accept wildcard characters? false

- -Name <String>

  Name for the server profile. (Must be unique from all other server profile names.)

  - Required? true

  - Position? 2

  - Default value

  - Accept pipeline input? false

  - Accept wildcard characters? false

- -Description <String>

  Optional description for the server profile.

  - Required? false

  - Position? 3

  - Default value

  - Accept pipeline input? false

  - Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

String

Outputs

Hitachi.UCP.CLI.Domain.ServerProfileSettings

Notes

Requires the UCP Server Administrator privilege.

Example: Prepare variable containing one server to extract

```
C:\PS>\# Get server in slot 7:
$Server = Get-UCPServer | Where {$_.ChassisSerialNumber -eq "323GG-
RE3A1NBX1-Y00000017" -and $_.PrimarySlot -eq 7}

# Build variable containing profile name and server ID:
$SPSetting = New-UCPServerProfileSetting -ServerId $Server.Id –Name
ExtractedProfileBlade7



$SPSetting | ft –Autosize

ServerId                                 Name                 Description
--------                                 ----                 -----------
44b9f921-1ead-4032-9bad-deac5d3fd900 ExtractedProfileBlade7
```

Example: Build array containing 3 servers to extract

```
C:\PS>\# Collect first three blades in a chassis:

$Server0 = Get-UCPServer | Where {$_.ChassisSerialNumber -eq "323GG-
RE3A1NBX1-Y00000017" -and $_.PrimarySlot -eq 0}
$Server1 = Get-UCPServer | Where {$_.ChassisSerialNumber -eq "323GG-
RE3A1NBX1-Y00000017" -and $_.PrimarySlot -eq 1}
```

```
$Server2 = Get-UCPServer | Where {$_.ChassisSerialNumber -eq "323GG-
RE3A1NBX1-Y00000017" -and $_.PrimarySlot -eq 2}

# Build variables containing servers and names for profiles:
$SPCollection0 = New-UCPServerProfileSetting -ServerId $Server0.Id -Name
ExtractedProfileBlade0
$SPCollection1 = New-UCPServerProfileSetting -ServerId $Server1.Id -Name
ExtractedProfileBlade1
$SPCollection2 = New-UCPServerProfileSetting -ServerId $Server2.Id -Name
ExtractedProfileBlade2

# Build variable containing array of above variables:
$ExtractArray = @($SPCollection0,$SPCollection1,$SPCollection2)

# When $ExtractArray is passed to Extract-UCPServerProfile, UCP will
create server profiles based all three servers.

# Examine contents of array:

$ExtractArray | ft -Autosize

ServerId                                Name                    Description
--------                                ----                    -----------
aba53ace-2288-4be6-91f7-e8ceb2b54d53 ExtractedProfileBlade0
9af495a5-cfd6-4bb0-9496-347d3533181e ExtractedProfileBlade1
ed4c9640-d901-42c1-b816-73584309d99a ExtractedProfileBlade2
```

Related Links

Extract-UCPServerProfile

Get-UCPServer

New-UCPServiceTemplateVolumeInformation

Helper cmdlet for piping volume information into new service templates.

Syntax

New-UCPServiceTemplateVolumeInformation [-StorageSystemId]
<String> [-PoolId] <String> -Size <Double> [-PortIds <String[]>] [-
FileSystem <FileSystem>] [-VolumeName <String>]
[<CommonParameters>]

New-UCPServiceTemplateVolumeInformation [-StorageSystemId]
<String> [-VolumeId] <String> [-PortIds <String[]>]
[<CommonParameters>]

New-UCPServiceTemplateVolumeInformation [-PortIds <String[]>] [-ServiceTemplateVolume] <UcpServiceTemplateVolume> [<CommonParameters>]

Description

This helper command prepares a variable containing details regarding volumes to attach and volumes to create. The variable is passed into the commands for new service templates.

Parameters

- -StorageSystemId <String>

  Storage System Id in which to find or create the volumes.

  – Required? true

  – Position? 1

  – Default value

  – Accept pipeline input? true (ByPropertyName)

  – Accept wildcard characters? false

- -PoolId <String>

  Pool Id in which to find or create the volumes.

  – Required? true

  – Position? 2

  – Default value

  – Accept pipeline input? true (ByPropertyName)

  – Accept wildcard characters? false

- -Size <Double>

  Size of volume to create.

  – Required? true

– Position? named

– Default value

– Accept pipeline input? true (ByPropertyName)

– Accept wildcard characters? false

- -PortIds <String[]>

  SAN ports to use. If not specified, UCP will choose the best ports.

  – Required? false

  – Position? named

  – Default value

  – Accept pipeline input? true (ByPropertyName)

  – Accept wildcard characters? false

- -FileSystem <FileSystem>

  Values are None and VMFS.

  – Required? false

  – Position? named

  – Default value

  – Accept pipeline input? true (ByPropertyName)

  – Accept wildcard characters? false

- -VolumeName <String>

  New formatted volumes must be given a user-defined name.

  – Required? false

  – Position? named

  – Default value

- – Accept pipeline input? true (ByPropertyName)

    – Accept wildcard characters? false

- -VolumeId <String>

    Id of existing volume to attach. When attaching volumes to ESXi service templates, use datastores. When attaching to other template types, use non-datastore volumes.

    – Required? true

    – Position? 2

    – Default value

    – Accept pipeline input? true (ByPropertyName)

    – Accept wildcard characters? false

- -ServiceTemplateVolume <UcpServiceTemplateVolume>

    This parameter is used when piping in volume information from another template. See Get-UCPServiceTemplateVolume.

    – Required? true

    – Position? 1

    – Default value

    – Accept pipeline input? true (ByPropertyName)

    – Accept wildcard characters? false

- <CommonParameters>

    This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

String

Outputs

Hitachi.UCP.CLI.Domain.UcpServiceTemplateVolumeInformation

Notes

The UCP System Administrator and UCP View privileges are required.

Applicable for all service template types except Custom.

Example: Prepare new volumes for a service template

```
C:\PS>$Vol1 = New-UCPServiceTemplateVolumeInformation -StorageSystemId
93040480 -VolumeId 4 -PortIds "CTL0-C","CTL0-D","CTL0-E","CTL0-F"

C:\PS>$Vol2 = New-UCPServiceTemplateVolumeInformation -StorageSystemId
93040480 -VolumeId 5 -PortIds "CTL0-C","CTL0-D","CTL0-E","CTL0-F"


# Two existing volumes are added to variables. They would then be added
to a template with:

C:\PS>New-UCPEsxiStatelessServiceTemplate -ComputeVlanIds 27-29 -Name
BasicESXiTemplate -AttachVolumes @($Vol1,$vol2) -BootImageId 1
```

Example: Prepare volumes to create

```
C:\PS>$Datastore1 = New-UCPServiceTemplateVolumeInformation -
StorageSystemId 93040480 -PoolId 2 -Size 140949672960 -FileSystem VMFS -
VolumeName Datastore1

C:\PS>v$Datastore2 = New-UCPServiceTemplateVolumeInformation -
StorageSystemId 93040480 -PoolId 2 -Size 140949672960 -FileSystem VMFS -
VolumeName Datastore2


# The variables above will be supplied in this command:

C:\PS>New-UCPEsxiHostServiceTemplate -ComputeVlanIds 27-29 -Name
ESXiTemplate -BootImageId 1 -CreateAndAttachVolumes
@($Datastore1,$Datastore2)

# Volumes will be created when the service template is applied to a
server.
```

Related Links

Get-UCPStorageSystem

Get-UCPStoragePool

Get-UCPVolume

New-UCPEsxiStatelessServiceTemplate

New-UCPWindowsServiceTemplate

New-UCPLinuxServiceTemplate

New-UCPClusterServiceTemplate

New-UCPWindowsHyperVServiceTemplate

New-UCPStorageClusterSetting

A helper command to put storage cluster settings into a variable.

Syntax

New-UCPStorageClusterSetting [-CreateStorageCluster] [-EnableStorageDrs] [-AutomateStorageDrs] [-EnableStorageDrsIoMetric] [<CommonParameters>]

Description

Cluster Storage settings are for vSphere Storage Clusters (SDRS). Add these settings to a variable which is used in the New-UCPClusterTemplate cmdlet.

Parameters

- -CreateStorageCluster

  Specifies that a storage cluster will be created regardless if other options are enabled or not.

  – Required? false

  – Position? named

  – Default value

  – Accept pipeline input? false

- Accept wildcard characters? false

- -EnableStorageDrs

  Whether or not to enable DRS on the storage cluster. (Dynamic Resource Scheduling)

  - Required? false

  - Position? named

  - Default value

  - Accept pipeline input? false

  - Accept wildcard characters? false

- -AutomateStorageDrs

  If this parameter is used, the Storage DRS I/O Metric for the storage cluster will be automated. Do not use if volumes are in a Hitachi dynamically tiered (HDT) pool.

  - Required? false

  - Position? named

  - Default value

  - Accept pipeline input? false

  - Accept wildcard characters? false

- -EnableStorageDrsIoMetric

  Enables vSphere's I/O metrics recommendations for SDRS (storage) cluster. If "-AutomateStorageDRS" is not also specified, the I/O recommendations will be manual.

  - Required? false

  - Position? named

  - Default value

  - Accept pipeline input? false

— Accept wildcard characters? false

- \<CommonParameters>

This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

String

Outputs

Hitachi.UCP.CLI.Domain.ClusterSetting

Notes

The UCP System Administrator and UCP View privileges are required.

Example: Make variable with storage cluster settings, enabling all options

```
C:\PS>$SDRSCluster = New-UCPStorageClusterSetting -CreateStorageCluster
-EnableStorageDrs -AutomateStorageDrs -EnableStorageDrsIoMetric


# This variable is piped into New-UCPClusterServiceTemplate -
StorageCluster.  When the cluster service template is applied to
servers, UCP will create a storage cluster with vSphere I/O
recommendations enabled and fully automated.
```

Example: Storage cluster settings with no options enabled

```
C:\PS>$StorageCluster = New-UCPStorageClusterSetting -
CreateStorageCluster


# Cluster service templates using this piped value will create a storage
cluster but will not enable DRS or the I/O metric recommendations from
vSphere.
```

Example: Storage cluster with DRS, No I/O metrics recommendations

```
C:\PS>$StorageCluster = New-UCPStorageClusterSetting -
CreateStorageCluster -EnableStorageDrs


# Cluster service templates using this piped configuration set will make
a storage cluster with DRS, but no I/O recommendations from vSphere.
```

Example: All SDRS options except automation of I/O metrics

```
C:\PS>$StorageCluster = New-UCPStorageClusterSetting -
CreateStorageCluster -EnableStorageDrs -EnableStorageDrsIoMetric


# When the storage pool is HDT, it is dynamically tiered. Competing
decisions would be made if vSphere were allowed to make 'Automated'
movements based on I/O recommendations. Therefore, leave off -
AutomateStorageDrs.
```

Related Links

New-UCPClusterServiceTemplate

New-UCPTargetServerSetting

Helper cmdlet for applying service templates.

Syntax

New-UCPTargetServerSetting [-ServerId] <String> [-ServerProfileId] <Int64> [<CommonParameters>]

Description

Service templates require each server to be matched with a server profile. This cmdlet builds a variable containing a server and a profile. Pass the variable to the TargetServers parameter when applying any type of service template.

Parameters

- -ServerId <String>

  – Required? true

  – Position? 1

  – Default value

  – Accept pipeline input? true (ByPropertyName)

  – Accept wildcard characters? false

- -ServerProfileId <Int64>

  – Required? true

  – Position? 2

  – Default value

  – Accept pipeline input? true (ByPropertyName)

  – Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

String

Outputs

Hitachi.UCP.CLI.Domain.TargetServer

Notes

Requires UCP System Administrator privilege

Example: Build variable containing a server and profile

```
C:\PS># Check for unused server profiles:
$usedServerProfileIdArray = @()
foreach ($server in Get-UCPServer){ $usedServerProfileIdArray +=
$server.CurrentServerProfileId }
   Get-UcpServerProfile | where {$usedServerProfileIdArray -notcontains
$_.Id} | Select-Object @{n="Id";e={$_.Id}},
   @{n="IsNonHypervisor";e={$_.Is
   BareMetal}} | ft -Autosize

Id IsNonHypervisor
-- ---------------
2          False
3          False
4          False

# Get server in target slot of specified chassis:
$ServerID = (Get-UCPServer | where {$_.ChassisSerialNumber -eq
"323GG-RE3A1NBXR-Y00000061" and $_.PrimarySlot -eq
"6"}).Id

# Build variable with server 6 and profile for hypervisor:
$ServerAndProfile = New-UCPTargetServerSetting -ServerId $ServerId -
ServerProfileId 4
```

Related Links

Get-UCPServer

Get-UCPServerProfile

New-UCPUuidSetting

Helper cmdlet for supplying UUID settings to New-UCPServerProfile.

Syntax

New-UCPUuidSetting [-AutoGenerate] [<CommonParameters>]

New-UCPUuidSetting -UserValue <String> [<CommonParameters>]

Description

Use this cmdlet for building a variable. The variable is supplied to New-UCPServerProfile, parameter -UuidSetting.

Parameters

- -AutoGenerate

Use this parameter when UCP should auto-generate a UUID for the server profile.

  – Required? true

  – Position? 1

  – Default value

  – Accept pipeline input? true (ByPropertyName)

  – Accept wildcard characters? false

- -UserValue <String>

Use this parameter if the UUID should be manually specified.

  – Required? true

  – Position? named

  – Default value

  – Accept pipeline input? true (ByPropertyName)

  – Accept wildcard characters? false

- <CommonParameters>

This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

None

Outputs

Hitachi.UCP.CLI.Domain.ServerProfile.UuidSettings

Notes

Requires the UCP System Administrator privilege.

Example: Build variable where UUID is generated automatically

```
C:\PS>$UuidSetting = New-UCPUuidSetting -AutoGenerate


Note that the variable will not contain an actual UUID because it
will be generated when the server profile is
created.



# Examine contents of variable:

$UuidSetting | fl

AutoGenerate   : True
UserValue  :
```

Related Links

New-UCPServerProfile

Get-UcpUuidIdentityPool

New-UCPVirtualDistributedSwitch

Helper commandlet which supplies VDS settings to New-UCPClusterTemplate

Syntax

New-UCPVirtualDistributedSwitch [-VmotionVlanId <Int32>] -ComputeVlanIds <String> [<CommonParameters>]

New-UCPVirtualDistributedSwitch -ManagementPortGroupName <String> -DistributedSwitchId <String> [-VmotionPortGroupName <String>] [<CommonParameters>]

Description

This helper cmdlet passes to New-UCPClusterTemplate the details to either make a new VDS or use an existing VDS.

Parameters

- -VmotionVlanId <Int32>

  VLAN Id to use for vMotion if the VDS is to have a vMotion port group. Only to be used when making a new VDS.

  – Required? false

  – Position? named

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- -ComputeVlanIds <String>

  VLAN ID to use for Compute port group. Only to be used when making a new VDS.

  – Required? true

  – Position? named

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- -ManagementPortGroupName <String>

  Management port group name. Must match the name of a management port group actually on the VDS specified in this helper cmdlet.

  – Required? true

  – Position? named

- – Default value

- – Accept pipeline input? false

- – Accept wildcard characters? false

- -DistributedSwitchId <String>

  Id of the VDS. If using this parameter, the cluster will use an existing VDS. Must also specify VmotionPortGroupName and ManagementPortGroupName.

  - – Required? true

  - – Position? named

  - – Default value

  - – Accept pipeline input? false

  - – Accept wildcard characters? false

- -VmotionPortGroupName <String>

  vMotion port group name is only to be specified when DistributedSwitchId is supplied. Name of port group must match a port group that is actually on the specified switch.

  - – Required? false

  - – Position? named

  - – Default value

  - – Accept pipeline input? false

  - – Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

String

Outputs

Hitachi.UCP.CLI.Domain.ServiceTemplate.VirtualDistributedSwitch

Notes

The UCP System Administrator and UCP View privileges are required.

Example: Set up variable for making new VDS with template

```
C:\PS>$MakeNewVDS = New-UCPVirtualDistributedSwitch -VmotionVlanId 26 -
ComputeVlanIds 25
```

Example: Set up variable for using existing VDS with template

```
C:\PS>$UseVDS = New-UCPVirtualDistributedSwitch -DistributedSwitchId
"dvs-815" -ManagementPortGroupName "dvMgmtPG" -VmotionPortGroupName
"dvVMotionPG"
```

```
# When specifying an existing VDS, the exact vMotion port group name and
Management port group name used by that switch must be specified.
```

Related Links

Get-UCPVirtualDistributedSwitch

New-UCPClusterServiceTemplate

New-UCPVirtualPortSetting

Helper cmdlet used for supplying virtual port settings to another helper cmdlet: New-UCPCnaPhysicalPortSetting.

Syntax

New-UCPVirtualPortSetting [<CommonParameters>]

New-UCPVirtualPortSetting [-EnableLogicalLink] -Bandwidth <String> -VlanId <Int32> [<CommonParameters>]

Description

Needed only when partitioning the Converged Network Adapter (CNA).

Each CNA, when used in a converged networking environment, can be partitioned into 4 virtual channels.

In UCP, the virtual channel configuration is:

* 1st = Management (when server profile is for hypervisor deployments)

* 2nd = Fibre Channel over Ethernet (FCoE)

* 3rd = Ethernet

* 4th = Ethernet

The variables built by this cmdlet are treated sequentially by New-UCPCnaPhysicalPortSetting. The first variable is for channel 1 and so on.

Parameters

- -EnableLogicalLink

  Supplying this Boolean flag enables the virtual channel. Omitting the flag disables the channel.

  For Hypervisor server profiles, always enable the 1st and 2nd channel.

  For Non-hypervisor server profiles, always enable the 2nd channel.

  – Required? false

  – Position? named

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- -Bandwidth <String>

  This parameter supplies the bandwidth for a virtual channel.

Note that the bandwidth supplied for all 4 virtual channels on a physical port must add to 100%.

If a channel is disabled by omitting EnableLogicalLink, supply a 0 here for its bandwidth.

– Required? true

– Position? named

– Default value

– Accept pipeline input? false

– Accept wildcard characters? false

- -VlanId <Int32>

Appropriate only when the intended server profile is for Non-hypervisor deployments.

The VLAN ID supplied in this parameter will be configured directly on the CNA for use by this virtual channel. The VLAN ID is treated as "native" and UCP also configures it on the attached converged switch ports.

Rules:

* Supply a 0 for VLAN ID on the 2nd channel. UCP ignores the 0 and configures the reserved FCoE VLAN ID.

* All non-zero VLAN IDs must be unique

* Do not use the reserved FCoE VLAN ID on any Ethernet channel (See Get-UCPDirectorConfiguration)

– Required? true

– Position? named

– Default value

– Accept pipeline input? false

– Accept wildcard characters? false

Commands

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

String

Outputs

Hitachi.UCP.CLI.Domain.ServerProfile.VirtualPortSetting

Notes

Requires UCP System Administrator privilege.

Example: For nonhypervisor server profile with 2port CNA partitioned

```
C:\PS># Build variables; one for each virtual channel:

$EthChannel1Port1 = New-UCPVirtualPortSetting -EnableLogicalLink -
Bandwidth "10" -VlanId 20
$FCoEChannel2Port1 = New-UCPVirtualPortSetting -EnableLogicalLink -
Bandwidth "40" -VlanId 0
$EthChannel3Port1 = New-UCPVirtualPortSetting -EnableLogicalLink -
Bandwidth "25" -VlanId 100
$EthChannel4Port1 = New-UCPVirtualPortSetting -EnableLogicalLink -
Bandwidth "25" -VlanId 101

# Build array containing all of the above variables:

$Array_Of_Channels =
@($EthChannel1Port1,$FCoEChannel2Port1,$EthChannel3Port1,$EthChannel4Por
t1)

$Array_Of_Channels | ft -Autosize

EnableLogicalLink Bandwidth VlanId
----------------- --------- ------
True 10                 20
True 40                  0
True 25                100
True 25                101
```

Example: For nonhypervisor server profile with 4port CNA partitioned

```
C:\PS># Build variables for first port; one for each virtual channel.
# The logical link is enabled on all channels.

$EthChannel1Port1 = New-UCPVirtualPortSetting -EnableLogicalLink -
Bandwidth "10" -VlanId 20
$FCoEChannel2Port1 = New-UCPVirtualPortSetting -EnableLogicalLink -
Bandwidth "40" -VlanId 0
$EthChannel3Port1 = New-UCPVirtualPortSetting -EnableLogicalLink -
Bandwidth "25" -VlanId 100
$EthChannel4Port1 = New-UCPVirtualPortSetting -EnableLogicalLink -
Bandwidth "25" -VlanId 101

# Build variables for 2nd port; one for each virtual channel.
# The logical link is enabled on all channels.

$EthChannel1Port2 = New-UCPVirtualPortSetting -EnableLogicalLink -
Bandwidth "10" -VlanId 21
$FCoEChannel2Port2 = New-UCPVirtualPortSetting -EnableLogicalLink -
Bandwidth "40" -VlanId 0
$EthChannel3Port2 = New-UCPVirtualPortSetting -EnableLogicalLink -
Bandwidth "25" -VlanId 102
$EthChannel4Port2 = New-UCPVirtualPortSetting -EnableLogicalLink -
Bandwidth "25" -VlanId 103

# Build array containing all of the above variables:

$Array_Of_Channels =
@($EthChannel1Port1,$FCoEChannel2Port1,$EthChannel3Port1,$EthChannel4Por
t1,$EthChannel1Port2,$FCoEChannel2Port2,$EthChannel3Port2,$EthChannel4Po
rt2)

# The above array will be supplied to New-UCPCnaPhysicalPortSettings,
twice for a 4port CNA.

Notes:
When partitioning, the CNA hardware requires a different VLAN ID to be
configured on each virtual channel. The adapter treats them as native.
When the profile is for non-hypervisor deployments, you may supply these
VLAN IDs. The IDs you supply for the first two ports will also be
configured on ports 3 and 4.

# Examine contents of the array:

$Array_Of_Channels | fl

EnableLogicalLink : True
Bandwidth         : 10
VlanId            : 20
```

```
EnableLogicalLink : True
Bandwidth         : 40
VlanId            : 0

EnableLogicalLink : True
Bandwidth         : 25
VlanId            : 100

EnableLogicalLink : True
Bandwidth         : 25
VlanId            : 101

EnableLogicalLink : True
Bandwidth         : 10
VlanId            : 21

EnableLogicalLink : True
Bandwidth         : 40
VlanId            : 0

EnableLogicalLink : True
Bandwidth         : 25
VlanId            : 102

EnableLogicalLink : True
Bandwidth         : 25
VlanId            : 103
```

Related Links

Get-UCPDirectorConfiguration

New-UCPCnaPhysicalPortSetting

New-UCPVolume

Creates a volume on a storage system and optionally formats it and attaches it to either a server or all servers in a cluster.

Syntax

New-UCPVolume [-StorageSystemId] <String> [-PoolId] <String> -VolumeSizeInGB <Double> [-ServerId <String>] [-ClusterId <String>] [-PortIds <String[]>] [-FormatVolume] [-VolumeName <String>] [<CommonParameters>]

Description

Creates a volume on a storage system. When formatted as a datastore, the volume must then be attached to either a server or all servers in a cluster.

If a server is specified, that server must also be a host in the virtual platform so that UCP Director can verify the volume has been attached and formatted. If a cluster is specified, UCP Director will attach the volume to all of the hosts in that cluster.

UCP Director will ensure multiple storage paths exist by creating Fibre Channel zones and host storage domains as needed. When one or more existing zones and host storage domains include the server's ports and use the same storage system ports, UCP Director will use them.

When one or more zones exist but complimentary host storage domains do not exist, UCP Director will create host storage domains that use the same storage system ports. When one or more host storage domains exist but complimentary zones do not exist, UCP Director will create zones that use the same storage system ports. If zones and host storage domains for the server ports both exist but do not use the same storage system ports, UCP Director will select the ports that have the least paths and create the complimentary zones or host storage domains.

When no zones or host storage domains exist for the servers, UCP Director will select storage system ports having the fewest paths. If preferred, you may specify four storage system PortIds to be used instead. When doing so, one odd and one even port must be specified for each fabric.

Parameters

- -StorageSystemId <String>

  Specifies the ID of the storage system that is to contain the new volume. Use Get-UCPStorageSystem to discover the storage system ID.

  – Required? true

  – Position? 1

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- -PoolId <String>

  Specifies the ID of the storage system pool that is to contain the new volume. Use Get-UCPStoragePool to discover pool IDs.

  – Required? true

  – Position? 2

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- -VolumeSizeInGB <Double>

  Specifies the size (in gigabytes) of the new volume.

  – Required? true

  – Position? named

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- -ServerId <String>

  Optionally specifies the ID of the server to which the volume is to be attached. Either ServerId or ClusterId may be provided, but not both.

  – Required? false

  – Position? named

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- -ClusterId <String>

  Optionally specifies the ID of the cluster of servers to which the volume is to be attached. Either ServerId or ClusterId may be provided, but not both.

    – Required? false

    – Position? named

    – Default value

    – Accept pipeline input? false

    – Accept wildcard characters? false

- -PortIds <String[]>

  Optionally specifies four Ids of storage system ports to be used for volume paths. There must be one odd and one even port for each fabric. If not specified, UCP Director will select ports that have the fewest paths. Use Get-UCPStoragePort to discover port IDs.

    – Required? false

    – Position? named

    – Default value

    – Accept pipeline input? false

    – Accept wildcard characters? false

- -FormatVolume

  Specifies the volume is to be formatted. Requires VolumeName and either ServerId or ClusterId.

    – Required? false

    – Position? named

    – Default value

    – Accept pipeline input? false

- – Accept wildcard characters? false

- -VolumeName <String>

  Specifies the name of the new volume. Required only when
  FormatVolume is specified.

  - – Required? false

  - – Position? named

  - – Default value

  - – Accept pipeline input? false

  - – Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug,
  ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer,
  PipelineVariable, and OutVariable. For more information, see about_
  CommonParameters (http://go.microsoft.com/fwlink/
  ?LinkID=113216).

Inputs

None

Outputs

Hitachi.UCP.CLI.Domain.Volume

Notes

The UCP Storage Administrator and UCP View privileges are required.

Example: Create and attach a new volume to a server

```
C:\PS>New-UCPVolume 53106 –PoolId 3 –VolumeSizeInGB 50 –ServerId
6e37f410–b4a7–11e1–94b0–c6aca3093fbb
   –FormatVolume -VolumeName HRWeb
```

```
AttachedServerIds : {6e37f410-b4a7-11e1-94b0-c6aca3093fbb}
StorageSystemId   : 53106
LDev              : 00:3A:00
PoolId            : 3
Name              : HRWeb
TotalCapacityInGB : 50
UsedCapacityInGB  : 0
UsedPercentage    : 0
IsBootVolume      : False
IsReplicatedVolume: False
VolumeType        : HDP
Id                : 14848
GlobalResourceId  : inst.UCP-123-456-789.stor.1.ss.53106.vol.14848
ResourceType      : StorageVolume
InstanceId        : UCP-123-456-789
```

Example: Create and attach a new volume to a cluster

```
C:\PS>New-UCPVolume 53106 -PoolId 3 -VolumeSizeInGB 200 -ClusterId
domain-c93 -FormatVolume -VolumeName HRServices
```

```
AttachedServerIds : {a00a087e-b42f-11e1-b5b5-de6c62e1293f, c92fe2c0-
b391-11e1-b1cc-8c192ba3b146,
7939714f-b3cf-11e1-b0e7-c85aebf97785}
StorageSystemId   : 53106
LDev              : 00:3A:01
PoolId            : 3
Name              : HRServices
TotalCapacityInGB : 200
UsedCapacityInGB  : 0
UsedPercentage    : 0
IsBootVolume      : False
IsReplicatedVolume: False
VolumeType        : HDP
Id                : 14849
GlobalResourceId  : inst.UCP-123-456-789.stor.1.ss.53106.vol.14849
ResourceType      : StorageVolume
InstanceId        : UCP-123-456-789
```

Example: Create a new volume in a storage system

```
C:\PS>New-UCPVolume 53106 -PoolId 3 -VolumeSizeInGB 50
```

```
AttachedServerIds : {}
StorageSystemId   : 53106
LDev              : 00:3A:02
PoolId            : 3
Name              :
TotalCapacityInGB : 50
UsedCapacityInGB  : 0
UsedPercentage    : 0
IsBootVolume      : False
IsReplicatedVolume: False
VolumeType        : HDP
Id                : 14850
GlobalResourceId  : inst.UCP-123-456-789.stor.1.ss.53106.vol.14850
ResourceType      : StorageVolume
InstanceId        : UCP-123-456-789
```

Example: Create a new volume and attach it to a server using specific ports

```
C:\PS>New-UCPVolume 53106 2 -VolumeSizeInGB 120 -ServerId 4e483e76-
b4ba-11e1-8dc6-d1f3cfb81b84 -PortIds CL1-D,
CL2-D, CL3-D, CL4-D -FormatVolume -VolumeName Datastore15
```

```
AttachedServerIds : {4e483e76-b4ba-11e1-8dc6-d1f3cfb81b84}
StorageSystemId   : 53106
LDev              : 00:37:07
PoolId            : 2
Name              : Datastore15
TotalCapacityInGB : 120
UsedCapacityInGB  : 0
UsedPercentage    : 0
IsBootVolume      : False
IsReplicatedVolume: False
VolumeType        : HDP
Id                : 14087
GlobalResourceId  : inst.UCP-123-456-789.stor.1.ss.53106.vol.14887
ResourceType      : StorageVolume
InstanceId        : UCP-123-456-789
```

Related Links

Get-UCPVolume

Attach-UCPVolume

Detach-UCPVolume

Expand-UCPVolume

Remove-UCPVolume

Get-UCPStorageSystem

New-UCPWindowsHyperVServiceTemplate

Creates a new Windows Hyper-V service template

Syntax

New-UCPWindowsHyperVServiceTemplate -BootUnattendFileLocation
<String> -ImageUnattendFileLocation <String> -
BootVolumeStorageSystemId <String> -BootVolumePoolId <Int32> -
BootVolumeSize <Double> [-AttachVolumes
<UcpServiceTemplateVolumeInformation[]>] [-CreateAndAttachVolumes
<UcpServiceTemplateVolumeInformation[]>] [-ComputeVlanIds <String>]
-Name <String> [-Description <String>] -BootImageId <String>
[<CommonParameters>]

Description

Appropriate when the platform manager is SCVMM, this cmdlet creates a
Windows Hyper-V service template. When the template is applied to a
server, Windows will be installed to the server and the host will be added to
SCVMM inventory.

Parameters

- -BootUnattendFileLocation <String>

  Location and file name of the boot unattend file for the boot image
  associated with this template.

  – Required? true

  – Position? named

  – Default value

  – Accept pipeline input? false

- – Accept wildcard characters? false

- -ImageUnattendFileLocation <String>

  Location and file name of the image unattend file for the boot image associated with this template.

  - – Required? true

  - – Position? named

  - – Default value

  - – Accept pipeline input? false

  - – Accept wildcard characters? false

- -BootVolumeStorageSystemId <String>

  Storage system in which to create the boot volume.

  - – Required? true

  - – Position? named

  - – Default value

  - – Accept pipeline input? false

  - – Accept wildcard characters? false

- -BootVolumePoolId <Int32>

  Storage pool in which to create the boot volume.

  - – Required? true

  - – Position? named

  - – Default value

  - – Accept pipeline input? false

  - – Accept wildcard characters? false

- -BootVolumeSize <Double>

Size of boot volume to create, expressed in megabytes.

- – Required? true

- – Position? named

- – Default value

- – Accept pipeline input? false

- – Accept wildcard characters? false

- -AttachVolumes <UcpServiceTemplateVolumeInformation[]>

  Existing volumes to attach. User helper cmdlet New-UCPServiceTemplateVolumeInformation.

  - – Required? false

  - – Position? named

  - – Default value

  - – Accept pipeline input? false

  - – Accept wildcard characters? false

- -CreateAndAttachVolumes <UcpServiceTemplateVolumeInformation[]>

  New volumes to create. User helper cmdlet New-UCPServiceTemplateVolumeInformation.

  - – Required? false

  - – Position? named

  - – Default value

  - – Accept pipeline input? false

  - – Accept wildcard characters? false

- -ComputeVlanIds <String>

Commands

Compute VLAN Id (or range) to be used by blades which apply this template. These are treated as trunk VLAN IDs and are configured on attached Ethernet switch ports. If the hosts will later be clustered, you may add the VLAN IDs for cluster and Live Migration networks into this list.

- – Required? false
- – Position? named
- – Default value
- – Accept pipeline input? false
- – Accept wildcard characters? false

- -Name <String>

  Name for the Windows Hyper-V service template.

  - – Required? true
  - – Position? named
  - – Default value
  - – Accept pipeline input? false
  - – Accept wildcard characters? false

- -Description <String>

  - – Required? false
  - – Position? named
  - – Default value
  - – Accept pipeline input? false
  - – Accept wildcard characters? false

- -BootImageId <String>

  Id of the Windows boot image that the template should install.

– Required? true

– Position? named

– Default value

– Accept pipeline input? false

– Accept wildcard characters? false

• <CommonParameters>

This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

String

Hitachi.UCP.CLI.Domain.UcpServiceTemplateVolumeInformation

Outputs

Hitachi.UCP.CLI.Domain.UcpWindowsHyperVServiceTemplate

Notes

The UCP System Administrator and UCP View privileges are required.

Example: Make new Windows HyperV service template with additional volume

```
C:\PS># Get Image information for Windows
C:\PS>$imageInfo = Get-UCPImage -ImageType Windows -ImageId 23

# Set ImageUnattend file location:
C:\PS>$ImageUnattend = $ImageInfo.ImageUnattendFilePaths[2]


#Get storage system information
C:\PS>$storageSystemInfo = Get-UCPStorageSystem

# Get Storage pool:
```

```
    C:\PS>$storagePool = Get-UCPStoragePool -
StorageSystemId$storageSystemInfo.id | Select-Object -First 1

    # Define volume to create:
    C:\PS>$DataVol = New-UCPServiceTemplateVolumeInformation -
StorageSystemId $storageSystemInfo.Id -PoolId
    $storagePool.id
     -Size 42949672960 -FileSystem "none" -PortIds "CTL1-C","CTL0-
C","CTL1-D","CTL0-D"

    #Make template
    C:\PS>New-UCPWindowsServiceTemplate -BootImageId 23 -
BootUnattendFileLocation $imageInfo.BootUnattendFilePaths[0]
    -ImageUnattendFileLocation $ImageUnattend -BootVolumeSize
120949672960 -BootVolumeStorageSystemId
    $storageSystemInfo.Id -BootVolumePoolId $storagePool.Id -
ComputeVlanIds "26-29" -CreateAndAttachVolumes $DataVol
    -Name "Win2012"
```

```
    BootVolumeStorageSystemId        : 93040480
    BootVolumePoolId                 : 1
    BootVolumeSizeInBytes            : 120949672960
    BootUnattendFileLocation         :
    \\10.21.24.247\REMINST\Boot\x64\Windows\BootUnattendFiles\
Windows2012DatacenterBootUnattend.xml
    ImageUnattendFileLocation        :
    \\10.21.24.247\REMINST\Boot\x64\Windows\ImageUnattendFiles\
TemplateWindows2012-StdServer-ImageUnattend.xml
    Id                               : 20
    Name                             : Win2012
    BootImageId                      : 23
    BootImageName                    : Windows Server 2012
SERVERDATACENTER
    BootImageType                    : Windows
    ServiceTemplateType              : WindowsHyperV
    ComputeVlanIds                   : 26-29
    GlobalResourceId                 : inst.UCP-123-456-
789.svctmplt.20
    ResourceType                     : ServiceTemplate
    InstanceId                       : UCP-123-456-789
```

Example: Make new Windows Hyper V template with ImageUnattend and BootUnattend fully typed out

```
    C:\PS># Pre-Step - Get the file locations with Get-UCPImage 23.
    # Set the BootUnattend and ImageUnattend locations into variables:

    C:\PS>$BootUnattend =
```

```
    "\\10.21.24.247\REMINST\Boot\x64\Windows\BootUnattendFiles\
Windows2012DatacenterBootUnattend.xml"

    C:\PS>$ImageUnattend =
    "\\10.21.24.247\REMINST\Boot\x64\Windows\ImageUnattendFiles\
TemplateWindows2012DatacenterImageUn
    attend.xml"

    # Make new windows service template with no additional storage:

    C:\PS>New-UCPWindowsServiceTemplate -Name "Win2012DC" -BootImageId
23 -BootVolumeStorageSystemId 93040480
    -BootVolumePoolId 1 -BootUnattendFileLocation $BootUnattend -
ImageUnattendFileLocation $ImageUnattend
    -BootVolumeSize 120949672960 -ComputeVlanIds "27,29"




    BootVolumeStorageSystemId          : 93040480
    BootVolumePoolId                   : 1
    BootVolumeSizeInBytes              : 120949672960
    BootUnattendFileLocation           :
    \\10.21.24.247\REMINST\Boot\x64\Windows\BootUnattendFiles\
Windows2012DatacenterBootUnattend.xml
    ImageUnattendFileLocation          :
    \\10.21.24.247\REMINST\Boot\x64\Windows\ImageUnattendFiles\
TemplateWindows2012DatacenterImageUnattend.xml
    Id                                 : 8
    Name                               : Win2012DC
    BootImageId                        : 23
    BootImageName                      : Windows Server 2012
SERVERDATACENTER
    BootImageType                      : Windows
    ServiceTemplateType                : Windows
    ComputeVlanIds                     : 27,29
    GlobalResourceId                   : inst.UCP-123-456-789.svctmplt.8
    ResourceType                       : ServiceTemplate
    InstanceId                         : UCP-123-456-789
```

Related Links

Set-UCPWindowsHyperVServiceTemplate

Apply-UCPWindowsHyperVServiceTemplate

Remove-UCPServiceTemplate

Get-UCPImage

New-UCPServiceTemplateVolumeInformation

New-UCPWindowsServiceTemplate

Creates new Windows service template in UCP inventory.

Syntax

New-UCPWindowsServiceTemplate -BootUnattendFileLocation <String> -ImageUnattendFileLocation <String> -BootVolumeStorageSystemId <String> -BootVolumePoolId <Int32> -BootVolumeSize <Double> [-AttachVolumes <UcpServiceTemplateVolumeInformation[]>] [-CreateAndAttachVolumes <UcpServiceTemplateVolumeInformation[]>] [-ComputeVlanIds <String>] -Name <String> -BootImageId <String> [<CommonParameters>]

Description

When this service template is applied to a server, the WDS server within UCP will apply the specified Windows image. VLAN Ids and storage will be configured for the server according to the service template details.

Parameters

- -BootUnattendFileLocation <String>

  Location and file name of the boot unattend file for the boot image associated with this template.

  - Required? true

  - Position? named

  - Default value

  - Accept pipeline input? false

  - Accept wildcard characters? false

- -ImageUnattendFileLocation <String>

  Location and file name of the image unattend file for the boot image associated with this template.

  - Required? true

- – Position? named

- – Default value

- – Accept pipeline input? false

- – Accept wildcard characters? false

- -BootVolumeStorageSystemId <String>

  Storage system in which to create the boot volume.

  - – Required? true

  - – Position? named

  - – Default value

  - – Accept pipeline input? false

  - – Accept wildcard characters? false

- -BootVolumePoolId <Int32>

  Storage pool in which to create the boot volume.

  - – Required? true

  - – Position? named

  - – Default value

  - – Accept pipeline input? false

  - – Accept wildcard characters? false

- -BootVolumeSize <Double>

  Size of boot volume to create, expressed in megabytes.

  - – Required? true

  - – Position? named

  - – Default value

– Accept pipeline input? false

– Accept wildcard characters? false

- -ComputeVlanIds <String>

Compute VLAN Id (or range) to be used by blades which apply this template.

– Required? false

– Position? named

– Default value

– Accept pipeline input? false

– Accept wildcard characters? false

- -AttachVolumes <UcpServiceTemplateVolumeInformation[]>

Existing volumes to attach. User helper cmdlet New-UCPServiceTemplateVolumeInformation.

– Required? false

– Position? named

– Default value

– Accept pipeline input? false

– Accept wildcard characters? false

- -CreateAndAttachVolumes <UcpServiceTemplateVolumeInformation[]>

New volumes to create. User helper cmdlet New-UCPServiceTemplateVolumeInformation.

– Required? false

– Position? named

– Default value

– Accept pipeline input? false

– Accept wildcard characters? false

- -ComputeVlanIds <String>

  Compute VLAN Id (or range) to be used by blades which apply this template. These are treated as trunk VLAN IDs and are configured on attached Ethernet switch ports.

  – Required? false

  – Position? named

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- -Name <String>

  Name for the Windows service template.

  – Required? true

  – Position? named

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- -Description <String>

  – Required? false

  – Position? named

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- -BootImageId <String>

  Id of the Windows boot image that the template should install.

  – Required? true

  – Position? named

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

String, Hitachi.UCP.CLI.Domain.UcpServiceTemplateVolumeInformation

Outputs

Hitachi.UCP.CLI.Domain.UcpWindowsServiceTemplate

Notes

The UCP System Administrator and UCP View privileges are required.

Example: Make new Windows service template with extra storage

```
C:\PS># Get Image information for Windows
C:\PS>$imageInfo = Get-UCPImage -ImageType Windows -ImageId 23

# Set ImageUnattend file location:
C:\PS>$ImageUnattend = $ImageInfo.ImageUnattendFilePaths[2]


#Get storage system information
C:\PS>$storageSystemInfo = Get-UCPStorageSystem
```

```
     # Get Storage pool:
     C:\PS>$storagePool = Get-UCPStoragePool -
StorageSystemId$storageSystemInfo.id | Select-Object -First 1

     # Define volume to create:
     C:\PS>$DataVol = New-UCPServiceTemplateVolumeInformation -
StorageSystemId $storageSystemInfo.Id -PoolId
     $storagePool.id
      -Size 42949672960 -FileSystem "none" -PortIds "CTL1-C","CTL0-
C","CTL1-D","CTL0-D"

     #Make template
     C:\PS>New-UCPWindowsServiceTemplate -BootImageId 23 -
BootUnattendFileLocation $imageInfo.BootUnattendFilePaths[0]
     -ImageUnattendFileLocation $ImageUnattend -BootVolumeSize
120949672960 -BootVolumeStorageSystemId
     $storageSystemInfo.Id -BootVolumePoolId $storagePool.Id -
ComputeVlanIds "26-29" -CreateAndAttachVolumes $DataVol
     -Name "Win2012"


     # Makes service template called "Win2012" with an extra data volume
to create.



     BootVolumeStorageSystemId          : 93040480
     BootVolumePoolId                   : 1
     BootVolumeSizeInBytes              : 120949672960
     BootUnattendFileLocation           :
     \\10.21.24.247\REMINST\Boot\x64\Windows\BootUnattendFiles\
Windows2012DatacenterBootUnattend.xml
     ImageUnattendFileLocation          :
     \\10.21.24.247\REMINST\Boot\x64\Windows\ImageUnattendFiles\
TemplateWindows2012-StdServer-ImageUnattend.xml
     Id                                 : 20
     Name                               : Win2012
     BootImageId                        : 23
     BootImageName                      : Windows Server 2012
SERVERDATACENTER
     BootImageType                      : Windows
     ServiceTemplateType                : Windows
     ComputeVlanIds                     : 26-29
     GlobalResourceId                   : inst.UCP-123-456-
789.svctmplt.20
     ResourceType                       : ServiceTemplate
     InstanceId                         : UCP-123-456-789
```

Example: New Windows service template with BootUnattend and ImageUnattend files typed out

```
     C:\PS># Pre-Step - Get the file locations with Get-UCPImage 23.
```

```
    # Set the BootUnattend and ImageUnattend locations into variables:

    C:\PS>$BootUnattend =
    "\\10.21.24.247\REMINST\Boot\x64\Windows\BootUnattendFiles\
Windows2012DatacenterBootUnattend.xml"

    C:\PS>$ImageUnattend =
    "\\10.21.24.247\REMINST\Boot\x64\Windows\ImageUnattendFiles\
TemplateWindows2012DatacenterImageUn
    attend.xml"

    # Make new windows service template with no additional storage:

    C:\PS>New-UCPWindowsServiceTemplate -Name "Win2012DC" -BootImageId
23 -BootVolumeStorageSystemId 93040480
    -BootVolumePoolId 1 -BootUnattendFileLocation $BootUnattend -
ImageUnattendFileLocation $ImageUnattend
    -BootVolumeSize 120949672960 -ComputeVlanIds "27,29"
```

```
    BootVolumeStorageSystemId          : 93040480
    BootVolumePoolId                   : 1
    BootVolumeSizeInBytes              : 120949672960
    BootUnattendFileLocation           :
    \\10.21.24.247\REMINST\Boot\x64\Windows\BootUnattendFiles\
Windows2012DatacenterBootUnattend.xml
    ImageUnattendFileLocation          :
    \\10.21.24.247\REMINST\Boot\x64\Windows\ImageUnattendFiles\
TemplateWindows2012DatacenterImageUnattend.xml
    Id                                 : 8
    Name                               : Win2012DC
    BootImageId                        : 23
    BootImageName                      : Windows Server 2012
SERVERDATACENTER
    BootImageType                      : Windows
    ServiceTemplateType                : Windows
    ComputeVlanIds                     : 27,29
    GlobalResourceId                   : inst.UCP-123-456-789.svctmplt.8
    ResourceType                       : ServiceTemplate
    InstanceId                         : UCP-123-456-789
```

Related Links

Set-UCPWindowsServiceTemplate

Apply-UCPWindowsServiceTemplate

Remove-UCPServiceTemplate

Get-UCPImage

New-UCPWWnAddressSetting

Helper cmdlet for supplying WWN settings to a server profile.

Syntax

New-UCPWWnAddressSetting [-UsePool] [-IsNodeName] [-IdentityPoolId] <String> [-IdentityPoolRangeId] <String> [<CommonParameters>]

New-UCPWWnAddressSetting [-IsNodeName] -UserValue <String> [<CommonParameters>]

Description

Whether using an HBA or CNA with FCoE, each Fibre Channel port requires exactly one WWPN and one WWNN. Use this cmdlet to build a variable containing an array of WWPN and WWNN for each F.C. port in the blade that will apply the server profile.

Parameters

- -UsePool

  This flag dictates that WWNs should be taken from UCP WWN address pool.

  – Required? true

  – Position? 1

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- -IsNodeName

  This flag dictates that the number should be a World Wide Node Name.

  (Each Fibre Channel port or FCoE channel requires one WWPN and one WWNN)

- – Required? false

- – Position? named

- – Default value

- – Accept pipeline input? false

- – Accept wildcard characters? false

- -IdentityPoolId <String>

  ID of the WWN pool.

  - – Required? true

  - – Position? 2

  - – Default value

  - – Accept pipeline input? true (ByPropertyName)

  - – Accept wildcard characters? false

- -IdentityPoolRangeId <String>

  The ID of the WWN range. Supply the ID of an address range within the specified pool.

  - – Required? true

  - – Position? 3

  - – Default value

  - – Accept pipeline input? true (ByPropertyName)

  - – Accept wildcard characters? false

- -UserValue <String>

  If not taking WWNs from a pool, use this parameter for manually typing WWNs.

  (Each Fibre Channel port or FCoE channel requires one WWPN and one WWNN.)

- – Required? true

- – Position? named

- – Default value

- – Accept pipeline input? false

- – Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

String

Outputs

Hitachi.UCP.CLI.Domain.ServerProfile.WwnAddressSetting

Notes

UCP System Administrator privilege is required.

Example: Build variable with WWN settings for server profile using 2port CNA, not partitioned

```
C:\PS># Build variables with WWN Pool and Range IDs:

$WWNPool = (Get-UcpWwnAddressIdentityPool).Id
$WWNRange = (Get-UcpWwnAddressIdentityPoolRange -IdentityPoolId
$WWNPool).Id

# Build variables with NN and PNs for 2 FC ports:
$WWNN1 = New-UCPWwnAddressSetting -UsePool -IsNodeName -
IdentityPoolId $WWNPool -IdentityPoolRangeId $WWNRange
$WWPN1 = New-UCPWwnAddressSetting -UsePool -IdentityPoolId $WWNPool
-IdentityPoolRangeId $WWNRange
$WWNN2 = New-UCPWwnAddressSetting -UsePool -IsNodeName -
IdentityPoolId $WWNPool -IdentityPoolRangeId $WWNRange
```

```
    $WWPN2 = New-UCPWwnAddressSetting -UsePool -IdentityPoolId $WWNPool
-IdentityPoolRangeId $WWNRange

    # Build variable containing an array of all 4 variables:
    $WWNArray = @($WWNN1,$WWPN1,$WWNN2,$WWPN2)


    # Each Fibre Channel port needs one WWPN and one WWNN. This is true
whether configuring a physical Fibre Channel
    adapter (HBA) or the FCoE channel of a converged network adapter
(CNA).


    # Examine contents of array:

    $WWNArray | fl

    UsePool             : True
    IsNodeName          : True
    IdentityPoolRangeId : 2
    IdentityPoolId      : 4
    UserValue           :

    UsePool             : True
    IsNodeName          : False
    IdentityPoolRangeId : 2
    IdentityPoolId      : 4
    UserValue           :

    UsePool             : True
    IsNodeName          : True
    IdentityPoolRangeId : 2
    IdentityPoolId      : 4
    UserValue           :

    UsePool             : True
    IsNodeName          : False
    IdentityPoolRangeId : 2
    IdentityPoolId      : 4
    UserValue           :
```

Related Links

Get-UCPWwnAddressIdentityPool

Get-UCPWwnAddressIdentityPoolRange

New-UCPServerProfile

New-UCPZone

Creates a new zone on a fabric.

Syntax

New-UCPZone [-FabricId] <String> [-ZoneName] <String> -InitiatorWWN <String> -TargetWWN <String> [<CommonParameters>]

Description

Creates a new zone on a fabric that contains a single InitiatorWWN and a single TargetWWN.

Parameters

- -FabricId <String>

  Specifies the ID of the fabric where the zone is to be created. Use Get-UCPFabric to discover fabric IDs.

  – Required? true

  – Position? 1

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- -ZoneName <String>

  Specifies the name of the zone to be created.

  – Required? true

  – Position? 2

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- -InitiatorWWN <String>

  Specifies the initiator's WWN for the zone.

  – Required? true

  – Position? named

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- -TargetWWN <String>

  Specifies the target's WWN for the zone.

  – Required? true

  – Position? named

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

None

Outputs

Hitachi.UCP.CLI.Domain.Zone

Notes

The UCP Storage Administrator and UCP View privileges are required.

Example: Create a new zone on a fabric

```
C:\PS>New-UCPZone 2 -ZoneName ExampleZone -InitiatorWWN
50.00.08.70.00.53.79.F0 -TargetWWN 50.06.0E.80.06.CF.72.02 | Format-List
```

```
Name             : ExampleZone
FabricId         : 2
PortMembers      : {50.00.08.70.00.53.79.F0, 50.06.0E.80.06.CF.72.02}
InitiatorWWN     : 50.00.08.70.00.53.79.F0
TargetWWN        : 50.06.0E.80.06.CF.72.02
Id               : ExampleZone
GlobalResourceId : inst.v2ProductionB-123-456-
789.fc.1.fab.2.zone.ExampleZone
ResourceType     : StorageZone
InstanceId       : v2ProductionB-123-456-789
```

Related Links

Get-UCPZone

Set-UCPZone

Remove-UCPZone

Get-UCPFabric

Purge-UCPEvent

Purges old UCP events.

Syntax

Purge-UCPEvent [<CommonParameters>]

Description

Purges old UCP events by removing events that are older than the retention policy defined in the virtual platform.

Parameters

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

None

Outputs

None

Notes

The UCP System Administrator and UCP View privileges are required.

Example: Purge UCP events

```
C:\PS>Purge-UCPEvent
```

Related Links

Get-UCPEvent

Get-UCPJob

Purge-UCPJob

Purge-UCPJob

Purges old UCP jobs.

Syntax

Purge-UCPJob [<CommonParameters>]

Description

Purges old UCP jobs by removing jobs that are older than the retention policy defined in the virtual platform.

Parameters

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

None

Outputs

None

Notes

The UCP System Administrator and UCP View privileges are required.

Example: Purge UCP jobs

```
C:\PS>Purge-UCPJob
```

Related Links

Get-UCPJob

Get-UCPEvent

Purge-UCPEvent

Refresh-UCPInventory

Refreshes UCP inventory by element type.

Syntax

Refresh-UCPInventory [-Type] <InventoryType> [<CommonParameters>]

Description

Refreshes UCP inventory by element type.

Parameters

- -Type <InventoryType>

  Specifies the type of inventory element that is to be refreshed. Valid values: Server, Storage, FibreChannelSwitch, EthernetSwitch, and Image.

  – Required? true

  – Position? 1

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

None

Outputs

None

Notes

The privilege required by this command depends on the value of the Type parameter, as follows:

- Server: Requires UCP Server Administration privilege

- Storage: Requires UCP Storage Administration privilege

- FibreChannelSwitch: Requires UCP Storage Administration privilege

- EthernetSwitch: Requires UCP Network Administration privilege

- Image: Requires UCP Server Administration privilege

In all cases the UCP View privilege is also required.

Example: Refresh server inventory

```
C:\PS>Refresh-UCPInventory Server
```

Example: Refresh storage inventory

```
C:\PS>Refresh-UCPInventory Storage
```

Example: Refresh Fibre Channel switch inventory

```
C:\PS>Refresh-UCPInventory FibreChannelSwitch
```

Example: Refresh Ethernet switch inventory

```
C:\PS>Refresh-UCPInventory EthernetSwitch
```

Example: Refresh image inventory

```
C:\PS>Refresh-UCPInventory Image
```

Related Links

Get-UCPServerElementManager

Get-UCPStorageElementManager

Get-UCPFibreChannelSwitch

Get-UCPEthernetSwitch

Refresh-UCPMonitorState

Refreshes UCP Monitor state.

Syntax

Refresh-UCPMonitorState [<CommonParameters>]

Description

Monitor state is an aggregated health status for the resources within UCP.

Parameters

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

None

Outputs

None

Notes

The UCP System Administrator role is required.

This cmdlet does not take the input of resource type. It refreshes the state of all resources together.

Example: Refresh UCP monitor state

```
C:\PS>Refresh-UCPMonitorState
```

```
# This will launch a UCP refresh for all monitor states.
```

Related Links

Get-UCPMonitorState

Register-UCPVirtualPlatformManager

Registers UCP as an extension to VMware vCenter or Microsoft System Center Virtual Machine Manager

Syntax

Register-UCPVirtualPlatformManager -Credential <PSCredential> [-Force] [-NetworkEmail <String>] [-PlatformServer <String>] [-PlatformType] <PlatformType> [-PlatformUrl <String>] [-ServerEmail <String>] [-StorageEmail <String>] [-SystemEmail <String>] [<CommonParameters>]

Description

Registers UCP as an extension to VMware vCenter or Microsoft System Center Virtual Machine Manager. This command should not be used without first consulting with an HDS representative. Use Set-UCPVirtualPlatformManagerConnectionInformation to change the credentials used to access the virtual platform manager.

Parameters

- -Credential <PSCredential>

    Specifies the username, domain, and password that is to be used to manage the virtual platform manager. Must be an Administrator of the virtual platform manager. Should not be the same identity as the service account used for the UCP Director.

    – Required? true

    – Position? named

    – Default value

    – Accept pipeline input? false

- – Accept wildcard characters? false

- -Force

  Indicates the user should not be prompted to confirm that the virtual platform manager should be registered.

  - – Required? false

  - – Position? named

  - – Default value

  - – Accept pipeline input? false

  - – Accept wildcard characters? false

- -NetworkEmail <String>

  Specifies the email address that will receive network alarm notifications. Consider making it an email group containing multiple recipients that may change over time. For SCVMM, this will be ignored.

  - – Required? false

  - – Position? named

  - – Default value

  - – Accept pipeline input? false

  - – Accept wildcard characters? false

- -PlatformServer <String>

  Specifies the FQDN/IP address that is to be used to access the virtual platform manager. For SCVMM, this should be the same as the FQDN/IP of the SCVMM Server. For VMWare, this will be ignored.

  - – Required? false

  - – Position? named

  - – Default value

  - – Accept pipeline input? false

– Accept wildcard characters? false

- -PlatformType <PlatformType>

  Specifies the platform type of the virtual platform manager. Valid values are "VMware" or "SCVMM".

  – Required? true

  – Position? 1

  – Default value

  – Accept pipeline input? true (ByPropertyName)

  – Accept wildcard characters? false

- -PlatformUrl <String>

  Specifies the URL that is to be used to access the virtual platform manager. For VMware, this should be the same as the VirtualCenter.VimApiUrl advanced setting. For SCVMM, this will be ignored.

  – Required? false

  – Position? named

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- -ServerEmail <String>

  Specifies the email address that will receive server alarm notifications. Consider making it an email group containing multiple recipients that may change over time. For SCVMM, this will be ignored.

  – Required? false

  – Position? named

  – Default value

- – Accept pipeline input? false

- – Accept wildcard characters? false

- -StorageEmail <String>

  Specifies the email address that will receive storage alarm notifications. Consider making it an email group containing multiple recipients that may change over time. For SCVMM, this will be ignored.

  - – Required? false

  - – Position? named

  - – Default value

  - – Accept pipeline input? false

  - – Accept wildcard characters? false

- -SystemEmail <String>

  Specifies the email address that will receive system wide alarm notifications. Consider making it an email group containing multiple recipients that may change over time. For SCVMM, this will be ignored.

  - – Required? false

  - – Position? named

  - – Default value

  - – Accept pipeline input? false

  - – Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

Hitachi.UCP.CLI.Domain.VirtualPlatformManager

Outputs

Hitachi.UCP.CLI.Domain.VirtualPlatformManager

Notes

This command requires the UCP System Administration and UCP View privileges.

Example: Register VMware virtual platform manager

```
C:\PS>$svcacctcred = Get-Credential

C:\PS>Register-UCPVirtualPlatformManager -PlatfromType VMWare -
Credential $svcacctcred -PlatformURL
    https://vcenter.ucp.local/sdk -NetworkEmail networkadmin@ucp.com -
ServerEmail serveradmin@ucp.com -StorageEmail
    storageadmin@ucp.com
```

```
PlatformServer    :
PlatformType      : VMWare
PlatformUrl       : https://vcenter.pode.local/sdk
PlatformUsername  : pode\ucpadmin
PluginExtensions  : {}
Id                : 1
GlobalResourceId  : inst.v2ProductionH-123-456-789.vmgr.1
ResourceType      : VirtualManager
InstanceId        : v2ProductionH-123-456-789
```

Example: Register SCVMM virtual platform manager

```
C:\PS>$svcacctcred = Get-Credential

C:\PS>Register-UCPVirtualPlatformManager -PlatfromType SCVMM -
Credential $svcacctcred -PlatformServer
    scvmm.ucp.local
```

```
PlatformServer    : scvmm.pode.local
PlatformType      : SCVMM
PlatformUrl       :
PlatformUsername  : pode\ucpadmin
PluginExtensions  : {https://scvmm.pode.local/ui/extension/
get?platform=SCVMM&version=V2012R2&client=UiConsole}
Id                : 1
GlobalResourceId  : inst.v2ProductionH-123-456-789.vmgr.1
ResourceType      : VirtualManager
InstanceId        : v2ProductionH-123-456-789
```

Related Links

Get-UCPVirtualPlatformManager

Set-UCPVirtualPlatformManagerConnectionInformation

Set-UCPVirtualPlatformManager

Remove-UCPConvergedSwitch

Removes a Converged switch from UCP inventory

Syntax

Remove-UCPConvergedSwitch [-Id] <String> [-Force]
[<CommonParameters>]

Description

Removes a Converged switch from inventory. During this process, SNMP
settings that were configured by UCP Director are removed from the
switch.

The Converged switch to be removed may be specified in the pipeline.
Alternatively, the Id parameter may be used.

Parameters

- -Id <String>

  ID of the converged switch to remove from UCP inventory.

  – Required? true

  – Position? 1

— Default value

— Accept pipeline input? true (ByPropertyName)

— Accept wildcard characters? false

- -Force

  Indicates the user should not be prompted to confirm that the Ethernet switch should be removed from inventory.

  — Required? false

  — Position? named

  — Default value

  — Accept pipeline input? false

  — Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

Hitachi.UCP.CLI.Domain.ConvergedSwitch

Outputs

None

Notes

The UCP Network Administrator role is required.

Example: Remove a converged switch from inventory

```
Remove-UCPConvergedSwitch -Id 4
```

```
Confirm
Proceed removing Converged switch?
[Y] Yes  [N] No  [S] Suspend  [?] Help (default is "Y"): y
```

Related Links

Get-UCPConvergedSwitch

Remove-UCPEthernetSwitch

Removes an Ethernet switch from UCP inventory.

Syntax

Remove-UCPEthernetSwitch [-Id] <String> [-Force]
[<CommonParameters>]

Description

Removes an Ethernet switch from inventory. During this process, SNMP settings that were configured by UCP Director are removed from the switch.

The Ethernet switch to be removed may be specified in the pipeline. Alternatively, the Id parameter may be used.

Parameters

- -Id <String>

  Specifies the ID of the Ethernet switch that is to be removed from inventory.

  – Required? true

  – Position? 1

  – Default value

  – Accept pipeline input? true (ByPropertyName)

  – Accept wildcard characters? false

- -Force

  Indicates the user should not be prompted to confirm that the Ethernet switch should be removed from inventory.

  – Required? false

  – Position? named

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

Hitachi.UCP.CLI.Domain.EthernetSwitch

Outputs

None

Notes

The UCP Network Administrator role is required.

Example: Remove an Ethernet switch from inventory

```
C:\PS>Remove-UCPEthernetSwitch -Id 4

Confirm
Proceed removing Ethernet switch?
[Y] Yes  [N] No  [S] Suspend  [?] Help (default is "Y"): y
```

Related Links

Get-UCPEthernetSwitch

New-UCPEthernetSwitch

Set-UCPEthernetSwitchConnectionInformation

Remove-UCPEthernetSwitchBackup

Removes an Ethernet switch configuration backup from inventory.

Syntax

Remove-UCPEthernetSwitchBackup [-Force] [-BackupId] <String> [-SwitchId] <String> [<CommonParameters>]

Description

An Ethernet switch configuration backup is a saved collection of configurations that UCP has made to an Ethernet switch. Deleting a backup configuration removes it from UCP inventory and allows room for another one to be saved.

Parameters

- -Force

    Specifies whether to remove the backup, even if the value of its Pinned property is true.

    – Required? false

    – Position? named

    – Default value

    – Accept pipeline input? false

    – Accept wildcard characters? false

- -BackupId <String>

  Specifies the Id of the configuration backup to remove from inventory.

  – Required? true

  – Position? 1

  – Default value

  – Accept pipeline input? true (ByPropertyName)

  – Accept wildcard characters? false

- -SwitchId <String>

  Specifies the Id of the switch from which the backup was created.

  – Required? true

  – Position? 2

  – Default value

  – Accept pipeline input? true (ByPropertyName)

  – Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

Hitachi.UCP.CLI.Domain.EthernetSwitchBackup

Outputs

None

Notes

The UCP Network Administrator role is required.

Example: Remove an Ethernet switch configuration backup

```
C:\PS>Remove-UCPEthernetSwitchBackup –BackupId 1 –SwitchId 4
```

Related Links

Get-UCPEthernetSwitchBackup

New-UCPEthernetSwitchBackup

Set-UCPEthernetSwitchBackup

Remove-UCPFibreChannelSwitch

Removes a Fibre Channel switch from inventory.

Syntax

Remove-UCPFibreChannelSwitch [-Id] <String> [-Force]
[<CommonParameters>]

Description

Removes an Fibre Channel switch from inventory. During this process, the SNMP settings that were configured by UCP Director are removed from the switch.

The Fibre Channel switch to be removed may be specified in the pipeline. Alternatively, the Id parameter may be used.

Parameters

- -Id <String>

  Specifies the ID of the Fibre Channel switch that is to be removed from inventory.

  – Required? true

  – Position? 1

- — Default value

- — Accept pipeline input? true (ByPropertyName)

- — Accept wildcard characters? false

- -Force

  Indicates the user should not be prompted to confirm that the Fibre Channel switch should be removed from inventory.

  - — Required? false

  - — Position? named

  - — Default value

  - — Accept pipeline input? false

  - — Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

Hitachi.UCP.CLI.Domain.FibreChannelSwitch

Outputs

None

Notes

The UCP Storage Administrator role is required.

Example: Remove a Fibre Channel switch from inventory

```
C:\PS>Remove-UCPFibreChannelSwitch -Id 4
```

```
Confirm
Proceed removing fibrechannel switch?
[Y] Yes  [N] No  [S] Suspend  [?] Help (default is "Y"): y
```

Related Links

Get-UCPFibreChannelSwitch

New-UCPFibreChannelSwitch

Set-UCPFibreChannelConnectionInformation

Remove-UCPImage

Removes an ESXi image from UCP Director's image inventory.

Syntax

Remove-UCPImage [-ImageId] <String> [-Force]
[<CommonParameters>]

Description

Removes an ESXi image from UCP Director's image inventory. To be removed the image must not be active or pending image for any servers.

The ESXi image to be removed may be specified in the pipeline. Alternatively, the ImageId parameter may be used.

Parameters

- -ImageId <String>

  Specifies the ID of the ESXi image that is to be removed.

  – Required? true

  – Position? 1

  – Default value

  – Accept pipeline input? true (ByPropertyName)

  – Accept wildcard characters? false

- -Force

  Indicates the user should not be prompted to confirm that the ESXi image should be removed.

  – Required? false

  – Position? named

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

Hitachi.UCP.CLI.Domain.Image

Outputs

None

Notes

The UCP Server Administrator role is required.

Example: Remove an image

```
C:\PS>Remove-UCPImage 2

Confirm
Proceed removing image?
[Y] Yes  [N] No  [S] Suspend  [?] Help (default is "Y"): Y
```

Related Links

Get-UCPImage

New-UCPImage

Set-UCPImage

Update-UCPActiveImages

Refresh-UCPInventory

Remove-UCPIpAddressIdentityPoolRange

Removes an IP Address Range from UCP

Syntax

Remove-UcpIpAddressIdentityPoolRange [-IdentityPoolId] <String> [-IdentityPoolRangeId] <String> [-Force] [<CommonParameters>]

Description

This cmdlet will delete a specified IP Address Range from UCP.

Parameters

- -IdentityPoolId <String>

  The Id of the identity pool from which to delete the IP address range.

  – Required? true

  – Position? 1

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- -IdentityPoolRangeId <String>

  The id of the IpAddressIdentityPoolRange that will be deleted.

- — Required? true

- — Position? 2

- — Default value

- — Accept pipeline input? false

- — Accept wildcard characters? false

- -Force

  Using this flag executes the deletion without prompting for confirmation.

  - — Required? false

  - — Position? named

  - — Default value

  - — Accept pipeline input? false

  - — Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

Hitachi.UCP.CLI.Domain.IpAddressIdentityPoolRange

Outputs

None

Notes

This cmdlet requires UCP Administrator privilege.

Example: Delete an IP range

```
C:\PS># Get IP pool:
Get-UcpIpAddressIdentityPool

Ranges            : {3}
Name              : IpAddresses
Type              : IpAddress
Id                : 1
GlobalResourceId : inst.UCP-12344.ippool.1
ResourceType      : IpAddressIdentityPool
InstanceId        : UCP-12344

# Examine details of the IP range:
Get-UcpIpAddressIdentityPoolRange -IdentityPoolRangeId 3 -
IdentityPoolId 1 | Select-Object StartAddress,
EndAddress | fl

StartAddress : 10.21.20.11
EndAddress   : 10.21.20.28

# Delete this range:
Remove-UcpIpAddressIdentityPoolRange -IdentityPoolId 1 -
IdentityPoolRangeId 3 -Force
```

Related Links

Get-UcpIpAddressIdentityPoolRange

Get-UCPIpAddressIdentityPool

Remove-UCPJournal

Removes an unused journal

Syntax

Remove-UCPJournal [-StorageSystemId] <String> [-JournalId] <String>
[-Force] [<CommonParameters>]

Description

Removes an unused Journal from the storage array and puts the freed
journal volumes back into the pool for future use.

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

Hitachi.UCP.CLI.Domain.StorageSystemJournal

Outputs

None

Notes

The UCP Storage Administrator role is required.

Example: Remove a UCP storage journal

```
C:\PS>Remove-UCPJournal –StorageSystemId 53106 –JournalId 4 –force
```

Related Links

Get-UCPJournal

Remove-UCPServerProfile

Deletes server profiles

Syntax

Remove-UCPServerProfile [-ServerProfileId] <String> [-Force] [<CommonParameters>]

Description

UCP will not delete server profiles that are in use by a server\blade-slot. The cmdlet Remove-UCPServerProfileFromServer must be used first to disassociate the profile from the server.

When Remove-UCPServerProfile deletes a profile, the identity numbers that were contained in the profile are returned back to UCP identity pools.

Parameters

- -ServerProfileId <String>

  The Id of the unused server profile to be deleted.

  – Required? true

  – Position? 1

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- -Force

  Use this flag to execute the command without a confirmation prompt.

  – Required? false

  – Position? named

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

Hitachi.UCP.CLI.Domain.UcpServerProfile

Outputs

None

Notes

In vCenter, the UCP System Administrator privilege is required.

Example: Delete one server profile

```
C:\PS>Remove-UCPServerProfile -ServerProfileId 1


# UCP will not delete a server profile that is in use.
# To find server profiles NOT in use, try:

$usedServerProfileIdArray = @()
foreach ($server in Get-UCPServer) { $usedServerProfileIdArray +=
$server.CurrentServerProfileId }
Get-UcpServerProfile | where {$usedServerProfileIdArray -notcontains
$_.Id} | Select-Object -Property Id

Id
--
1
18


none
```

Example: Delete a range of server profiles

```
C:\PS>for($p=5; $p -le 10 ; $p++) {Remove-UCPServerProfile -
ServerProfileId $p -Force}


# This deletes server profiles 5 through 10.
# See example 1 for a tip to collect all profiles NOT in use.
```

Related Links

Get-UCPServerProfile

Remove-UCPServerProfileFromServer

Removes a server profile from a server.

Syntax

Remove-UCPServerProfileFromServer [-ServerId] <String>
[<CommonParameters>]

Description

When a server is to be re-commissioned, use this cmdlet for removing the existing server profile. The server will then be ready to apply a new profile. The server must be off and have no storage attached. If running ESXi, it must be in maintenance mode, not in a cluster, and have no storage attached.

Parameters

- -ServerId <String>

  The ID of the server from which the server profile is to be removed.

  – Required? false

  – Position? 1

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

Hitachi.UCP.CLI.Domain.Server

Outputs

None

Notes

Requires UCP System Administrator privilege.

Example: Remove server profile from server

```
C:\PS>Remove-UCPServerProfile –ServerProfileId 28


    # UCP removes server profile with ID 28 from the server that it is
applied to.
```

Related Links

Get-UCPServerProfile

Remove-UCPServiceTemplate

Removes a UCP Service Template

Syntax

Remove-UCPServiceTemplate [-ServiceTemplateId] <String> [-Force]
[<CommonParameters>]

Description

Removes a UCP Service Template from UCP inventory.

Parameters

- -ServiceTemplateId <String>

  Id of template to delete.

  – Required? true

  – Position? 1

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- -Force

  With -Force, there is no prompt for 'Are you sure?'.

  – Required? false

  – Position? named

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

Hitachi.UCP.CLI.Domain.UcpServiceTemplate

Outputs

None

Notes

The UCP Server Administrator role is required.

Example: Remove service template by Id

```
C:\PS>Remove-UCPServiceTemplate -ServiceTemplateId 7

Confirm
Proceed removing ServiceTemplate
[Y] Yes  [N] No  [S] Suspend  [?] Help (default is "Y"): y
```

Related Links

Get-UCPCustomServiceTemplate

Get-UCPLinuxServiceTemplate

Get-UCPWindowsServiceTemplate

Get-UCPWindowsHyperVServiceTemplate

Get-UCPESXiStatelessServiceTemplate

Get-UCPClusterServiceTemplate

Remove-UCPVolume

Removes a volume from a storage system.

Syntax

Remove-UCPVolume [-StorageSystemId] <String> [-VolumeId] <String> [-Force] [<CommonParameters>]

Description

Removes a volume from a storage system. A volume that is attached to any servers or clusters will not be removed.

The volume to be removed may be specified in the pipeline. Alternatively, the StorageSystemId and VolumeId parameters may be used.

Parameters

- -StorageSystemId <String>

  Specifies the ID of the storage system with the volume that is to be removed. Use Get-UCPStorageSystem to discover the storage system ID.

  – Required? true

  – Position? 1

  – Default value

  – Accept pipeline input? true (ByPropertyName)

  – Accept wildcard characters? false

- -VolumeId <String>

  Specifies the ID of the volume that is to be removed.

  – Required? true

  – Position? 2

  – Default value

  – Accept pipeline input? true (ByPropertyName)

  – Accept wildcard characters? false

- -Force

  Indicates the user should not be prompted to confirm that the volume should be removed.

  – Required? false

  – Position? named

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

Hitachi.UCP.CLI.Domain.Volume

Outputs

None

Notes

The UCP Storage Administrator and UCP View privileges are required.

Example: Remove a volume from a storage system

```
C:\PS>Remove-UCPVolume 53106 14850

Confirm
Proceed removing Volume?
[Y] Yes  [N] No  [S] Suspend  [?] Help (default is "Y"): y
```

Related Links

Get-UCPVolume

New-UCPVolume

Attach-UCPVolume

Detach-UCPVolume

Expand-UCPVolume

Get-UCPStorageSystem

Remove-UCPZone

Removes a zone from a fabric.

Syntax

Remove-UCPZone [-FabricId] <String> [-ZoneId] <String> [-Force]
[<CommonParameters>]

Description

Removes a zone from a fabric.

The zone to be removed may be specified in the pipeline. Alternatively, the
FabricId and ZoneId parameters may be used.

Parameters

- -FabricId <String>

  Specifies the ID of the fabric with the zone that is to be removed. Use Get-UCPFabric to discover fabric IDs.

  – Required? true

  – Position? 1

  – Default value

  – Accept pipeline input? true (ByPropertyName)

  – Accept wildcard characters? false

- -ZoneId <String>

  Specifies the ID of the zone that is to be removed.

  – Required? true

  – Position? 2

  – Default value

  – Accept pipeline input? true (ByPropertyName)

  – Accept wildcard characters? false

- -Force

  Indicates the user should not be prompted to confirm that the zone should be removed.

  – Required? false

  – Position? named

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- • <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

Hitachi.UCP.CLI.Domain.Zone

Outputs

None

Notes

The UCP Storage Administrator and UCP View privileges are required.

Example: Remove a zone from a fabric

```
C:\PS>Remove-UCPZone 2 ExampleZone

Confirm
Proceed removing zone?
[Y] Yes [N] No [S] Suspend [?] Help (default is "Y"): Y
```

Related Links

Get-UCPZone

Set-UCPZone

Get-UCPFabric

Reset-UCPServer

Resets a server.

Syntax

Reset-UCPServer [-ServerId] <String> [-Force] [<CommonParameters>]

Description

Resets a server. When the server is an ESXi host, UCP Director expects that host to be in maintenance mode before resetting it unless the Force switch has been specified.

When the server's boot type is set to Custom, the server will be powered off regardless of whether the Force switch is present.

The server may be specified in the pipeline. Alternatively, the ServerId parameter may be used. An updated server is returned.

Parameters

- -ServerId <String>

  Specifies the ID of the server that is to be reset.

  – Required? true

  – Position? 1

  – Default value

  – Accept pipeline input? true (ByPropertyName)

  – Accept wildcard characters? false

- -Force

  Specifies that the server should be reset even if it is not in maintenance mode.

  – Required? false

  – Position? named

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

Hitachi.UCP.CLI.Domain.Server

Outputs

Hitachi.UCP.CLI.Domain.Server

Notes

The UCP Server Administrator and UCP View privileges are required.

Example: Reset a server

```
C:\PS>Reset-UCPServer 6e37f410-b4a7-11e1-94b0-c6aca3093fbb | Format-List
ServerId, HostInformation, Health, ErrorCount, WarningCount,
InformationCount, LastRefreshed

Confirm
Proceed resetting server?
[Y] Yes  [N] No  [S] Suspend  [?] Help (default is "Y"): Y




ServerId                  : 6e37f410-b4a7-11e1-94b0-c6aca3093fbb
HostInformation           : esx04.ucp.local
Health                    : Healthy
ErrorCount                : 0
WarningCount              : 0
InformationCount          : 0
LastRefreshed             : 9/9/2012 10:52:09 PM
Id                        : 6e37f410-b4a7-11e1-94b0-c6aca3093fbb
GlobalResourceId          : inst.v2ProductionB-123-456-
789.cmp.1.ser.6e37f410-b4a7-11e1-94b0-c6aca3093fbb
ResourceType              : Server
InstanceId                : v2ProductionB-123-456-789
```

Related Links

Get-UCPServer

Set-UCPServerImage

Deploy-UCPServer

Reset-UCPServer

Start-UCPServer

Stop-UCPServer

Set-UCPServerLocationId

Restore-UCPEthernetSwitchBackup

Restores an Ethernet switch configuration to values stored in the specified backup.

Syntax

Restore-UCPEthernetSwitchBackup [-Force] [-BackupId] <String> [-SwitchId] <String> [<CommonParameters>]

Description

An Ethernet switch configuration backup is a saved collection of metadata containing the settings which were applied by UCP. This cmdlet restores a switch to those saved settings.

The Ethernet switch will be taken offline while the restore is in progress, and brought back online once the restore process is completed.

Parameters

- -Force

  Executes the command without confirmation.

  – Required? false

  – Position? named

- – Default value

- – Accept pipeline input? false

- – Accept wildcard characters? false

- -BackupId <String>

  The Id of the backup to restore to the specified Ethernet switch.

  - – Required? true

  - – Position? 1

  - – Default value

  - – Accept pipeline input? true (ByPropertyName)

  - – Accept wildcard characters? false

- -SwitchId <String>

  The Id of the Ethernet switch which will have its configuration restored to the state in the specified backup.

  - – Required? true

  - – Position? 2

  - – Default value

  - – Accept pipeline input? true (ByPropertyName)

  - – Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

None

Outputs

None

Notes

The UCP Network Administrator and UCP View privileges are required.

UCP Ethernet Features must be enabled.

Example: Restore the specified Ethernet switch configuration using the specified backup by Id

```
C:\PS>Restore-UCPEthernetSwitchBackup -BackupId 1 -SwitchId 4
```

Example: Restore an Ethernet switch using information from the Ethernet switch backup inventory

```
C:\PS>Get-UCPEthernetSwitchBackup -BackupId 1 -SwitchId 4 | Restore-
UCPEthernetSwitchBackup
```

Related Links

New-UCPEthernetSwitchBackup

Get-UCPEthernetSwitchBackup

Set-UCPEthernetSwitchBackup

Get-UCPEthernetFeatures

Set-UCPEthernetFeatures

Set-UCPClusterImage

Sets a new pending ESXi image for all servers belonging to the specified cluster.

Syntax

```
Set-UCPClusterImage [-ClusterId] <String> [-ImageId] <String>
[<CommonParameters>]
```

Set-UCPClusterImage [-ClusterId] <String> [-Default]
[<CommonParameters>]

Description

Applicable only when the platform manager is vCenter.

Appropriate when the ESXi image running on clustered hosts needs to be upgraded. This cmdlet sets a new pending image to all hosts in a cluster. The pending image is loaded next time the servers reboot.

Deploy-UCPCluster will place hosts into maintenance mode and reboot them, sequentially, one after the next.

Parameters

- -ClusterId <String>

  Id of the cluster to apply a new image to.

  – Required? true

  – Position? 1

  – Default value

  – Accept pipeline input? true (ByPropertyName)

  – Accept wildcard characters? false

- -ImageId <String>

  Id of the new image to apply to the cluster.

  – Required? true

  – Position? 2

  – Default value

  – Accept pipeline input? true (ByPropertyName)

  – Accept wildcard characters? false

- -Default

    Returns the cluster to using the default ESXi image for the server type.

    – Required? true

    – Position? 2

    – Default value

    – Accept pipeline input? false

    – Accept wildcard characters? false

- <CommonParameters>

    This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

None

Outputs

None

Notes

The UCP System Administrator role is required.

Use Deploy-UCPCluster and the servers will be sequentially placed in maintenance mode and rebooted.

Example: Set specific image for a cluster

```
C:\PS>Set-UCPClusterImage -ClusterId domain-c60 -ImageId 11
```

```
ClusterId          : domain-c60
```

```
ClusterName        : TestA
ServerUuids        : {5e21dabd-90bc-11e1-901a-f947807ab247, 4b757475-
8fa9-11e1-b9b4-f518649264e1,
                     e0b1045c-90a7-11e1-a61b-8249a74ae29a, 2515af28-8fec-
11e1-8a03-90259a41924f...}
Id                 : domain-c60
GlobalResourceId   : inst.v2ProductionB-123-456-789.vmgr.1.clu.domain-c60
ResourceType       : Cluster
InstanceId         : v2ProductionB-123-456-789
```

Example: Set cluster back to the default ESXi image for the server type

```
C:\PS>Set-UCPClusterImage -ClusterId domain-c60 -Default
```

```
ClusterId          : domain-c60
ClusterName        : TestA
ServerUuids        : {5e21dabd-90bc-11e1-901a-f947807ab247, 4b757475-
8fa9-11e1-b9b4-f518649264e1,
                     e0b1045c-90a7-11e1-a61b-8249a74ae29a, 2515af28-8fec-
11e1-8a03-90259a41924f...}
Id                 : domain-c60
GlobalResourceId   : inst.v2ProductionB-123-456-789.vmgr.1.clu.domain-c60
ResourceType       : Cluster
InstanceId         : v2ProductionB-123-456-789
```

Related Links

Deploy-UCPCluster

Get-UCPServerType

Set-UCPServerTypeImage

Get-UCPCluster

Get-UCPImage

Set-UCPClusterNetworkVlan

Applies VLAN IDs from clustered hosts to the connected Ethernet switch ports.

Syntax

Set-UCPClusterNetworkVlan [-ClusterId] <String>
[<CommonParameters>]

Description

VLAN IDs are detected from the virtual switch used by clustered hosts and are applied to the physical switch port used by those blades.

The cluster may be specified in the pipeline. Alternatively, the ClusterId parameter may be used. Updated cluster uplink configurations are returned.

Parameters

- -ClusterId <String>

  Id of the cluster.

  – Required? true

  – Position? 1

  – Default value

  – Accept pipeline input? true (ByPropertyName)

  – Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

String

Outputs

Hitachi.UCP.CLI.Domain.ClusterUplinkConfigurations

Notes

This command requires the UCP Network Administrator and UCP View privileges.

The UCP Ethernet Features setting must be enabled.

The Ethernet switch ports used by the hosts must be "Managed".

Example: Apply VLAN IDs from clustered hosts to their Ethernet switch ports

```
C:\PS>Set-UCPClusterNetworkVlan domain-c93 | Select -ExpandProperty
HostUplinkConfigurations | Select HostId -ExpandProperty
UplinkConfigurations | Format-Table HostId, Name, Vlans -AutoSize
```

```
HostId Name Vlans
------ ---- -----
host-102 vmnic0 475-477,482,521
host-102 vmnic1 475-477,482,521
host-164 vmnic0 475-477,482,521
host-164 vmnic1 475-477,482,521
host-68 vmnic0 475-477,482,521
host-68 vmnic1 475-477,482,521
```

Related Links

Get-UCPClusterNetworkVlan

Get-UCPEthernetFeature

Set-UCPEthernetFeature

Set-UCPConvergedSwitchConnectionInformation

Updates connection information used to manage a converged switch.

Syntax

Set-UCPConvergedSwitchConnectionInformation [-Id] <String> -IPAddress <String> -Credential <PSCredential> [<CommonParameters>]

Description

The converged switch may be specified in the pipeline. Alternatively, the Id parameter may be used. An updated converged switch is returned.

Parameters

- -Id <String>

  ID of the converged switch that will be updated with new connection information.

  – Required? true

  – Position? 1

  – Default value

  – Accept pipeline input? true (ByPropertyName)

  – Accept wildcard characters? false

- -IPAddress <String>

  IP address of the converged switch that will be updated with new connection information.

  – Required? true

  – Position? named

  – Default value

  – Accept pipeline input? true (ByPropertyName)

  – Accept wildcard characters? false

- -Credential <PSCredential>

  This parameter accepts new credentials from a variable.

  – Required? true

  – Position? named

  – Default value

    –   Accept pipeline input? false

    –   Accept wildcard characters? false

- \<CommonParameters\>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

Hitachi.UCP.CLI.Domain.ConvergedSwitch

Outputs

Hitachi.UCP.CLI.Domain.ConvergedSwitch

Notes

Requires the UCP Network Administrator and UCP View privileges.

Example: Modify the credentials used to manage a Converged switch

```
$cred = Get-Credential

C:\PS>Get-UCPConvergedSwitch 4 | Set-
UCPConvergedSwitchConnectionInformation –Credential $cred


Type              : Access
Status            : Active
Name              : R1-CS-5548-A-U42
Make              : Cisco
Model             : Nexus5548
SerialNumber      : FOC17012NGC
FirmwareVersion   : 6.0(2)N2(3)
IpAddress         : 10.21.80.212
UserName          : ucpadmin
EthernetPorts     : {Ethernet1/1, Ethernet1/2, Ethernet1/3, Ethernet1/
4...}
FibreChannelPorts : {fc1/25, fc1/26, fc1/27, fc1/28...}
FCoEPorts         : {Ethernet1/11, Ethernet1/12, Ethernet1/17,
Ethernet1/18...}
Id                : 1
```

```
GlobalResourceId  : inst.PODG-1234.conv.1.net.1
ResourceType      : ConvergedSwitch
InstanceId        : PODG-1234
```

Related Links

Get-UCPConvergedSwitch

Set-UCPConvergedSwitchUnmanagedPort

Sets UCP converged switch port to unmanaged.

Syntax

Set-UCPConvergedSwitchUnmanagedPort [-Id] <String> [-UnmanagedPorts <String[]>] [-AddUnmanagedPorts <String[]>] [-RemoveUnmanagedPorts <String[]>] [<CommonParameters>]

Description

When a port is marked "Unmanaged", UCP will not configure VLAN IDs for this port.

Parameters

- -Id <String>

  ID of the converged switch for which to set unmanaged ports.

  – Required? true

  – Position? 1

  – Default value

  – Accept pipeline input? true (ByPropertyName)

  – Accept wildcard characters? false

- -UnmanagedPorts <String[]>

  List of ports to mark as unmanaged. The existing list of unmanaged ports will be replaced with a new list.

- – Required? false

- – Position? named

- – Default value

- – Accept pipeline input? true (ByPropertyName)

- – Accept wildcard characters? false

- -AddUnmanagedPorts <String[]>

  Appends a specified set of ports to the current list of unmanaged ports.

  - – Required? false

  - – Position? named

  - – Default value

  - – Accept pipeline input? false

  - – Accept wildcard characters? false

- -RemoveUnmanagedPorts <String[]>

  Removes a specified set of ports from the current list of unmanaged ports.

  - – Required? false

  - – Position? named

  - – Default value

  - – Accept pipeline input? false

  - – Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

None

Outputs

Hitachi.UCP.CLI.Domain.ConvergedSwitchUnmanagedPorts

Notes

Requires the UCP Network Administrator privilege set.

Commonly used when a blade is using a Custom boot type, needs to use a non-UCP network, and the user plans to manage this blade's VLAN Ids manually.

Example: Set unmanaged switch port

```
Set-UCPConvergedSwitchUnmanagedPort 1 -UnmanagedPorts "Ethernet1/4"


Id                                                   UnmanagedPorts
--                                                   --------------
3                                                       {Ethernet1/4}
```

Example: Set unmanaged Converged switch ports

```
Set-UCPConvergedSwitchUnmanagedPort 1 -AddUnmanagedPorts "Ethernet1/5",
"Ethernet1/6", "fc1/27"



Id                                                   UnmanagedPorts
--                                                   --------------
3                               {Ethernet1/5, Ethernet1/6, fc1/27}
```

Example: Remove list of unmanaged ports

```
Set-UCPConvergedSwitchUnmanagedPort -Id 1 -RemoveUnmanagedPorts
"Ethernet1/5","Ethernet1/6", "fc1/27"



Id                                                   UnmanagedPorts
--                                                   --------------
3                                                               {}
```

Related Links

Get-UCPConvergedSwitch

Get-UCPConvergedSwitch

Set-UCPCustomServiceTemplate

Modifies a custom service template.

Syntax

Set-UCPCustomServiceTemplate [-ComputeVlanIds <String>] [-ServiceTemplateId] <String> -Name <String> [-Description <String>] -BootImageId <String> [<CommonParameters>]

Description

Trunk VLAN Ids or template name can be changed.

See the description for New-UCPCustomServiceTemplate.

Parameters

- -ComputeVlanIds <String>

  Compute VLAN Id or range of IDs for the template.

  – Required? false

  – Position? named

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- -ServiceTemplateId <String>

  Id of the service template to be altered.

  – Required? true

- – Position? 1

- – Default value

- – Accept pipeline input? false

- – Accept wildcard characters? false

- -Name <String>

  Name for the template.

  - – Required? true

  - – Position? named

  - – Default value

  - – Accept pipeline input? false

  - – Accept wildcard characters? false

- -Description <String>

  - – Required? false

  - – Position? named

  - – Default value

  - – Accept pipeline input? false

  - – Accept wildcard characters? false

- -BootImageId <String>

  Boot image Id. This Id should remain unchanged because UCP contains a single instance of the Custom image concept. The actual operating system is installed manually by the user.

  - – Required? true

  - – Position? named

  - – Default value

- Accept pipeline input? false

- Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

String

Outputs

Hitachi.UCP.CLI.Domain.UcpServiceTemplate

Notes

This operation requires UCP System Administrator privilege to perform.

Example: Modify a custom service template

```
C:\PS>Set-UCPCustomServiceTemplate -ServiceTemplateId 3 -
ComputeVlanIds 15 -Name "ModifiedCustomTemplate"
  -BootImageId 2


# Change only VLAN IDs and\or service template name.


Id                                 : 3
Name                               : ModifiedCustomTemplate
BootImageId                        : 2
BootImageName                      : Custom Image
BootImageType                      : Custom
ServiceTemplateType                : Custom
ComputeVlanIds                     : 15
GlobalResourceId                   : inst.UCP-123-456-789.svctmplt.3
ResourceType                       : ServiceTemplate
InstanceId                         : UCP-123-456-789
```

Related Links

New-UCPCustomServiceTemplate

Remove-UCPServiceTemplate

Apply-UCPCustomServiceTemplate

Set-UCPDirectorConfiguration

Modifies some configurable settings of UCP.

Syntax

Set-UCPDirectorConfiguration -AmqpUsername <String> -AmqpPassword <String> [<CommonParameters>]

Set-UCPDirectorConfiguration -UcpManagementIpAddress <IPAddress> [<CommonParameters>]

Set-UCPDirectorConfiguration -WdsManagementIpAddress <IPAddress> [<CommonParameters>]

Set-UCPDirectorConfiguration -ScpServerIpAddress <IPAddress> -ScpServerUserName <String> -ScpServerUserPassword <String> [<CommonParameters>]

Set-UCPDirectorConfiguration -RaidcomUsername <String> -RaidcomPassword <String> [<CommonParameters>]

Description

Some usernames, passwords and IP addresses are configurable with this cmdlet.

Only change one feature at a time, but submit all parameters related to the feature. For example, submit AmqpUsername along with AmqpPassword. The same rule applies to the Scp parameters.

Parameters

- -AmqpUsername <String>

  AMQP is a protocol used for queuing UCP jobs. The AmqpUsername is used by UCP for accessing the AMQP server.

- Required? true

- Position? named

- Default value

- Accept pipeline input? false

- Accept wildcard characters? false

- -AmqpPassword <String>

  The AmqpPassword is used by UCP for accessing the AMQP server.

  - Required? true

  - Position? named

  - Default value

  - Accept pipeline input? false

  - Accept wildcard characters? false

- -UcpManagementIpAddress <IPAddress>

  IP address of virtual machine running UCP Pro for VMware vSphere.

  - Required? true

  - Position? named

  - Default value

  - Accept pipeline input? false

  - Accept wildcard characters? false

- -WdsManagementIpAddress <IPAddress>

  IP address of the virtual machine running Windows Deployment Services.

  - Required? true

  - Position? named

- — Default value

- — Accept pipeline input? false

- — Accept wildcard characters? false

- -ScpServerIpAddress <IPAddress>

  IP address of the virtual machine running the Secure Copy service. By default, this is the UCPUtility VM.

  - — Required? true

  - — Position? named

  - — Default value

  - — Accept pipeline input? false

  - — Accept wildcard characters? false

- -ScpServerUserName <String>

  Username for accessing the Secure Copy service.

  - — Required? true

  - — Position? named

  - — Default value

  - — Accept pipeline input? false

  - — Accept wildcard characters? false

- -ScpServerUserPassword <String>

  Password for accessing the Secure Copy service.

  - — Required? true

  - — Position? named

  - — Default value

  - — Accept pipeline input? false

- – Accept wildcard characters? false

- -RaidcomUsername <String>

  - – Username for the account that has administrative access to the UCP resource group in the G1000 storage array.

  - – Required? true

  - – Position? named

  - – Default value

  - – Accept pipeline input? false

  - – Accept wildcard characters? false

- -RaidcomPassword <String>

  Password for the account that has administrative access to the UCP resource group in the G1000 storage array.

  - – Required? true

  - – Position? named

  - – Default value

  - – Accept pipeline input? false

  - – Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

String

Outputs

Hitachi.UCP.CLI.Domain.UcpDirectorConfiguration

Notes

Requires UCP System Administrator privilege.

Example: Change AMQP configuration

```
Set-UCPDirectorConfiguration -AmqpUsername ucp -AmqpPassword
Kum0@pur@1nS
```

```
AmqpUsername          : ucp
RaidcomUsername       :
UcpManagementIpAddress : 10.21.80.243
WdsManagementIpAddress : 10.21.80.247
ScpServerIpAddress     : 10.21.79.242
ScpServerUserName      : ucpscp
ManagementVLanId       : 80
Id                     : 1
GlobalResourceId       : inst.v2ProductionG-123-456-789.cfg.1
ResourceType           : Configuration
InstanceId             : v2ProductionG-123-456-789
```

Example: Change SCP configuration

```
Set-UCPDirectorConfiguration -ScpServerUserName ucpscp
```

```
cmdlet Set-UCPDirectorConfiguration at command pipeline position 1
Supply values for the following parameters:
ScpServerIpAddress: 10.21.79.242
ScpServerUserPassword: Kum0@pur@1nS
```

```
AmqpUsername          : ucp
RaidcomUsername       :
UcpManagementIpAddress : 10.21.80.243
WdsManagementIpAddress : 10.21.80.247
ScpServerIpAddress     : 10.21.79.242
ScpServerUserName      : ucpscp
ManagementVLanId       : 80
Id                     : 1
GlobalResourceId       : inst.v2ProductionG-123-456-789.cfg.1
ResourceType           : Configuration
InstanceId             : v2ProductionG-123-456-789
```

Example: Set WDS server IP

```
Set-UCPDirectorConfiguration -WdsManagementIpAddress 10.21.79.247
```

```
AmqpUsername         : ucp
RaidcomUsername      :
UcpManagementIpAddress : 10.21.80.243
WdsManagementIpAddress : 10.21.79.247
ScpServerIpAddress   : 10.21.79.242
ScpServerUserName    : ucpscp
ManagementVLanId     : 80
Id                   : 1
GlobalResourceId     : inst.v2ProductionG-123-456-789.cfg.1
ResourceType         : Configuration
InstanceId           : v2ProductionG-123-456-789
```

Example: Set UCP server IP

```
Set-UCPDirectorConfiguration -UcpManagementIpAddress 10.21.79.243
```

```
AmqpUsername         : ucp
RaidcomUsername      :
UcpManagementIpAddress : 10.21.79.243
WdsManagementIpAddress : 10.21.79.247
ScpServerIpAddress   : 10.21.79.242
ScpServerUserName    : ucpscp
ManagementVLanId     : 80
Id                   : 1
GlobalResourceId     : inst.v2ProductionG-123-456-789.cfg.1
ResourceType         : Configuration
InstanceId           : v2ProductionG-123-456-789
```

Related Links

Get-UCPDirectorConfiguration

Set-UCPDisasterRecoveryManager

Updates the disaster recovery manager details.

Syntax

Set-UCPDisasterRecoveryManager [-Id] <String> -ServiceUrl <String> -
Credential <PSCredential> [-Force] [<CommonParameters>]

Description

UCP Disaster Recovery uses VMware Site Recovery Manager (SRM) to provide failover management. This cmdlet is used to change connection details for the SRM instance used by UCP Disaster Recovery.

Parameters

- -Id <String>

  Specifies the ID of the disaster recovery manager

  – Required? true

  – Position? 1

  – Default value

  – Accept pipeline input? true (ByPropertyName)

  – Accept wildcard characters? false

- -ServiceUrl <String>

  Specifies the service URL of the disaster recovery manager

  – Required? true

  – Position? named

  – Default value

  – Accept pipeline input? true (ByPropertyName)

  – Accept wildcard characters? false

- -Credential <PSCredential>

  Specifies the credentials of the disaster recovery manager

  – Required? true

  – Position? named

  – Default value

Commands

- – Accept pipeline input? false

  - – Accept wildcard characters? false

- -Force

  - – Required? false

  - – Position? named

  - – Default value

  - – Accept pipeline input? false

  - – Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

String

Outputs

Hitachi.UCP.CLI.Domain.DisasterRecoveryManager

Notes

The SRM Administrator role or the UCP System Administrator role are required.

Example: Update disaster recovery manager information

```
C:\PS>$SRMcred=Get-Credential

C:\PS>Set-UCPDisasterRecoveryManager -Id 1 -ServiceUrl https://
10.21.62.248:9007 -Credential $SRMcred

Confirm
Proceed updating disaster recovery manager?
```

```
[Y] Yes  [N] No  [S] Suspend  [?] Help (default is "Y"): Y



ServiceUrl        : https://10.21.74.248:9007/
Username          : ucp\svc_srm
Id                : 1
GlobalResourceId  : inst.ucp-123-456-789.dr.1
ResourceType      : DisasterRecoveryManager
InstanceId        : UCP-123-456-789
```

Related Links

New-UCPDisasterRecoveryManager

Get-UCPDisasterRecoveryManager

Set-UCPEsxiStatelessClusterServiceTemplate

Edits an ESXi cluster service template.

Syntax

Set-UCPEsxiStatelessClusterServiceTemplate -HostProfileId <String> -VirtualDistributedSwitch <VirtualDistributedSwitch> [-HighAvailabilityCluster <HighAvailabilityCluster>] [-EnableDistributedResourceScheduler] [-StorageCluster <StorageCluster>] [-AttachVolumes <UcpServiceTemplateVolumeInformation[]>] [-CreateAndAttachVolumes <UcpServiceTemplateVolumeInformation[]>] [-ComputeVlanIds <String>] [-ServiceTemplateId] <String> -Name <String> [-Description <String>] -BootImageId <String> [<CommonParameters>]

Description

All existing properties of the template that should be preserved must be re-entered with this cmdlet.

Parameters

- -HostProfileId <String>

  Id of the vSphere host profile to use. A copy will be made and edited for each template application.

  – Required? true

- Position? named

- Default value

- Accept pipeline input? false

- Accept wildcard characters? false

• -VirtualDistributedSwitch <VirtualDistributedSwitch>

Uses helper cmdlet New-UCPVirtualDistributedSwitch. Either associates an existing switch to the template, or provides instructions to create a new one.

- Required? true

- Position? named

- Default value

- Accept pipeline input? false

- Accept wildcard characters? false

• -HighAvailabilityCluster <HighAvailabilityCluster>

Specifies HA settings. Use helper command New-UCPHighAvailabilityClusterSetting.

- Required? false

- Position? named

- Default value

- Accept pipeline input? false

- Accept wildcard characters? false

• -EnableDistributedResourceScheduler

If specified, this enabled SRS on the host cluster.

- Required? false

- Position? named

- – Default value

- – Accept pipeline input? false

- – Accept wildcard characters? false

- -StorageCluster <StorageCluster>

  Optionally specifies configuration information for an SDRS (storage) cluster. Use helper command New-UCPStorageClusterSetting.

  - – Required? false

  - – Position? named

  - – Default value

  - – Accept pipeline input? false

  - – Accept wildcard characters? false

- -AttachVolumes <UcpServiceTemplateVolumeInformation[]>

  Uses helper cmdlet New-UCPServiceTemplateVolumeInformation. It adds configuration information to the template about attaching existing volumes.

  - – Required? false

  - – Position? named

  - – Default value

  - – Accept pipeline input? false

  - – Accept wildcard characters? false

- -CreateAndAttachVolumes <UcpServiceTemplateVolumeInformation[]>

  Uses helper cmdlet New-UCPServiceTemplateVolumeInformation. It adds configuration information to the template about creating new volumes for the cluster.

  - – Required? false

  - – Position? named

- – Default value

- – Accept pipeline input? false

- – Accept wildcard characters? false

- -ComputeVlanIds <String>

When trunk VLAN IDs are supplied with this parameter, the template will make a new VDS with a port group for each VLAN ID, but will not make a vMotion port group. If a vMotion port group is needed, use the VirtualDistributedSwitch parameter instead, and supply necessary values with helper cmdlet New-UCPVirtualDistributedSwitch. VLANs can be a single digit, a range, or a comma-separated list.

- – Required? false

- – Position? named

- – Default value

- – Accept pipeline input? false

- – Accept wildcard characters? false

- -ServiceTemplateId <String>

Id of the service template to edit.

- – Required? true

- – Position? 1

- – Default value

- – Accept pipeline input? false

- – Accept wildcard characters? false

- -Name <String>

Name for the cluster service template.

- – Required? true

- – Position? named

- – Default value

- – Accept pipeline input? false

- – Accept wildcard characters? false

- -Description <String>

  - – Required? false

  - – Position? named

  - – Default value

  - – Accept pipeline input? false

  - – Accept wildcard characters? false

- -BootImageId <String>

  ID of the ESXi boot image to be deployed by this cluster service template.

  - – Required? true

  - – Position? named

  - – Default value

  - – Accept pipeline input? false

  - – Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

Hitachi.UCP.CLI.Domain.HighAvailabilityCluster,
Hitachi.UCP.CLI.Domain.UcpServiceTemplateVolumeInformation,
Hitachi.UCP.CLI.Domain.ServiceTemplate.VirtualDistributedSwitch,
Hitachi.UCP.CLI.Domain.StorageCluster

Outputs

Hitachi.UCP.CLI.Domain.UcpEsxiStatelessClusterServiceTemplate

Notes

Requires UCP System Administrator privilege.

Example: Edit ESXi Cluster service template

```
C:\PS># Build variables to preserve existing settings:

C:\PS>$HA = New-UCPHighAvailabiltyClusterSetting -
FailoverRamPercentage 25 -FailoverCpuPercentage 25

C:\PS>$Vols = Get-UCPServiceTemplateVolume -ServiceTemplateId 7

C:\PS>$Name = (Get-UCPServiceTemplate 7).Name

C:\PS>$Image = (Get-UCPEsxiStatelessClusterServiceTemplate
7).BootImageId

C:\PS>$HP = (Get-UCPEsxiStatelessClusterServiceTemplate
7).HostProfileId

# List existing VDS:

C:\PS>Get-UCPVirtualDistributedSwitch -VirtualManagerId 1

Name             : dvSwitch-ClusterTest-285
PortGroupNames   : {dvpg-ClusterTest-285-VMotion, dvpg-ClusterTest-
285-Compute-VLAN87,
dvpg-ClusterTest-285-Management, vDPGxx}
Id               : dvs-287
GlobalResourceId : inst.ucp12345.vmgr.1.vswitch.dvs-287
ResourceType     : VirtualSwitch
InstanceId       : ucp12345

# Build variable with helper cmdlet for attaching to the above
virtual distributed switch:
```

```
    C:\PS>$Switch = New-UCPVirtualDistributedSwitch -DistributedSwitchId
dvs-287 -ManagementPortGroupName
    (Get-UCPVirtualDistributedSwitch dvs-287 -VirtualManagerId
1).PortGroupNames[2] -VmotionPortGroupName
    (Get-UCPVirtualDistributedSwitch dvs-287 -VirtualManagerId
1).PortGroupNames[0]

    # Edit template:

    C:\PS>Set-UCPEsxiStatelessClusterServiceTemplate -ServiceTemplateId
7 -HostProfileId $HP -VirtualDistributedSwitch
    $Switch -HighAvailabilityCluster $HA -
EnableDistributedResourceScheduler -CreateAndAttachVolumes $Vols -Name
$Name
    -BootImageId $Image
```

The existing template creates a new VDS. These edits change it to using an existing VDS.

Related Links

Get-UCPEsxiStatelessClusterServiceTemplate

Get-UCPVirtualDistributedSwitch

Get-UCPHostProfile

New-UCPVirtualDistributedSwitch

New-UCPHighAvailabiltyClusterSetting

Get-UCPServiceTemplateVolume

New-UCPStorageClusterSetting

New-UCPImage

Set-UCPEsxiStatelessServiceTemplate

Edits an ESXi service template.

Syntax

Set-UCPEsxiStatelessServiceTemplate [-AttachVolumes
<UcpServiceTemplateVolumeInformation[]>] [-CreateAndAttachVolumes
<UcpServiceTemplateVolumeInformation[]>] [-ComputeVlanIds <String>]
[-ServiceTemplateId] <String> -Name <String> [-Description <String>] -
BootImageId <String> [<CommonParameters>]

Description

Use this cmdlet to edit details of an ESXi service template. Any values that
should remain unchanged need to be supplied again. Use Get-
ESXiStatelessServiceTemplate to discover existing values.

Parameters

- -AttachVolumes <UcpServiceTemplateVolumeInformation[]>

  Existing volumes to attach to service template.

  – Required? false

  – Position? named

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- -CreateAndAttachVolumes <UcpServiceTemplateVolumeInformation[]>

  New volumes to create and attach to the service template.

  – Required? false

  – Position? named

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- -ComputeVlanIds <String>

Trunk VLAN IDs that should be configured on hosts attached Ethernet ports.

- – Required? false

- – Position? named

- – Default value

- – Accept pipeline input? false

- – Accept wildcard characters? false

- -ServiceTemplateId <String>

  ID of the ESXiStateless service template to edit.

  - – Required? true

  - – Position? 1

  - – Default value

  - – Accept pipeline input? false

  - – Accept wildcard characters? false

- -Name <String>

  Name of the service template.

  - – Required? true

  - – Position? named

  - – Default value

  - – Accept pipeline input? false

  - – Accept wildcard characters? false

- -Description <String>

  - – Required? false

  - – Position? named

Commands

- — Default value

- — Accept pipeline input? false

- — Accept wildcard characters? false

- -BootImageId <String>

  ID of the ESXi image that will be deployed by the service template.

  - — Required? true

  - — Position? named

  - — Default value

  - — Accept pipeline input? false

  - — Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

Hitachi.UCP.CLI.Domain.UcpServiceTemplateVolumeInformation

Outputs

Hitachi.UCP.CLI.Domain.UcpEsxiStatelessServiceTemplate

Notes

The UCP System Administrator privilege is required.

Example: Change the trunk VLAN ID used by an ESXi standalone service template

```
# Build variables with template's current information to preserve:
$Vol = Get-UCPServiceTemplateVolume -ServiceTemplateId 6
```

```
$Name = (Get-UCPEsxiStatelessServiceTemplate 6).Name
$Image = (Get-UCPEsxiStatelessServiceTemplate 6).BootImageId

# Edit service template, changing the trunk VLAN ID:
Set-UCPEsxiStatelessServiceTemplate 6 -CreateAndAttachVolumes $Vol -
ComputeVlanIds 102 -Name $Name -BootImageId $Image
```

```
Id                  : 6
Name                : ESXiHostTemplate
BootImageId         : 2
BootImageName       : HitachiESXiImage-520HB2
BootImageType       : ESXiStateless
ServiceTemplateType : EsxiStateless
ComputeVlanIds      : 102
GlobalResourceId    : inst.ucp12345.svctmplt.6
ResourceType        : ServiceTemplate
InstanceId          : ucp12345
```

Related Links

Get-UCPEsxiStatelessServiceTemplate

Get-UCPServiceTemplateVolume

Set-UCPEthernetFeature

Enables or disables the UCP Ethernet Features setting.

Syntax

Set-UCPEthernetFeature [[-HostNetworkConfigurationFeatureEnabled]]
[<CommonParameters>]

Description

When enabled, UCP manages the Ethernet switch ports, port channels, and
host VLAN configurations as well as the SNMP configuration of Ethernet
switches.

Parameters

- -HostNetworkConfigurationFeatureEnabled

  Adding the parameter -HostNetworkConfigurationFeatureEnabled Enables the feature. Leaving off the parameter sets Ethernet features to disabled.

  – Required? false

  – Position? 1

  – Default value

  – Accept pipeline input? true (ByPropertyName)

  – Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

None

Outputs

None

Notes

Requires the UCP Network Administrator privileges.

Example: Enable UCP Ethernet Features

```
C:\PS>Set-UCPEthernetFeature –HostNetworkConfigurationFeatureEnabled
```

Related Links

Get-UCPEthernetFeature

Set-UCPEthernetSwitchBackup

Modifies details for an Ethernet switch configuration backup.

Syntax

Set-UCPEthernetSwitchBackup [-Description <String>] [-BackupId] <String> [-Pinned] [-SwitchId] <String> [<CommonParameters>]

Description

The properties which can be updated include the description, and whether or not the backup is pinned to prevent automatic deletion.

Parameters

- -Description <String>

  The description of the specified configuration backup.

  – Required? false

  – Position? named

  – Default value

  – Accept pipeline input? true (ByPropertyName)

  – Accept wildcard characters? false

- -BackupId <String>

  The Id of the configuration backup to update.

  – Required? true

  – Position? 1

  – Default value

  – Accept pipeline input? true (ByPropertyName)

  – Accept wildcard characters? false

- -Pinned

  Specifies whether the backup should be pinned, to prevent it from being automatically deleted based on UCP Director's Ethernet switch backup retention policy.

  – Required? false

  – Position? named

  – Default value

  – Accept pipeline input? true (ByPropertyName)

  – Accept wildcard characters? false

- -SwitchId <String>

  The Id of the switch that the backup was created from.

  – Required? true

  – Position? 2

  – Default value

  – Accept pipeline input? true (ByPropertyName)

  – Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

None

Outputs

Hitachi.UCP.CLI.Domain.EthernetSwitchBackup

Notes

This command requires the UCP Network Administration and UCP View privileges.

Example: Set the description for the specified Ethernet switch configuration backup

```
C:\PS>Set-UCPEthernetSwitchBackup -BackupId 1 -SwitchId 4 -Description
"Updated VLAN configuration"
```

```
Content         : Hitachi.UCP.CLI.Domain.EthernetSwitchBackupContent
CreatedBy       : UCP\ucpadmin
CreatedDate     : 3/27/2013 3:57:49 PM
Description     : Updated VLAN configuration
SwitchOSVersion : 3.0.1
BackupId        : 1
Pinned          : True
SwitchId        : 4
```

Related Links

Get-UCPEthernetSwitchBackup

Get-UCPEthernetSwitchBackupRetentionPolicy

Set-UCPEthernetSwitchBackupRetentionPolicy

Updates UCP Director's Ethernet switch configuration backup retention policy.

Syntax

Set-UCPEthernetSwitchBackupRetentionPolicy [-NumberOfPinnedBackupsPerSwitch] <Int32> -TotalNumberOfBackupsPerSwitch <Int32> [-Force] [<CommonParameters>]

Description

An Ethernet switch configuration backup is a collection of metadata of settings that UCP has configured on a switch.

The retention policy specifies the total number of configuration backups that can be saved per switch and how many of them can be pinned. Use TotalNumberOfBackupsPerSwitch and NumberOfPinnedBackupsPerSwitch to set these configurations. If the policy is exceeded, older backups are automatically deleted as new ones are created. Pinned backups are not deleted.

Parameters

- -NumberOfPinnedBackupsPerSwitch <Int32>

  Specifies the maximum number of pinned backups to retain for each Ethernet switch.

  – Required? true

  – Position? 1

  – Default value

  – Accept pipeline input? true (ByPropertyName)

  – Accept wildcard characters? false

- -TotalNumberOfBackupsPerSwitch <Int32>

  Specifies the maximum total number of backups to retain for each Ethernet switch.

  – Required? true

  – Position? named

  – Default value

  – Accept pipeline input? true (ByPropertyName)

  – Accept wildcard characters? false

- -Force

  Specifies that the retention policy should be set, even if the change will result in one or more backups being deleted.

  – Required? false

- – Position? named

- – Default value

- – Accept pipeline input? false

- – Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

None

Outputs

Hitachi.UCP.CLI.Domain.RetentionPolicy

Notes

This command requires the UCP Network Administration and UCP View privileges.

Example: Set Ethernet switch backup retention policy

```
C:\PS>Set-UCPEthernetSwitchBackupRetentionPolicy -
NumberOfPinnedBackupsPerSwitch 80 -TotalNumberOfBackupsPerSwitch 90 |
Format-List
```

```
NumberOfPinnedBackupsPerSwitch : 80
TotalNumberOfBackupsPerSwitch  : 90
```

Related Links

Get-UCPEthernetSwitchBackupRetentionPolicy

Get-UCPEthernetSwitchBackup

Set-UCPEthernetSwitchConnectionInformation

Updates connection information used to manage an Ethernet switch.

Syntax

Set-UCPEthernetSwitchConnectionInformation [-Id] <String> -IPAddress <String> -Credential <PSCredential> [<CommonParameters>]

Description

Updates connection information used to manage an Ethernet switch.

The Ethernet switch may be specified in the pipeline. Alternatively, the Id parameter may be used. An updated Ethernet switch is returned.

Parameters

- -Id <String>

  Specifies the ID of the Ethernet switch with the connection information that is to be modified.

  – Required? true

  – Position? 1

  – Default value

  – Accept pipeline input? true (ByPropertyName)

  – Accept wildcard characters? false

- -IPAddress <String>

  Specifies the new management IP address of the Ethernet switch.

  – Required? true

  – Position? named

  – Default value

- — Accept pipeline input? true (ByPropertyName)

    - — Accept wildcard characters? false

- • -Credential <PSCredential>

    Specifies the new username and password that is to be used to manage the Ethernet switch.

    - — Required? true

    - — Position? named

    - — Default value

    - — Accept pipeline input? false

    - — Accept wildcard characters? false

- • <CommonParameters>

    This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

Hitachi.UCP.CLI.Domain.EthernetSwitch

Outputs

Hitachi.UCP.CLI.Domain.EthernetSwitch

Notes

This command requires the UCP Network Administration and UCP View privileges.

Example: Modify the credentials used to manage an Ethernet switch

```
C:\PS>$cred = Get-UCPCredential
```

Commands

```
C:\PS>Get-UCPEthernetSwitch 4 | Set-
UCPEthernetSwitchConnectionInformation -Credential $cred
```

```
Id            : 4
Type          : Access
Status        : Active
Name          : Brocade-6746-R1F-U03-SW-01
Make          : Brocade
Model         : VDX6746
SerialNumber  : BRK0445G01J
OSVersion     : v2.0.1_kat3
IpAddress     : 10.21.47.141
UserName      : ucpadmin
Ports         : {TenGigabitEthernet 0/1, TenGigabitEthernet 0/2,
TenGigabitEthernet 0/3, TenGigabitEthernet 0/4...}
```

Related Links

Get-UCPEthernetSwitch

New-UCPEthernetSwitch

Remove-UCPEthernetSwitch

Set-UCPEthernetSwitchUnmanagedPort

Set UCP Ethernet Switch port to unmanaged.

Syntax

Set-UCPEthernetSwitchUnmanagedPort [-Id] <String> [-UnmanagedPorts
<String[]>] [-AddUnmanagedPorts <String[]>] [-
RemoveUnmanagedPorts <String[]>] [<CommonParameters>]

Description

When a port is unmanaged, UCP will not configure VLAN IDs for this port.

Parameters

- -Id <String>

  Id of the switch.

  – Required? true

  – Position? 1

  – Default value

  – Accept pipeline input? true (ByPropertyName)

  – Accept wildcard characters? false

- -UnmanagedPorts <String[]>

  Port or list of ports to mark as unmanaged.

  – Required? false

  – Position? named

  – Default value

  – Accept pipeline input? true (ByPropertyName)

  – Accept wildcard characters? false

- -AddUnmanagedPorts <String[]>

  Adds port Ids to the list of ports to mark as unmanaged.

  – Required? false

  – Position? named

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- -RemoveUnmanagedPorts <String[]>

  Removes port Ids from the list of ports marked as unmanaged.

  – Required? false

  – Position? named

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

None

Outputs

Hitachi.UCP.CLI.Domain.EthernetSwitchUnmanagedPorts

Notes

Requires the UCP Network Administrator privilege set.

Commonly used when a blade is using a Custom boot type, needs to use a non-UCP network, and the user plans to manage this blade's VLAN Ids manually.

Example: Set unmanaged switch port

```
C:\PS>Set-UCPEthernetSwitchUnmanagedPort 1 -UnmanagedPorts "Ethernet1/4"
```

```
Id
UnmanagedPorts
--
1                                                        {Ethernet1/
4}
```

Example: Set unmanaged Ethernet switch ports

```
C:\PS>Set-UCPEthernetSwitchUnmanagedPort 1 -AddUnmanagedPorts
"Ethernet1/5", "Ethernet1/6"
```

```
Id
UnmanagedPorts
--
1                                                        {Ethernet1/
4, Ethernet1/5, Ethernet1/6}
```

Example: Remove list of unmanaged switch ports

```
C:\PS>Set-UCPEthernetSwitchUnmanagedPort -Id 1 -RemoveUnmanagedPorts
"Ethernet1/4","Ethernet1/5","Ethernet1/6"
```

```
# Sets these switch ports back to managed.
```

```
Id
UnmanagedPorts
--
1                                                              {}
```

Related Links

Get-UCPEthernetUnmanagedSwitchPorts

Get-UCPEthernetSwitchPorts

Get-UCPServer

Set-UCPFibreChannelSwitchConnectionInformation

Updates connection information used to manage a Fibre Channel switch.

Syntax

Set-UCPFibreChannelSwitchConnectionInformation [-Id] <String> -IPAddress <String> -Credential <PSCredential> [<CommonParameters>]

Description

Updates connection information used to manage a Fibre Channel switch.

The Fibre Channel switch is specified in the pipeline. Alternatively, the Id parameter may be used.

Parameters

- -Id <String>

  Specifies the ID of the Fibre Channel switch with the connection information that is to be modified.

  – Required? true

  – Position? 1

  – Default value

  – Accept pipeline input? true (ByPropertyName)

  – Accept wildcard characters? false

- -IPAddress <String>

  Specifies the new management IP address of the Fibre Channel switch.

  – Required? true

  – Position? named

  – Default value

  – Accept pipeline input? true (ByPropertyName)

  – Accept wildcard characters? false

- -Credential <PSCredential>

  Specifies the new username and password that is to be used to manage the Fibre Channel switch.

  – Required? true

  – Position? named

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

Hitachi.UCP.CLI.Domain.FibreChannelSwitch

Outputs

Hitachi.UCP.CLI.Domain.FibreChannelSwitch

Notes

This command requires the UCP Storage Administration and UCP View privileges.

Example: Modify the credentials used to manage a Fibre Channel switch

```
C:\PS>$cred = Get-Credential

C:\PS>Get-UCPFibreChannelSwitch 4 | Set-
UCPFibreChannelSwitchConnectionInformation -Credential $cred
```

```
IpAddress               : 10.21.24.180
Username                : ucpadmin
FirmwareVersion         : v7.0.2c
AvailableFirmwareVersion :
Manufacturer            : Brocade
Model                   : Brocade 5460
Name                    : R1-HI-CB500-2-U09-5460A
SerialNumber            : AUM0425G00W
Status                  : Active
SwitchTopologyRole      : Edge Switch
FabricId                : 2
SwitchPorts             : {0, 1, 2, 3...}
Id                      : 4
GlobalResourceId        : inst.v2ProductionB-123-456-789.fc.1.fcs.4
ResourceType            : FibreChannelSwitch
InstanceId              : v2ProductionB-123-456-789
```

Related Links

Get-UCPFibreChannelSwitch

New-UCPFibreChannelSwitch

Remove-UCPFibreChannelSwitch

Set-UCPHostName

Sets a user-defined host name.

Syntax

Set-UCPHostName [-ServerId] <String> [-HostName] <String>
[<CommonParameters>]

Description

User may decide to set this value to match the server's actual host name.
Other preference may be an asset tracking value.

Parameters

- -ServerId <String>

  – Required? true

- — Position? 1

- — Default value

- — Accept pipeline input? true (ByPropertyName)

- — Accept wildcard characters? false

- -HostName <String>

  A name defined by the user.

  - — Required? true

  - — Position? 2

  - — Default value

  - — Accept pipeline input? true (ByPropertyName)

  - — Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

String

Outputs

Hitachi.UCP.CLI.Domain.Server

Notes

Requires the UCP Server Administrator privilege set.

Example: Set a host name

```
C:\PS># Get ServerId for a server:
```

```
C:\PS>$WebServer = Get-UCPServer | where {$_.ServerId -like "45f6*"}

#  Set host name for this server:

C:\PS>Set-UCPHostName -ServerId $WebServer.Id -HostName "WebServer"
```

```
HostInformation           : WebServer
ServerDeploymentInformation :
ServerId                  : 45f6c765-b37d-11e1-ac31-cba134fd5e3e
SerialNumber              : 323GGAGC0A1-TNNX14Y00000004
ServerUuid                : 45f6c765-b37d-11e1-ac31-cba134fd5e3e
Manufacturer              : HITACHI
Model                     : Compute Blade 520HA1
ModelNumber               : GGAGC0A1-TNNX14Y
BootType                  : Custom
ChassisSerialNumber       : 323GG-RE3A1NBX1-Y00000008
PartitionNumber           : 7
PrimarySlot               : 7
PartitionWidth            : 1
PartitionValid            : True
CpuType                   : Intel(R) Xeon(R) CPU E5-2630L 0 @ 2.00GHz
CoresPerCPU               : 6
NumberOfCpus              : 0
CpuFrequencyInGHz         : 2
CpuCacheSizeInMB          : 30
MemoryAmountInGB          : 96
BmcIp                     : 10.21.74.18
BmcSubnetMask             : 255.255.255.0
BmcDefaultGateway         : 10.21.74.1
BmcDhcpEnabled            : False
PowerState                : Off
LIDState                  : On
LIDColor                  : Blue
Health                    : Healthy
ErrorCount                : 0
WarningCount              : 0
InformationCount          : 0
LastRefreshed             : 9/27/2013 8:50:39 PM
CurrentFirmwareVersion    : 01-71
PendingFirmwareVersion    :
AvailableFirmwareVersion  :
EfiFirmwareVersionCurrent : 06-05
EfiFirmwareVersionPending :
BmcFirmwareVersionCurrent : 01-67
BmcFirmwareVersionPending :
HardwareMaintenanceMode   :
MacType                   : Additional
WwnType                   : Additional
```

```
OperatingMode            : Basic
ConsoleUri               : https://10.21.74.18/
NicInformationList       : {Emulex 10Gb 4-port converged network
mezzanine card, Emulex 10Gb 4-port converged
                           network mezzanine card, Emulex 10Gb 4-port
converged network mezzanine card, Emulex 10Gb
                           4-port converged network mezzanine card}
HbaInformationList       : {Hitachi 8Gb 2-port fibre channel
mezzanine card, Hitachi 8Gb 2-port fibre channel
                           mezzanine card}
Id                       : 45f6c765-b37d-11e1-ac31-cba134fd5e3e
GlobalResourceId         : inst.blue-podf-3940.cmp.1.ser.45f6c765-
b37d-11e1-ac31-cba134fd5e3e
ResourceType             : Server
InstanceId               : blue-podf-3940
```

Related Links

Get-UCPServer

Set-UCPHostNetworkVlan

Applies VLAN IDs from a host's network uplinks to the connected physical switch ports.

Syntax

Set-UCPHostNetworkVlan [-ServerId] <String> [<CommonParameters>]

Description

The VLAN IDs are collected from the host's virtual switch and then applied to the Ethernet switch ports used by that host. The server must be an ESXi host in the virtual platform.

Parameters

- -ServerId <String>

  Specifies the ID of the server that is to have its uplink VLAN configurations applied to the Ethernet switch network paths used by the server.

  – Required? true

  – Position? 1

– Default value

– Accept pipeline input? true (ByPropertyName)

– Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

String

Outputs

Hitachi.UCP.CLI.Domain.HostUplinkConfigurations

Notes

This command requires the UCP Network Administrator and UCP View privileges.

The UCP Ethernet Features setting must be enabled.

The Ethernet switch ports used by the hosts must be "Managed".

Example: Apply a host's VLANs to the Ethernet switch ports it uses

```
C:\PS>Set-UCPHostNetworkVlan 6e37f410-b4a7-11e1-94b0-c6aca3093fbb |
Select -ExpandProperty UplinkConfigurations | Format-Table Name, Vlans -
AutoSize
```

```
Name    Vlans
----    -----
vmnic0 475-477,482,521
vmnic1 475-477,482,521
```

Related Links

Get-UCPHostNetworkVlan

Get-UCPGlobalVlan

Get-UCPEthernetFeature

Set-UCPEthernetFeature

Set-UCPImage

Modifies the contents of an ESXi image.

Syntax

Set-UCPImage [-ImageId] <String> -Name <String> [-Description <String>] -Packages <Package[]> [<CommonParameters>]

Description

Modifies the contents of an ESXi image.

The ESXi image may be specified in the pipeline. Alternatively, the ImageId parameter may be used. An updated image is returned.

Parameters

- -ImageId <String>

  Specifies the ID of the ESXi image that is to be modified.

  – Required? true

  – Position? 1

  – Default value

  – Accept pipeline input? true (ByPropertyName)

  – Accept wildcard characters? false

- -Name <String>

  Specifies the new name of the ESXi image.

  – Required? true

  – Position? named

  – Default value

  – Accept pipeline input? true (ByPropertyName)

  – Accept wildcard characters? false

- -Description <String>

  Specifies the new description of the ESXi image.

  – Required? false

  – Position? named

  – Default value

  – Accept pipeline input? true (ByPropertyName)

  – Accept wildcard characters? false

- -Packages <Package[]>

  Specifies all of the packages to be included in the ESXi image.

  – Required? true

  – Position? named

  – Default value

  – Accept pipeline input? true (ByPropertyName)

  – Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

Hitachi.UCP.CLI.Domain.Image

Outputs

Hitachi.UCP.CLI.Domain.Image

Notes

This command requires the UCP Server Administrator and UCP View privileges.

Example: Add a package to an image

```
C:\PS>$packages = (Get-UCPImage 1).packages

C:\PS>$newPackage = Get-UCPPackage | Where-Object { $_.Id -eq "VMware_
bootbank_vmware-fdm_5.1.0-716946" }

C:\PS>$packages += $newPackage

C:\PS>Set-UCPImage 2 -Name FDMHitachiESXiImage -Packages $packages
```

```
Name                 : FDMHitachiESXiImage
Vendor               : Hitachi, Ltd.
Description          : Hitachi base image with FDM
AcceptanceLevel      : PartnerSupported
StatelessReady       : False
InUse                : False
IsUcpImage           : True
Packages             : {tools-light, scsi-rste, misc-drivers, net-
e1000e...}
CreatedDate          : 6/7/2012 6:50:46 PM
UpdatedDate          : 9/10/2012 5:57:00 AM
AssociatedServerType :
```

```
ServerCount           : 0
ImageType             : EsxiStateless
Id                    : 2
GlobalResourceId      : inst.v2ProductionB-123-456-789.cmp.1.img.2
ResourceType          : ServerImage
InstanceId            : v2ProductionB-123-456-789
```

Example: Remove a package from an image

```
C:\PS>$packages = (Get-UCPImage 2).packages | Where-Object { $_.Id -ne
"VMware_bootbank_vmware-fdm_5.1.0-716946" }

Set-UCPImage 2 -Name FDMRemovedESXiImage -Packages $packages
```

```
Name                  : FDMRemovedESXiImage
Vendor                : Hitachi, Ltd.
Description           : Hitachi base image with FDM
AcceptanceLevel       : PartnerSupported
StatelessReady        : False
InUse                 : False
IsUcpImage            : True
Packages              : {scsi-adp94xx, misc-drivers, net-e1000e, net-
bnx2...}
CreatedDate           : 6/7/2012 6:50:46 PM
UpdatedDate           : 9/11/2012 6:10:31 AM
AssociatedServerType  :
ServerCount           : 0
ImageType             : EsxiStateless
Id                    : 2
GlobalResourceId      : inst.v2ProductionB-123-456-789.cmp.1.img.2
ResourceType          : ServerImage
InstanceId            : v2ProductionB-123-456-789
```

Related Links

Get-UCPImage

New-UCPImage

Remove-UCPImage

Update-UCPActiveImages

Get-UCPPackage

Refresh-UCPInventory

Set-UCPImageUpdateNotification

Set the list of email recipients whom UCP will notify when new ESXi image update is available.

Syntax

Set-UCPImageUpdateNotification [-EmailAddresses <String[]>] [-AddEmailAddresses <String[]>] [-RemoveEmailAddresses <String[]>] [<CommonParameters>]

Description

This operation requires user with UCP Server Administrator or higher privilege to perform.

This cmdlet adds, removes or defines a list of recipients who will be notified when a new ESXi image update is available.

Parameters

- -EmailAddresses <String[]>

  – Required? false

  – Position? named

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- -AddEmailAddresses <String[]>

  – Required? false

  – Position? named

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- -RemoveEmailAddresses <String[]>

    – Required? false

    – Position? named

    – Default value

    – Accept pipeline input? false

    – Accept wildcard characters? false

- <CommonParameters>

    This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

String

Outputs

String

Notes

Requires the UCP System Administrator privilege set.

Example: Define a new list of recipients

```
C:\PS>Set-UCPImageUpdateNotification -EmailAddresses "server@hds.com",
"storage@hds.com"
```

```
server@hds.com
storage@hds.com
```

Example: Add new recipients to existing list

```
C:\PS>Set-UCPImageUpdateNotification -AddEmailAddresses
"server2@hds.com", "storage2@hds.com"
```

```
server@hds.com
storage@hds.com
server2@hds.com
storage2@hds.com
```

Example: Remove recipients from existing list

```
C:\PS>Set-UCPImageUpdateNotification -RemoveEmailAddresses
"server2@hds.com", "storage2@hds.com"
```

```
server@hds.com
storage@hds.com
```

Related Links

Get-UCPImageUpdateNotification

Update-UCPActiveImage

Set-UCPLinuxServiceTemplate

Edits a Linux service template.

Syntax

Set-UCPLinuxServiceTemplate -KickstartFileLocation <String> -BootVolumeStorageSystemId <Int32> -BootVolumePoolId <Int32> -BootVolumeSize <Double> [-AttachVolumes <UcpServiceTemplateVolumeInformation[]>] [-CreateAndAttachVolumes <UcpServiceTemplateVolumeInformation[]>] [-ComputeVlanIds <String>] [-ServiceTemplateId] <String> -Name <String> -BootImageId <String> [<CommonParameters>]

Description

This cmdlet edits details of a Linux service template.

See the description for New-UCPLinuxServiceTemplate.

Parameters

- -KickstartFileLocation <String>

  File location and name of the Kickstart file.

  – Required? true

  – Position? named

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- -BootVolumeStorageSystemId <Int32>

  Id of the storage system in which to create the boot volume.

  – Required? true

  – Position? named

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- -BootVolumePoolId <Int32>

  Id of the storage pool in which to create the boot volume.

  – Required? true

  – Position? named

  – Default value

- – Accept pipeline input? false

- – Accept wildcard characters? false

- -BootVolumeSize <Double>

Size of boot volume to create.

  - – Required? true

  - – Position? named

  - – Default value

  - – Accept pipeline input? false

  - – Accept wildcard characters? false

- -AttachVolumes <UcpServiceTemplateVolumeInformation[]>

Existing volumes to attach. Use helper cmdlet New-
UCPServiceTemplateVolumeInformation.

  - – Required? false

  - – Position? named

  - – Default value

  - – Accept pipeline input? false

  - – Accept wildcard characters? false

- -CreateAndAttachVolumes <UcpServiceTemplateVolumeInformation[]>

New volumes to create and attach to servers when template is applied.
Use helper cmdlet New-UCPServiceTemplateVolumeInformation.

  - – Required? false

  - – Position? named

  - – Default value

  - – Accept pipeline input? false

– Accept wildcard characters? false

- -ComputeVlanIds <String>

  Compute VLAN Id (or range of Ids) to be applied to switch ports used by blades applying this template.

  – Required? false

  – Position? named

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- -ServiceTemplateId <String>

  Id of the Linux service template to edit.

  – Required? true

  – Position? 1

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- -Name <String>

  Name for the Linux service template.

  – Required? true

  – Position? named

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- -Description <String>

    – Required? false

    – Position? named

    – Default value

    – Accept pipeline input? false

    – Accept wildcard characters? false

- -BootImageId <String>

    Id of the Linux boot image to deploy.

    – Required? true

    – Position? named

    – Default value

    – Accept pipeline input? false

    – Accept wildcard characters? false

- <CommonParameters>

    This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

String

Outputs

Hitachi.UCP.CLI.Domain.UcpLinuxServiceTemplate

Notes

This requires UCP System Administration privileges.

Example: Edit a linux service template

```
C:\PS># Get the linux service template and place it into a variable:

C:\PS>$EditMe = Get-UCPServiceTemplate 5

C:\PS># Define new volumes, 200GB each:

C:\PS>$Vol1 = New-UCPServiceTemplateVolumeInformation -
StorageSystemId 93040480 -PoolId 2 -size 214748364800

C:\PS>$Vol2 = New-UCPServiceTemplateVolumeInformation -
StorageSystemId 93040480 -PoolId 2 -size 214748364800

C:\PS>$Storage = @($Vol1,$Vol2)

# Edit the Linux service template:

C:\PS>Set-UCPLinuxServiceTemplate -ServiceTemplateId $EditMe.Id -
Name $EditMe.Name -BootImageId $EditMe.BootImageId -
BootVolumeStorageSystemId $EditMe.BootVolumeStorageSystemId -
BootVolumePoolId $EditMe.BootVolumePoolId -BootVolumeSize
$EditMe.BootVolumeSizeInBytes -KickstartFileLocation
$EditMe.KickstartFileLocation -ComputeVlanIds $EditMe.ComputeVlanIds -
CreateAndAttachVolumes $Storage


# Gets a Linux service template, then edits the storage. Changing
from 100GB volumes to 200GB.



BootVolumeStorageSystemId        : 93040480
BootVolumePoolId                 : 1
BootVolumeSizeInBytes            : 214748364800
KickstartFileLocation            :
\\10.21.24.247\REMINST\Boot\x64\Linux\Images\RHEL6.4\KickstartFiles\
RHEL6.4_template.cfg
Id                               : 5
Name                             : LinuxRHEL64
BootImageId                      : 4
BootImageName                    : RHEL6.4
BootImageType                    : Linux
ServiceTemplateType              : Linux
ComputeVlanIds                   : 27,29
GlobalResourceId                 : inst.UCP-123-456-789.svctmplt.5
ResourceType                     : ServiceTemplate
```

```
           InstanceId                              : UCP-123-456-789
```

Related Links

New-UCPLinuxServiceTemplate

New-UCPServiceTemplateVolumeInformation

Apply-UCPLinuxServiceTemplate

Get-UCPLinuxServiceTemplate

Get-UCPServiceTemplateVolume

Set-UCPMonitorMode

Sets the SNMP monitor mode to the specified mode.

Syntax

Set-UCPMonitorMode [-ResourceType] <MonitorModeResourceType> [-GlobalResourceId <String>] [-MonitorModeState] <MonitorMode> [<CommonParameters>]

Description

Sets the monitor mode for top level monitor resource types. The user should have system administration privilege to execute this command

Valid top level resource types are Ethernet, FibreChannel, Compute and Storage.

Valid monitor modes are Off, Monitor and Report.

Parameters

- -ResourceType <MonitorModeResourceType>

  Resource types are: Ethernet, FibreChannel, Storage, Compute, EthernetSwitchPort, FibreChannelSwitchPort.

  – Required? true

  – Position? 1

- — Default value

- — Accept pipeline input? true (ByPropertyName)

- — Accept wildcard characters? false

- -GlobalResourceId <String>

  Used only for Ethernet switch ports and Fibre Channel switch ports.

  - — Required? false

  - — Position? named

  - — Default value

  - — Accept pipeline input? false

  - — Accept wildcard characters? false

- -MonitorModeState <MonitorMode>

  Monitor state of the specified resource. Values are Report, Monitor, Off.

  - — Required? true

  - — Position? 2

  - — Default value

  - — Accept pipeline input? true (ByPropertyName)

  - — Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

String

Outputs

String

Notes

Requires the UCP System Administrator role.

-If the monitor mode is set to Off for a resource type, UCP Director will not monitor that particular resource type.

-If the monitor mode is set to Monitor for a resource type, UCP Director will monitor and events will be logged but not posted in the virtual platform.

-If the monitor mode is set to Report for a resource type, UCP Director will monitor and report events to virtual platform.

Example: Set monitor mode for Ethernet to report

```
C:\PS>Set-UCPMonitorMode -ResourceType Ethernet -MonitorModeState Report
```

```
Report
```

Example: Set monitor mode for FibreChannel to monitor

```
C:\PS>Set-UCPMonitorMode -ResourceType FibreChannel -MonitorModeState
Monitor
```

```
Monitor
```

Example: Set monitor mode for an Ethernet switch port to Off

```
C:\PS>Set-UCPMonitorMode -ResourceType EthernetSwitchPort -
GlobalResourceId "inst.v2ProductionA-123-456-
789.eth.1.net.1.port.TenGigabitEthernet 0/60" -MonitorModeState Off
```

```
Off
```

Related Links

Get-UCPMonitorMode

Get-UCPSnmpTrapReceiver

Set-UCPPerformanceCounter

Sets performance counter rules and thresholds.

Syntax

Set-UCPPerformanceCounter [-ResourceType] <MonitorResourceType> [-PerformanceCounterName] <String> [-IsThresholdEnabled] <String> [-DampingHistory] <Int32> [-DampingThreshold] <Int32> [-PerformanceCounterThresholdRules] <Hashtable> [<CommonParameters>]

Description

This cmdlet allows the user to choose the kinds of health and performance measurements that matter most in an environment. The parameters configure what measurements to warrant an alert.

Parameters

- -ResourceType <MonitorResourceType>

  Specifies the resource for which to configure thresholds on a specific performance counter.

  Resource types with configurable performance counters are:

  StorageVolume, StorageSystem, FibreChannelSwitchPort, StoragePort, StoragePool, StorageProcessor, EthernetSwitchPort, StorageParityGroup, StorageJournal, EthernetSwitch.

  – Required? true

  – Position? 1

  – Default value

– Accept pipeline input? true (ByPropertyName)

– Accept wildcard characters? false

• -PerformanceCounterName <String>

The performance counter which the Set-UCPPerformanceCounter cmdlet should configure.

Performance counters per element type are:

FKMonitorResourceType FKName

StorageVolume RandomTotalIoRate

StorageVolume RandomTotalXferRate

StorageVolume ReadHitPct

StorageVolume ReadIoRate

StorageVolume ReadResponseRate

StorageVolume ReadXferRate

StorageVolume SequentialTotalIoRate

StorageVolume SequentialTotalXferRate

StorageVolume TotalResponseRate

StorageVolume WriteHitPct

StorageVolume WriteIoRate

StorageVolume WriteResponseRate

StorageVolume WriteXferRate

StorageVolume TotalCapacity

StorageVolume UsedCapacity

StorageVolume UsedPercentage

StoragePhysicalDevice AvgTagCount

StoragePhysicalDevice BusyPct

StoragePool ReadResponseRate

StoragePool WriteResponseRate

StoragePool ReadIoRate

StoragePool WriteIoRate

StoragePool Capacity

StoragePool SubscribedCapacity

StoragePool UsedCapacity

StoragePool CurrentSubscriptionPercentage

StoragePool UsedPercentage

StoragePool SubscriptionLimitPercentage

StoragePort AvgIoRate

StoragePort AvgXferRate

StorageProcessor ProcessorBusyPct

StorageParityGroup BusyPct

StorageParityGroup RandomReadIoPct

StorageParityGroup RandomReadIoRate

StorageParityGroup RandomReadXferPct

StorageParityGroup RandomReadXferRate

StorageParityGroup RandomTotalIoRate

StorageParityGroup RandomTotalXferRate

StorageParityGroup RandomWriteIoPct

StorageParityGroup RandomWriteIoRate

StorageParityGroup RandomWriteXferPct

StorageParityGroup RandomWriteXferRate

StorageParityGroup ReadHitPct

StorageParityGroup ReadIoPct

StorageParityGroup ReadIoRate

StorageParityGroup ReadXferPct

StorageParityGroup ReadXferRate

StorageParityGroup SequentialReadIoPct

StorageParityGroup SequentialReadIoRate

StorageParityGroup SequentialReadXferPct

StorageParityGroup SequentialReadXferRate

StorageParityGroup SequentialTotalIoRate

StorageParityGroup SequentialTotalXferRate

StorageParityGroup SequentialWriteIoPct

StorageParityGroup SequentialWriteIoRate

StorageParityGroup SequentialWriteXferPct

StorageParityGroup SequentialWriteXferRate

StorageParityGroup WriteIoPct

StorageParityGroup WriteHitPct

StorageParityGroup WriteIoRate

StorageParityGroup WriteXferPct

StorageParityGroup WriteXferRate

StorageJournal UsedPercentage

StorageSystem CacheMemoryUsage

StorageSystem CacheMemoryUsagePct

StorageSystem CacheWritePending

StorageSystem CacheWritePendingPct

StorageSystem PhysicalSpace

StorageSystem ReservedSpace

StorageSystem FreeSpace

StorageSystem AllocatedSpace

StorageSystem UnallocatedSpace

EthernetSwitchPort DataReceiveRate

EthernetSwitchPort UnicastReceives

EthernetSwitchPort MulticastReceives

EthernetSwitchPort BroadcastReceives

EthernetSwitchPort PacketsReceived

EthernetSwitchPort ReceivePacketsDropped

EthernetSwitchPort PacketReceiveErrors

EthernetSwitchPort UnknownProtocolPackets

EthernetSwitchPort DataTransmitRate

EthernetSwitchPort UnicastTransmits

EthernetSwitchPort MulticastTransmits

EthernetSwitchPort BroadcastTransmits

EthernetSwitchPort PacketsTransmitted

EthernetSwitchPort TransmitPacketsDropped

EthernetSwitchPort PacketTransmitErrors

EthernetSwitch CPUUsage

EthernetSwitch MemoryUsage

FibreChannelSwitchPort DataTransmitRate

FibreChannelSwitchPort DataReceiveRate

FibreChannelSwitchPort FrameTransmitRate

FibreChannelSwitchPort FrameReceiveRate

FibreChannelSwitchPort MulticastReceives

FibreChannelSwitchPort MulticastTransmits

FibreChannelSwitchPort BufferCreditZeroStateCount

FibreChannelSwitchPort EncodingDisparityCount

FibreChannelSwitchPort TooLongFrames

FibreChannelSwitchPort InvalidOrderedSets

FibreChannelSwitchPort LinkFailures

FibreChannelSwitchPort SyncLosses

FibreChannelSwitchPort SignalLosses

FibreChannelSwitchPort PrimSeqProtoErrors

FibreChannelSwitchPort InvalidTransmittedWords

FibreChannelSwitchPort CRCErrors

FibreChannelSwitchPort DelimiterErrors

FibreChannelSwitchPort AddressErrors

FibreChannelSwitchPort ReceivedLinkReset

FibreChannelSwitchPort TransmittedLinkReset

FibreChannelSwitchPort ReceivedOfflineSequence

FibreChannelSwitchPort TransmittedOfflineSequence

– Required? true

– Position? 2

- – Default value

- – Accept pipeline input? false

- – Accept wildcard characters? false

- -IsThresholdEnabled [<String>]

  When Threshold is enabled, the performance counter threshold rules are applied. Values for this parameter are True or False.

  - – Required? true

  - – Position? 3

  - – Default value

  - – Accept pipeline input? false

  - – Accept wildcard characters? false

- -DampingHistory <Int32>

  The number of measurement results to keep in history.

  - – Required? true

  - – Position? 4

  - – Default value

  - – Accept pipeline input? false

  - – Accept wildcard characters? false

- -DampingThreshold <Int32>

  If the threshold is exceeded this number of times, report to UCP.

  - – Required? true

  - – Position? 5

  - – Default value

  - – Accept pipeline input? false

- Accept wildcard characters? false

- -PerformanceCounterThresholdRules <Hashtable>

  The health and performance of the specified resource is checked by UCP at regular intervals. The measurement will be reported only if the measurement exceeds the value set by the user with -PerformanceCounterThresholdRules for a particular performance counter.

  Rules that may be set are:

  TooLowError

  TooLowWarning

  TooHighWarning

  TooHighError

    - Required? true

    - Position? 6

    - Default value

    - Accept pipeline input? false

    - Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

None

Outputs

Hitachi.UCP.CLI.Domain.PerformanceCounter

Notes

Requires the UCP System Administrator role.

Example: Set performance counter rules for EthernetSwitch CPUUsage

```
C:\PS>$PerfValues =
@{TooLowError=1;TooLowWarning=2;TooHighWarning=3;TooHighError=4}

C:\PS>Set-UCPPerformanceCounter -ResourceType EthernetSwitch -
PerformanceCounterName CPUUsage -PerformanceCounterThresholdRules
$PerfValues | fl

cmdlet Set-UCPPerformanceCounter at command pipeline position 1
Supply values for the following parameters:
IsThresholdEnabled: True
DampingHistory: 1
DampingThreshold: 1




Name                        : CPUUsage
DisplayName                 : CPU Usage
MetricUnit                  : %
PerformanceCounterThreshold : {IsThresholdEnabled:True,
DampingThreshold:1, DampingHistory:1,...}
```

Related Links

Get-UCPPerformanceCounter

Set-UCPRepositoryLocation

Edits repository locations where ESXi images are stored.

Syntax

```
Set-UCPRepositoryLocation [-RepositoryLocations <String[]>] [-
AddRepositoryLocations <String[]>] [-RemoveRepositoryLocations
<String[]>] [<CommonParameters>]
```

Description

User-defined repository locations may be network file shares or online depots. This cmdlet can replace the locations list, add to the list, or remove a location.

Parameters

- -RepositoryLocations <String[]>

  Replaces entire list of repository locations.

  – Required? false

  – Position? named

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- -AddRepositoryLocations <String[]>

  Appends a repository location to an existing list.

  – Required? false

  – Position? named

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- -RemoveRepositoryLocations <String[]>

  Removes a specified repository location by its full path.

  – Required? false

  – Position? named

  – Default value

     –   Accept pipeline input? false

     –   Accept wildcard characters? false

- \<CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

String

Enclose each repository location in quotes. Separate each with a comma.

Outputs

String

Updated list of repository locations.

Notes

UCP Server Administrator role is required. Any network file location must be shared with read\write privileges to UCPAdmin.

Example: Add multiple locations

```
C:\PS>Set-UCPRepositoryLocation -RepositoryLocations "\\vCenter\
Share","\\10.21.24.241\ESXiShare"


# Enclose each location in quotes. Separate each with a comma.


\\vCenter\Share
\\10.21.24.241\ESXiShare
```

Example: Append a location to existing list

```
C:\PS>Set-UCPRepositoryLocation -AddRepositoryLocations "\\vCenter\
MoreImages"
```

```
Preserves existing list of locations and adds a new location.


\\vCenter\Share
\\10.21.24.241\ESXiShare
\\vCenter\MoreImages
```

Example: Remove a repository location

```
C:\PS>Set-UCPRepositoryLocation -RemoveRepositoryLocations "\\vCenter\
MoreImages"
```

```
\\vCenter\Share
\\10.21.24.241\ESXiShare
```

Related Links

Get-UCPRepositoryLocation

Get-UCPImage

Set-UCPScheduledJob

Modifies when and how often a scheduled UCP job will run.

Syntax

Set-UCPScheduledJob [-Name] <String> -IntervalType <String> [-IntervalValue <Int32>] [-TimeOfDay <DateTimeOffset>]
[<CommonParameters>]

Description

Modifies when and how often a scheduled UCP job will run.

The scheduled job may be specified in the pipeline. Alternatively, the Name parameter may be used.

Parameters

- -Name <String>

  Specifies the name of the scheduled UCP job that is to be updated, currently "ImageUpdate".

  – Required? true

  – Position? 1

  – Default value

  – Accept pipeline input? true (ByPropertyName)

  – Accept wildcard characters? false

- -IntervalType <String>

  Specifies the number of interval type units (i.e. days, weeks, or months) before a scheduled job will be run. Required if IntervalType is not Never. When Daily, it should be the number of days to wait until next run (1-365, 1 to run every day, 2 for every other day, etc.). For Weekly use 1, for Sundays 2, for Mondays, etc. When Monthly, use 1 for the first day of the month, 15 for the 15th day of the month (if greater than number of days in month, the job will run on last day of month).

  – Required? true

  – Position? named

  – Default value

  – Accept pipeline input? true (ByPropertyName)

  – Accept wildcard characters? false

- -IntervalValue <Int32>

  Specifies what time of day a scheduled job will be run. On the days specified by the combination of IntervalType and IntervalValue, the job will be run at this time of day. Required if IntervalType is not Never.

  – Required? false

- – Position? named

- – Default value

- – Accept pipeline input? true (ByPropertyName)

- – Accept wildcard characters? false

- -TimeOfDay <DateTimeOffset>

  Specifies what time of day a scheduled job will be run. Required if IntervalType is not Never.

  - – Required? false

  - – Position? named

  - – Default value

  - – Accept pipeline input? true (ByPropertyName)

  - – Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

None

Outputs

Hitachi.UCP.CLI.Domain.ScheduledUcpJob

Notes

The UCP Server Administrator and UCP View privileges are required.

Example: Modify the schedule for the update active images scheduled job

```
C:\PS>Set-ScheduledUcpJob ImageUpdate -IntervalType Weekly -
IntervalValue 2 -TimeOfDay "2:00:00 GMT"
```

```
Name : ImageUpdate
JobType : ImageUpdate
IntervalType : Weekly
IntervalValue : 2
RunAt : 9/11/2012 2:00:00 AM +00:00
```

Related Links

Get-UCPScheduledJob

Set-UCPServerElementManager

Modifies server element manager connection information.

Syntax

Set-UCPServerElementManager [-Id] <String> -ServiceUrl <String> -Credential <PSCredential> -ApplicationUrl <String> [-Force] [<CommonParameters>]

Description

HCSM is the server element manager. It may be specified in the pipeline. Alternatively, the Id parameter may be used.

Parameters

- -Id <String>

  Specifies the ID of the server element manager with the connection information that is to be modified.

  – Required? true

  – Position? 1

  – Default value

  – Accept pipeline input? true (ByPropertyName)

  – Accept wildcard characters? false

- -ServiceUrl <String>

  Specifies the URL that is to be used to access the server element manager.

  – Required? true

  – Position? named

  – Default value

  – Accept pipeline input? true (ByPropertyName)

  – Accept wildcard characters? false

- -Credential <PSCredential>

  Specifies the username and password that is to be used to manage the server element manager.

  – Required? true

  – Position? named

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- -ApplicationUrl <String>

  Specifies the URL that is to be used to launch the server element manager's user interface.

  – Required? true

  – Position? named

  – Default value

  – Accept pipeline input? true (ByPropertyName)

  – Accept wildcard characters? false

- -Force

  Indicates the user should not be prompted to confirm that the server element manager should be updated.

  – Required? false

  – Position? named

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

Hitachi.UCP.CLI.Domain.ServerElementManager

Outputs

Hitachi.UCP.CLI.Domain.ServerElementManager

Notes

The UCP Server Administrator and UCP View privileges are required.

Example: Modify the settings used to access a server element manager

```
C:\PS>C:\PS>$cred = Get-Credential

C:\PS>Set-UCPServerElementManager 1 -ApplicationUrl http://
10.21.24.167:23015/ComputeSystemsManager/index.jsp -ServiceUrl http://
10.21.24.167:23015/ComputeSystemsManager -Credential $cred | Format-List

Confirm
Proceed updating server element manager?
[Y] Yes  [N] No  [S] Suspend  [?] Help (default is "Y"): Y




Username          : ucpadmin
ApplicationUrl    : http://10.21.24.167:23015/ComputeSystemsManager/
index.jsp
ServiceUrl        : http://10.21.24.167:23015/ComputeSystemsManager
Id                : 1
GlobalResourceId  : inst.v2ProductionB-123-456-789.cmp.1.sem.1
ResourceType      : ServerElementManager
InstanceId        : v2ProductionB-123-456-789
```

Related Links

Get-UCPServerElementManager

Get-UCPServer

Set-UCPServerImage

Sets the pending ESXi image for a specific server.

Syntax

Set-UCPServerImage [-ServerId] <String> [-ImageId <String>] [-Default] [<CommonParameters>]

Description

Sets the pending image for a specific server.

The server may be specified in the pipeline. Alternatively, the ServerId parameter may be used.

Parameters

- -ServerId <String>

  Specifies the ID of the server that is to be assigned a pending image.

  – Required? true

  – Position? 1

  – Default value

  – Accept pipeline input? true (ByPropertyName)

  – Accept wildcard characters? false

- -ImageId <String>

  Optionally specifies the ID of the ESXi image that is to be set as the pending image for the server.

  This image must have the attribute of "true" for "IsUCPImage." Meaning: The image is local and not on a remote repository location. Auto Deploy will only deploy images that UCP has created or cloned.

  – Required? false

  – Position? named

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- -Default

  Optionally specifies that the pending image for the server is to default to that specified for the server type.

  - Required? false

  - Position? named

  - Default value

  - Accept pipeline input? false

  - Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

Hitachi.UCP.CLI.Domain.Server

Outputs

Hitachi.UCP.CLI.Domain.Server

Notes

The UCP Server Administrator and UCP View privileges are required.

Where possible, use UCP service templates for image deployment rather than Set-UCPServerImage.

Example: Set a pending image for a specific server

```
    C:\PS>Set-UCPServerImage -ServerId f912356c-8fed-11e1-b5f4-
a1de70d1e7f3 -ImageId 32
```

```
HostInformation             :
ServerDeploymentInformation : HitachiESXiImage
ServerId                    : a00a087e-b42f-11e1-b5b5-de6c62e1293f
SerialNumber                : 323GGAGC0A1-TNNX14Y00000001
ServerUuid                  : a00a087e-b42f-11e1-b5b5-de6c62e1293f
Manufacturer                : HITACHI
Model                       : Compute Blade 520HA1
ModelNumber                 : GGAGC0A1-TNNX14Y
BootType                    : ESXiStateless
ChassisSerialNumber         : 323GG-RE3A1NBX1-Y00000008
PartitionNumber             : 0
PrimarySlot                 : 0
PartitionWidth              : 1
PartitionValid              : True
CpuType                     : Intel(R) Xeon(R) CPU E5-2630L 0 @
2.00GHz
CoresPerCPU                 : 6
CpuFrequencyInGHz           : 2
CpuCacheSizeInMB            : 15
MemoryAmountInGB            : 96
BmcIp                       : 10.21.74.11
BmcSubnetMask               : 255.255.255.0
BmcDefaultGateway           : 10.21.74.1
BmcDhcpEnabled              : False
PowerState                  : On
LIDState                    : On
LIDColor                    : Blue
Health                      : Healthy
ErrorCount                  : 0
WarningCount                : 0
InformationCount            : 0
LastRefreshed               : 4/3/2013 5:34:07 PM
EfiFirmwareVersionCurrent   : 02-13
EfiFirmwareVersionPending   :
BmcFirmwareVersionCurrent   : 01-44
BmcFirmwareVersionPending   :
ConsoleUri                  : https://10.21.74.11/
NicInformationList          : {Emulex 10Gb 4-port converged network
mezzanine card,

                              Emulex 10Gb 4-port converged network
mezzanine card,

                              Emulex 10Gb 4-port converged network
mezzanine card,

                              Emulex 10Gb 4-port converged network
mezzanine card}
HbaInformationList          : {Hitachi 8Gb 2-port fibre channel
mezzanine card,

                              Hitachi 8Gb 2-port fibre channel
mezzanine card}
Id                          : a00a087e-b42f-11e1-b5b5-de6c62e1293f
GlobalResourceId            : inst.v2ProductionB-123-456-
789.cmp.1.ser.a00a087e-b42f-11e1-b5b5-de6c62e1293f
```

```
ResourceType                 : Server
InstanceId                   : v2ProductionB-123-456-789
```

Example: Return a server to using the default image for its server type

```
C:\PS>Set-UCPServerImage -ServerId f912356c-8fed-11e1-b5f4-
a1de70d1e7f3 -Default
```

```
HostInformation              : r1-hi-cb500-2-b01.podb.local
ServerDeploymentInformation  : HitachiESXiImage
ServerId                     : f912356c-8fed-11e1-b5f4-a1de70d1e7f3
SerialNumber                 : 323GGAGC0B1-TNNX14Y00000111
ServerUuid                   : f912356c-8fed-11e1-b5f4-a1de70d1e7f3
Manufacturer                 : HITACHI
Model                        : Compute Blade 520HB1
ModelNumber                  : GGAGC0B1-TNNX14Y
BootType                     : ESXiStateless
ChassisSerialNumber          : 323GG-RE3A1NBX1-Y00000016
PartitionNumber              : 1
PrimarySlot                  : 1
PartitionWidth               : 1
PartitionValid               : True
CpuType                      : Intel(R) Xeon(R) CPU E5-2640 0 @
2.50GHz
CoresPerCPU                  : 6
NumberOfCpus                 : 0
CpuFrequencyInGHz            : 2.5
CpuCacheSizeInMB             : 30
MemoryAmountInGB             : 96
BmcIp                        : 10.21.24.22
BmcSubnetMask                : 255.255.255.0
BmcDefaultGateway            : 10.21.24.1
BmcDhcpEnabled               : False
PowerState                   : On
LIDState                     : Off
LIDColor                     : Blue
Health                       : Healthy
ErrorCount                   : 0
WarningCount                 : 2
InformationCount             : 2
LastRefreshed                : 9/27/2013 7:02:28 PM
CurrentFirmwareVersion       : 01-59
PendingFirmwareVersion       :
AvailableFirmwareVersion     :
EfiFirmwareVersionCurrent    : 04-06
EfiFirmwareVersionPending    :
BmcFirmwareVersionCurrent    : 01-56
```

```
     BmcFirmwareVersionPending   :
     HardwareMaintenanceMode     :
     MacType                     : Original
     WwnType                     : Original
     OperatingMode               : Basic
     ConsoleUri                  : https://10.21.24.22/
     NicInformationList          : {10Gb Onboard LAN, 10Gb Onboard LAN}
     HbaInformationList          : {Hitachi 8Gb 2-port fibre channel
 mezzanine card, Hitachi 8Gb 2-port fibre channel
     mezzan
                                   ine card}
     Id                          : f912356c-8fed-11e1-b5f4-a1de70d1e7f3
     GlobalResourceId            : inst.v2ProductionB-123-456-
 789.cmp.1.ser.f912356c-8fed-11e1-b5f4-a1de70d1e7f3
     ResourceType                : Server
     InstanceId                  : v2ProductionB-123-456-789
```

Related Links

Get-UCPServer

Deploy-UCPServer

Reset-UCPServer

Start-UCPServer

Stop-UCPServer

Set-UCPServerLocationId

Get-UCPImage

Set-UCPServerLocationId

Sets the state of a Server's Location ID.

Syntax

Set-UCPServerLocationId [-ServerId] <String> -State <LidState>
[<CommonParameters>]

Description

Sets the state of a Server's Location ID.

The server may be specified in the pipeline. Alternatively, the ServerId parameter may be used.

Parameters

- -ServerId <String>

  Specifies the ID of the server with the location Id that is to be set.

  – Required? true

  – Position? 1

  – Default value

  – Accept pipeline input? true (ByPropertyName)

  – Accept wildcard characters? false

- -State <LidState>

  Specifies the desired state of the LID. Valid states are On, and Off.

  – Required? true

  – Position? named

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

Hitachi.UCP.CLI.Domain.Server

Outputs

Hitachi.UCP.CLI.Domain.Server

Notes

The UCP Server Administrator and UCP View privileges are required.

Example: Turn on a server's LID

```
C:\PS>Set-UCPServerLocationId 6e37f410-b4a7-11e1-94b0-c6aca3093fbb -
State On | Format-List ServerId,
   HostInformation, Model, LidState
```

```
ServerId         : 6e37f410-b4a7-11e1-94b0-c6aca3093fbb
HostInformation  : esx04.ucp.local
Model            : Compute Blade 520HB1
LIDState         : On
```

Example: Turn off a server's LID

```
C:\PS>Set-UCPServerLocationId 6e37f410-b4a7-11e1-94b0-c6aca3093fbb -
State Off | Format-List ServerId,
   HostInformation, Model, LidState
```

```
ServerId         : 6e37f410-b4a7-11e1-94b0-c6aca3093fbb
HostInformation  : esx04.ucp.local
Model            : Compute Blade 520HB1
LIDState         : Off
```

Related Links

Get-UCPServer

Start-UCPServer

Stop-UCPServer

Reset-UCPServer

Set-UCPServerImage

Deploy-UCPServer

Set-UCPServerProfile

Edits settings in a server profile.

Syntax

Set-UCPServerProfile [-ServerProfileId] <String> -Name <String> -Description <String> -EfiSettings <EfiSettings> [-CnaControllerSettings <CnaControllerSetting[]>] [<CommonParameters>]

Description

If a server profile is not associated with a server, the EFI settings, Name, Description, and CNA settings can be edited.

Parameters

- -ServerProfileId <String>

  Id of the server profile to be edited.

  – Required? true

  – Position? 1

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- -Name <String>

  Name for the edited server profile.

  – Required? true

  – Position? named

  – Default value

- – Accept pipeline input? true (ByPropertyName)

- – Accept wildcard characters? false

- -Description <String>

  Description for the edited server profile.

  - – Required? true

  - – Position? named

  - – Default value

  - – Accept pipeline input? true (ByPropertyName)

  - – Accept wildcard characters? false

- -EfiSettings <EfiSettings>

  Collection of EFI settings for the edited server profile. Use helper cmdlet New-UCPEfiSettings.

  - – Required? true

  - – Position? named

  - – Default value

  - – Accept pipeline input? true (ByPropertyName)

  - – Accept wildcard characters? false

- -CnaControllerSettings <CnaControllerSetting[]>

  Collection of CNA settings for the edited server profile. Use helper cmdlet New-UCPCnaSettings.

  - – Required? false

  - – Position? named

  - – Default value

  - – Accept pipeline input? false

- — Accept wildcard characters? false

- \<CommonParameters\>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

Hitachi.UCP.CLI.Domain.EfiSettings,
Hitachi.UCP.CLI.Domain.UcpServerProfile,
Hitachi.UCP.CLI.Domain.CnaControllerSettings

Outputs

Hitachi.UCP.CLI.Domain.UcpServerProfile,

Notes

Requires UCP System Administrator privilege.

Example: Edit the server profile to disable HyperThreading in the EFI settings

```
C:\PS>#  Get server profile to be edited:
$ChangeMyEFISettings = Get-UcpServerProfile -ServerProfileId 4

# Make new variable containing new EFI settings:
$EFI = New-UCPEfiSetting -ProcessorTurboMode Enable -
ProcessorHyperThreading Disable -ProcessorHardwarePrefetcher
   Enable -MemoryMode Independent -MemorySpeed AUTO -NodeInterleaveMode
NUMA -RASDeconfiguredMode Enable
   -DDRVoltageLevel Auto

# Make variable for CNA settings:
$PhysPort = New-UCPCnaPhysicalPortSetting -VlanId 0
$CNA = New-UCPCnaControllerSetting -PhysicalPortSettings $PhysPort

# Edit server profile with new EFI settings:
   Set-UCPServerProfile -ServerProfileId 4 -Name
$ChangeMyEFISettings.Name -Description "HyperThreading Off"
   -EfiSettings $EFI -CnaControllerSettings
$ChangeMyEFISettings.CnaSettings
```

```
    Name               : Test2
    Description        :
    ServerUuid         : F9F3E69A-C2DB-4E05-BB16-57A8E0D6DBAE
    EfiSettings        : EfiSettings: ProcessorTurboMode - Enable,
ProcessorHyperThreading - Disable,
    ProcessorHardwarePrefetcher - Enable, MemoryMode -Independent,
MemorySpeed - AUTO, NodeInterleaveMode - NUMA,
    RASDeconfiguredMode - Enable, DDRVoltageLevel - Force to 1.50V
    IpAddressSettings  : IpAddressSettings: UsePool - False,
IdentityPoolId - , IdentityPoolRangeId - , SubnetMask -
    255.255.255.0, DefaultGateway -10.21.20.1, IpAddress - 10.21.20.22,
DnsAddress - 10.21.19.246
    NonHypervisor      : False
    CnaSettings        : {CnaSettings: CnaNumber - 0, ControllerSettings
- [ControllerNumber - 0...]}
    MacAddressSettings : {MacAddressSettings: MacNumber - 0, MacAddress
- D0:5F:CE:18:00:02, MacAddressSettings:
    MacNumber - 1, MacAddress -D0:5F:CE:18:00:03}
    WwnAddressSettings : {WwnAddressSettings: IsNodeName - True,
WwnNumber - 0, WwnAddress - 24:00:D0:5F:CE:18:00:04,
    WwnAddressSettings: IsNodeName -False, WwnNumber - 0, WwnAddress -
24:00:D0:5F:CE:18:00:05, WwnAddressSettings:
    IsNodeName - True, WwnNumber - 1, WwnAddress -
24:00:D0:5F:CE:18:00:06, WwnAddressSettings: IsNodeName - False,
    WwnNumber - 1, WwnAddress - 24:00:D0:5F:CE:18:00:07}
    Id                 : 4
    GlobalResourceId   : inst.UCP-12345.srvprofile.4
    ResourceType       : ServerProfile
    InstanceId         : UCP-12345
```

Related Links

Get-UCPServerProfile

New-UCPCnaSettings

New-UCPEfiSettings

Set-UCPServerTypeImage

Sets the default ESXi image for a server type.

Syntax

Set-UCPServerTypeImage [-ServerTypeId] <String> -DefaultImageId <String> [<CommonParameters>]

Description

Sets the default ESXi image for a server type.

This cmdlet is only applicable to ESXi images and to servers using "ESXiStateless" as their boot type.

The server type may be specified in the pipeline. Alternatively, the ServerType parameter may be used.

Parameters

- -ServerTypeId <String>

  Specifies the ID of the server type to be updated.

  – Required? true

  – Position? 1

  – Default value

  – Accept pipeline input? true (ByPropertyName)

  – Accept wildcard characters? false

- -DefaultImageId <String>

  Specifies the ID of the image that is to be set as the default image for all servers of the specified server type. An ESXi image may only be set as Default if it is marked "true" for "IsUCPImage".

  – Required? true

  – Position? named

  – Default value

  – Accept pipeline input? true (ByPropertyName)

- – Accept wildcard characters? false

- \<CommonParameters\>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

Hitachi.UCP.CLI.Domain.ServerType

Outputs

Hitachi.UCP.CLI.Domain.ServerType

Notes

The UCP Server Administrator and UCP View privileges are required.

Servers using Windows or Linux images do not have a concept of 'default' image for server type.

Example: Set a default image for a server type

```
C:\PS>Get-UCPServerType | Set-UCPServerTypeImage –DefaultImageId 32
```

```
DefaultImageName : CloneTest
DefaultImageId   : 32
Id               : Compute Blade 520HB1
GlobalResourceId : inst.v2ProductionB-123-456-789.cmp.1.st.Compute Blade
520HB1
ResourceType     : ServerType

InstanceId       : v2ProductionB-123-456-789
```

Example: Return default image for server type back to original

```
C:\PS>Get-UCPServerType | Set-UCPServerTypeImage –DefaultImageId 1
```

```
DefaultImageName : HitachiESXiImage
DefaultImageId   : 1
Id               : Compute Blade 520HB1
GlobalResourceId : inst.v2ProductionB-123-456-789.cmp.1.st.Compute Blade
520HB1
ResourceType     : ServerType
InstanceId       : v2ProductionB-123-456-789
```

Related Links

Get-UCPServerType

Set-UCPServerImage

Set-UCPImage

Set-UCPSnmpSetting

Sets the SNMP setting for a specific top level resource type.

Syntax

Set-UCPSnmpSetting [-ResourceType] <TopLevelMonitorResourceType> [-AuthenticationPassword <String>] [-PrivacyPassword <String>] [-SnmpVersion <String>] [-AuthenticationProtocol <String>] [-PrivacyProtocol <String>] [-UserName <String>] [-CommunityString <String>] [<CommonParameters>]

Description

Sets the SNMP setting for a specific top level resource type. Valid top level resource types are Ethernet, FibreChannel, Compute and Storage.

Ethernet and FibreChannel resource type supports SNMP v3.

Parameters

- -ResourceType <TopLevelMonitorResourceType>

  Top level resource type. Values are: Compute, Ethernet, FibreChannel, Storage

  – Required? true

580   Commands

- Position? 1

- Default value

- Accept pipeline input? true (ByPropertyName)

- Accept wildcard characters? false

- -AuthenticationPassword <String>

  This is a V3 parameter.

  For Ethernet: Any string 8-32 characters long starting with alphanumeric characters which may also contain question mark, space, double quote, or tab characters.

  For FibreChannal: Any string 8-20 characters long.

  - Required? false

  - Position? named

  - Default value

  - Accept pipeline input? false

  - Accept wildcard characters? false

- -PrivacyPassword <String>

  This is a V3 parameter.

  For Ethernet: Can be string containing 8-32 characters. Can contain a question mark (?), white space( ), double quote("), tab (\t)

  For Fibrechannel: Can be a string 8-20 characters long.

  - Required? false

  - Position? named

  - Default value

  - Accept pipeline input? false

  - Accept wildcard characters? false

- -SnmpVersion <String>

  Appropriate version for Storage and Server is V2c. The version for Ethernet and FibreChannel is V3. These values are case sensitive.

  – Required? false

  – Position? named

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- -AuthenticationProtocol <String>

  This is a V3 parameter. Valid Authentication protocols for Ethernet and FibreChannel switches are, NoAuth, MD5, SHA1.

  SnmpVersion AuthenticationProtocol PrivacyProtocol UserName

  ----------- ---------------------- --------------- --------

  V2c

  for Compute and Storage

  – Required? false

  – Position? named

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- -PrivacyProtocol <String>

  Ethernet switch privacy protocols are: NoPriv, AES128, DES.

  FibreChannel switch privacy protocols are: NoPriv, AES128, AES192, AES256, DES, TripleDES (3DES)

Not applicable for Compute and Storage

- Required? false

- Position? named

- Default value

- Accept pipeline input? false

- Accept wildcard characters? false

- -UserName <String>

  Applicable for Ethernet and FibreChannel resource types.

  - Required? false

  - Position? named

  - Default value

  - Accept pipeline input? false

  - Accept wildcard characters? false

- -CommunityString <String>

  CommunityString is supplied only to resource types: Compute and Storage.

  For compute: Alphanumeric string 1-255 characters long

  For storage: Alphanumeric string 1 -180 characters long. The characters ", \, ;, :, ,, *, ?, <, >, |, /, ^, &, and % are invalid.

  Setting the community string with this cmdlet only updates UCP records. The user must ensure that it matches the community string used by Hitachi Compute Systems Manager and Device Manager.

  - Required? false

  - Position? named

  - Default value

- – Accept pipeline input? false

- – Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

String

Outputs

Hitachi.UCP.CLI.Domain.SnmpSetting

Notes

This cmdlet requires the Administrator role per each resource type. For example, changing the SNMP settings for Compute requires the UCP Server Administrator role.

Example: Set SNMP settings for FibreChannel

```
C:\PS>Set-UCPSnmpSetting -ResourceType FibreChannel -
AuthenticationPassword pAssword1 -PrivacyPassword pAssword1 -SnmpVersion
V3 -AuthenticationProtocol MD5 -PrivacyProtocol AES128 -UserName
SNMPUser
```

```
SnmpVersion                  AuthenticationProtocol
PrivacyProtocol              UserName
-----------                  --------       -            --------
V3                           MD5                         AES128
SNMPUser
```

Example: Set SNMP Settings for Compute

```
C:\PS>Set-UCPSnmpSetting -ResourceType Compute -CommunityString
SNMPCommunityString -SnmpVersion V2c
```

```
SnmpVersion                 AuthenticationProtocol
PrivacyProtocol             UserName
-----------                 --------      -           --------
V2c
```

Related Links

Get-UCPSnmpSetting

Set-UCPStorageElementManager

Modifies storage element manager connection information.

Syntax

Set-UCPStorageElementManager [-Id] <String> -ServiceUrl <String> -
Credential <PSCredential> -ApplicationUrl <String> [-Force]
[<CommonParameters>]

Description

Modifies storage element manager connection information.

The storage element manager may be specified in the pipeline.
Alternatively, the Id parameter may be used.

Parameters

- -Id <String>

  Specifies the ID of the storage element manager with the connection
  information that is to be modified.

  – Required? true

  – Position? 1

  – Default value

  – Accept pipeline input? true (ByPropertyName)

- Accept wildcard characters? false

- -ServiceUrl <String>

  Specifies the URL that is to be used to access the storage element manager.

  - Required? true

  - Position? named

  - Default value

  - Accept pipeline input? true (ByPropertyName)

  - Accept wildcard characters? false

- -Credential <PSCredential>

  Specifies the username and password that is to be used to manage the storage element manager.

  - Required? true

  - Position? named

  - Default value

  - Accept pipeline input? false

  - Accept wildcard characters? false

- -ApplicationUrl <String>

  Specifies the URL to be used to launch the storage element manager's user interface.

  - Required? true

  - Position? named

  - Default value

  - Accept pipeline input? true (ByPropertyName)

  - Accept wildcard characters? false

- -Force

    Indicates the user should not be prompted to confirm that the storage element manager should be updated.

    – Required? false

    – Position? named

    – Default value

    – Accept pipeline input? false

    – Accept wildcard characters? false

- <CommonParameters>

    This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

Hitachi.UCP.CLI.Domain.StorageElementManager

Outputs

Hitachi.UCP.CLI.Domain.StorageElementManager

Notes

The UCP Storage Administrator and UCP View privileges are required.

Example: Modify the credentials used to access a storage element manager

```
C:\PS>$cred = Get-Credential

C:\PS>Set-UCPStorageElementManager 1 -ApplicationUrl http://hdvm-
a.mcp.com:23015/DeviceManagerWebService/index.jsp -ServiceUrl http://
hdvm-a.mcp.com:2001/service/StorageManager -Credential $cred | Format-
List

Confirm
```

```
Proceed updating storage element manager?
[Y] Yes  [N] No  [S] Suspend  [?] Help (default is "Y"): Y
```

```
ApplicationUrl     : http://hdvm-a.mcp.com:23015/DeviceManagerWebService/
index.jsp
ServiceUrl         : http://hdvm-a.mcp.com:2001/service/StorageManager
Username           : ucpadmin
Id                 : 1
GlobalResourceId   : inst.v2ProductionB-123-456-789.sdm.1
ResourceType       : StorageElementManager
InstanceId         : v2ProductionB-123-456-789
```

Related Links

Get-UCPStorageElementManager

Get-UCPStorageSystem

Set-UCPVirtualPlatformManager

Re-registers UCP as an extension to VMware vCenter or Microsoft System Center Virtual Machine Manager.

Syntax

Set-UCPVirtualPlatformManager [-PlatformId] <String> -Credential <PSCredential> [-Force] [-NetworkEmail <String>] [-PlatformServer <String>] [-PlatformUrl <String>] [-ServerEmail <String>] [-StorageEmail <String>] [-SystemEmail <String>] [<CommonParameters>]

Description

Re-registers UCP as an extension to VMware vCenter or Microsoft System Center Virtual Machine Manager. This cmdlet is used to update the UCP plugin that is registered to the platform.

Use Set-UCPVirtualPlatformManagerConnectionInformation to change the credentials used to access the virtual platform manager.

The virtual platform manager to be registered may be specified in the pipeline. Alternatively, the PlatformId parameter may be used. An updated virtual platform manager is returned.

Parameters

- -PlatformId <String>

  Specifies the ID of the virtual platform manager that is to be updated.

  – Required? true

  – Position? 1

  – Default value

  – Accept pipeline input? true (ByPropertyName)

  – Accept wildcard characters? false

- -Credential <PSCredential>

  Specifies the username, domain, and password that is to be used to manage the virtual platform manager. Must be an Administrator of the virtual platform manager. Should not be the same identity as the service account used for the UCP Director.

  – Required? true

  – Position? named

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- -Force

  Indicates the user should not be prompted to confirm.

  – Required? false

  – Position? named

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- -NetworkEmail <String>

  Specifies the email address that will receive network alarm notifications. Consider making it an email group containing multiple recipients that may change over time. For SCVMM, this will be ignored.

  – Required? false

  – Position? named

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- -PlatformServer <String>

  Specifies the FQDN/IP address that is to be used to access the virtual platform manager. For SCVMM, this should be the same as the FQDN/IP of the SCVMM Server. For VMware, this will be ignored.

  – Required? false

  – Position? named

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- -PlatformUrl <String>

  Specifies the URL that is to be used to access the virtual platform manager. For VMware, this should be the same as the VirtualCenter.VimApiUrl advanced setting. For SCVMM, this will be ignored.

  – Required? falsePosition? named

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- -ServerEmail <String>

  Specifies the email address that will receive server alarm notifications. Consider making it an email group containing multiple recipients that may change over time. For SCVMM, this will be ignored.

  – Required? false

  – Position? named

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- -StorageEmail <String>

  Specifies the email address that will receive storage alarm notifications. Consider making it an email group containing multiple recipients that may change over time. For SCVMM, this will be ignored.

  – Required? false

  – Position? named

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- -SystemEmail <String>

  Specifies the email address that will receive system wide alarm notifications. Consider making it an email group containing multiple recipients that may change over time. For SCVMM, this will be ignored.

  – Required? false

  – Position? named

  – Default value

  – Accept pipeline input? false

— Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

None

Outputs

Hitachi.UCP.CLI.Domain.VirtualPlatformManager

Notes

This command requires the UCP System Administration and UCP View privileges.

Example: Update VMware vitual platform manager

```
C:\PS>$svcacctcred = Get-Credential

C:\PS>Set-UCPVirtualPlatformManager -PlatfromId 1 -Credential
$svcacctcred -PlatformURL https://vcenter.ucp.local/sdk -NetworkEmail
networkadmin@ucp.com -ServerEmail serveradmin@ucp.com -StorageEmail
storageadmin@ucp.com
```

```
PlatformServer    :
PlatformType      : VMware
PlatformUrl       : https://vcenter.ucp.local/sdk
PlatformUsername  : pode\ucpadmin
WebClientUrl      : https://vcenter.ucp.local/vsphere-client
PluginExtension   : {}
Id                : 1
GlobalResourceId  : inst.UCP-123-456-789.vmgr.1
ResourceType      : VirtualManager
InstanceId        : UCP-123-456-789
```

Example: Update SCVMM virtual platform manager

```
C:\PS>$svcacctcred = Get-Credential

C:\PS>Set-UCPVirtualPlatformManager -PlatfromId 1 -Credential
$svcacctcred -PlatformServer scvmm.ucp.local
```

```
PlatformServer   : scvmm.ucp.local
PlatformType     : SCVMM
PlatformUrl      :
PlatformUsername : ucp\ucpadmin
WebClientUrl     :
PluginExtension  : {https://scvmm.ucp.local/ui/extension/
get?platform=SCVMM&version=V2012R2&client=UiConsole}
Id               : 1
GlobalResourceId : inst.UCP-123-456-789.vmgr.1
ResourceType     : VirtualManager
InstanceId       : UCP-123-456-789
```

Related Links

Get-UCPVirtualPlatformManager

Set-UCPVirtualPlatformManagerConnectionInformation

Register-UCPVirtualPlatformManager

Set-UCPVirtualPlatformManagerConnectionInformation

Modifies the connection information used to access the virtual platform manager.

Syntax

Set-UCPVirtualPlatformManagerConnectionInformation -Credential
<PSCredential> [-Force] [-PlatformId] <String> [-PlatformServer
<String>] [-PlatformUrl <String>] [<CommonParameters>]

Description

Parameters

- -Credential <PSCredential>

  Specifies the username, domain, and password that is to be used to manage the virtual platform manager.

  – Required? true

  – Position? named

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- -Force

  Indicates the user should not be prompted to confirm that the virtual platform manager should be updated.

  – Required? false

  – Position? named

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- -PlatformId <String>

  Specifies the ID of the virtual platform manager that is to be updated.

  – Required? true

  – Position? 1

  – Default value

  – Accept pipeline input? true (ByPropertyName)

  – Accept wildcard characters? false

- -PlatformServer <String>

  Specifies the FQDN/IP address that is to be used to access the virtual platform manager. For SCVMM, this should be the same as the FQDN/IP of the SCVMM Server. For VMWare, this will be ignored.

  – Required? false

  – Position? named

  – Default value

  – Accept pipeline input? true (ByPropertyName)

  – Accept wildcard characters? false

- -PlatformUrl <String>

  Specifies the URL that is to be used to access the virtual platform manager. For VMware, this should be the same as the VirtualCenter.VimApiUrl advanced setting.

  – Required? true

  – Position? named

  – Default value

  – Accept pipeline input? true (ByPropertyName)

  – Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

Hitachi.UCP.CLI.Domain.VirtualPlatformManager

Outputs

Hitachi.UCP.CLI.Domain.VirtualPlatformManager

Notes

The UCP System Administrator and UCP View privileges are required.

Example: Modify the credentials used to access the VMware virtual platform manager

```
C:\PS>C:\PS>$cred = Get-Credential

C:\PS>$Platform = Get-UCPVirtualPlatformManager

C:\PS>Set-VirtualPlatformManagerConnectionInformation -PlatformId 1
-Credential $credential -PlatformUrl
    $Platform.PlatformUrl


    Confirm
    Confirm no other users are logged into vCenter and that there are no
active tasks. Virtual Platform Management
    settings will be modified to use 'https://vcenter.ucp.local/sdk'.
UCP extensions to the platform will be updated
    using the admin privileges of 'ucp\ucpadmin'. Proceed with virtual
platform manager update?
    [Y] Yes  [N] No  [S] Suspend  [?] Help (default is "Y"): Y


    # Only credentials are updated in this example. PlatformUrl remains
the same since it is input through the
    pipeline with Get-UCPVirtualPlatformManager.


    PlatformServer    :
    PlatformType      : VMware
    PlatformUrl       : https://vcenter.ucp.local/sdk
    PlatformUsername  : ucp\ucpadmin
    WebClientUrl      : https://vcenter.ucp.local/vsphere-client
    PluginExtensions  : {}
    Id                : 1
    GlobalResourceId  : inst.v2ProductionH-123-456-789.vmgr.1
    ResourceType      : VirtualManager
    InstanceId        : v2ProductionH-123-456-789
```

Example: Modify the credentials used for accessing the SCVMM platform manager

```
C:\PS>$cred = Get-Credential

C:\PS>$Platform = Get-UCPVirtualPlatformManager

C:\PS>Set-VirtualPlatformManagerConnectionInformation -PlatformId 1
-Credential $credential -PlatformServer
    $Platform.PlatformServer


Confirm
Confirm no other users are logged into UCP Director and that there
are no active tasks. Virtual Platform
Management
settings will be set to use 'scvmm.ucp.local'. UCP extensions to the
platform will be updated
using the admin privileges of 'ucp\ucpadmin'. Proceed with virtual
platform manager update?
[Y] Yes  [N] No  [S] Suspend  [?] Help (default is "Y"): Y




PlatformServer    : scvmm.pode.local
PlatformType      : SCVMM
PlatformUrl       :
PlatformUsername : ucp\ucpadmin
WebClientUrl      :
PluginExtensions : {https://scvmm.pode.local/ui/extension/
get?platform=SCVMM&version=V2012R2&client=UiConsole}
Id                : 1
GlobalResourceId : inst.v2ProductionH-123-456-789.vmgr.1
ResourceType      : VirtualManager
InstanceId        : v2ProductionH-123-456-789
```

Related Links

Get-UCPVirtualPlatformManager

Set-UCPWindowsHyperVServiceTemplate

Edits a Windows Hyper-V service template.

Syntax

Set-UCPWindowsHyperVServiceTemplate -BootUnattendFileLocation
<String> -ImageUnattendFileLocation <String> -
BootVolumeStorageSystemId <String> -BootVolumePoolId <Int32> -
BootVolumeSize <Double> [-AttachVolumes
<UcpServiceTemplateVolumeInformation[]>] [-CreateAndAttachVolumes
<UcpServiceTemplateVolumeInformation[]>] [-ComputeVlanIds <String>]
[-ServiceTemplateId] <String> -Name <String> [-Description <String>] -
BootImageId <String> [<CommonParameters>]

Description

Appropriate only when the platform manager is SCVMM.

Properties of the existing Hyper-V service template must be re-entered
with this cmdlet if they are to be preserved.

Parameters

- -BootUnattendFileLocation <String>

  Boot unattend file name and location. Must match that used by the boot
  image associated with this template.

  – Required? true

  – Position? named

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- -ImageUnattendFileLocation <String>

  Image unattend file name and location. Must match that used by the
  boot image associated with this template.

  – Required? true

  – Position? named

  – Default value

- – Accept pipeline input? false

- – Accept wildcard characters? false

- -BootVolumeStorageSystemId <String>

  Storage system in which the boot volume should be created.

  - – Required? true

  - – Position? named

  - – Default value

  - – Accept pipeline input? false

  - – Accept wildcard characters? false

- -BootVolumePoolId <Int32>

  Storage pool in which to create the boot volume.

  - – Required? true

  - – Position? named

  - – Default value

  - – Accept pipeline input? false

  - – Accept wildcard characters? false

- -BootVolumeSize <Double>

  Size of boot volume to create.

  - – Required? true

  - – Position? named

  - – Default value

  - – Accept pipeline input? false

  - – Accept wildcard characters? false

- -AttachVolumes <UcpServiceTemplateVolumeInformation[]>

  Existing non-VMFS volume(s) to attach. Use helper cmdlet New-UCPServiceTemplateVolumeInformation.

  – Required? false

  – Position? named

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- -CreateAndAttachVolumes <UcpServiceTemplateVolumeInformation[]>

  Volume(s) to create. Use helper cmdlet New-UCPServiceTemplateVolumeInformation. Use -Format "none".

  – Required? false

  – Position? named

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- -ComputeVlanIds <String>

  Compute VLAN Id (or range) to be configured on switch ports used by blades which apply this template.

  – Required? false

  – Position? named

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- -ServiceTemplateId <String>

Id of the service template to edit.

- – Required? true

- – Position? 1

- – Default value

- – Accept pipeline input? false

- – Accept wildcard characters? false

- -Name <String>

  Name for the service template being edited.

  - – Required? true

  - – Position? named

  - – Default value

  - – Accept pipeline input? false

  - – Accept wildcard characters? false

- -Description <String>

  - – Required? false

  - – Position? named

  - – Default value

  - – Accept pipeline input? false

  - – Accept wildcard characters? false

- -BootImageId <String>

  Boot image Id to be used by the template.

  - – Required? true

  - – Position? named

- – Default value

- – Accept pipeline input? false

- – Accept wildcard characters? false

- • <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

None

Outputs

Hitachi.UCP.CLI.Domain.UcpWindowsHyperVServiceTemplate

Notes

Requires UCP System Administrator privilege

Example: Rename a Windows Hyper-V service template

```
C:\PS># Place existing template into a variable:
C:\PS>$T = Get-UCPWindowsHyperVServiceTemplate 1

# Edit service template:

C:\PS>Set-UCPWindowsHyperVServiceTemplate -BootUnattendFileLocation
$T.BootUnattendFileLocation
   -ImageUnattendFileLocation $T.ImageUnattendFileLocation -
BootVolumeStorageSystemId $T.BootVolumeStorageSystemId
   -BootVolumePoolId $T.BootVolumePoolId -BootVolumeSize
$T.BootVolumeSizeInBytes -ServiceTemplateId 1 -Name "Windows
   HyperV Service Template1" -BootImageId $T.BootImageId




   BootVolumeStorageSystemId : 92232278
   BootVolumePoolId          : 0
```

```
       BootVolumeSizeInBytes    : 52949672960
       BootUnattendFileLocation :
       \\wds\REMINST\Boot\x64\Windows\BootUnattendFiles\
   Windows2012R2DatacenterBootUnattend.xml
       ImageUnattendFileLocation :
       \\wds\REMINST\Boot\x64\Windows\ImageUnattendFiles\
   Windows2012R2DatacenterImageUnattend.xml
       Id                       : 1
       Name                     : Windows HyperV Service Template1
       BootImageId              : 7
       BootImageName            : Windows2012SP1
       BootImageType            : Windows
       ServiceTemplateType      : WindowsHyperV
       ComputeVlanIds           :
       GlobalResourceId         : inst.UCP-12311.svctmplt.1
       ResourceType             : ServiceTemplate
       InstanceId               : UCP-12311
```

Related Links

New-UCPWindowsHyperVServiceTemplate

Get-UCPWindowsHyperVServiceTemplate

New-UCPServiceTemplateVolumeInformation

Get-UCPImage

Get-UCPStorageSystem

Get-UCPStoragePool

Set-UCPWindowsServiceTemplate

Edit a windows service template.

Syntax

Set-UCPWindowsServiceTemplate -BootUnattendFileLocation <String> -
ImageUnattendFileLocation <String> -BootVolumeStorageSystemId
<Int32> -BootVolumePoolId <Int32> -BootVolumeSize <Double> -
NativeVlanId <Int32> [-AttachVolumes
<UcpServiceTemplateVolumeInformation[]>] [-CreateAndAttachVolumes
<UcpServiceTemplateVolumeInformation[]>] [-ComputeVlanIds <String>]
[-ServiceTemplateId] <String> -Name <String> [-Description <String>] -
BootImageId <String> [<CommonParameters>]

Description

Use this cmdlet for editing existing Windows service templates.

See the description for New-UCPWindowsServiceTemplate.

Parameters

- -BootUnattendFileLocation <String>

  Boot unattend file name and location. Must match that used by the boot image associated with this template.

  – Required? true

  – Position? named

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- -ImageUnattendFileLocation <String>

  Image unattend file name and location. Must match that used by the boot image associated with this template.

  – Required? true

  – Position? named

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- -BootVolumeStorageSystemId <Int32>

  Storage system in which the boot volume should be created.

  – Required? true

  – Position? named

- – Default value

- – Accept pipeline input? false

- – Accept wildcard characters? false

- -BootVolumePoolId <Int32>

  Storage pool in which to create the boot volume.

  - – Required? true

  - – Position? named

  - – Default value

  - – Accept pipeline input? false

  - – Accept wildcard characters? false

- -BootVolumeSize <Double>

  Size of boot volume to create.

  - – Required? true

  - – Position? named

  - – Default value

  - – Accept pipeline input? false

  - – Accept wildcard characters? false

- -NativeVlanId <Int32>

  Native VLAN Id to be configured on switch ports used by blades which apply this template.

  - – Required? true

  - – Position? named

  - – Default value

  - – Accept pipeline input? false

- – Accept wildcard characters? false

- -AttachVolumes <UcpServiceTemplateVolumeInformation[]>

  Existing non-VMFS volume(s) to attach. Use helper cmdlet New-UCPServiceTemplateVolumeInformation.

  - – Required? false

  - – Position? named

  - – Default value

  - – Accept pipeline input? false

  - – Accept wildcard characters? false

- -CreateAndAttachVolumes <UcpServiceTemplateVolumeInformation[]>

  Volume(s) to create. Use helper cmdlet New-UCPServiceTemplateVolumeInformation. Use -Format "none".

  - – Required? false

  - – Position? named

  - – Default value

  - – Accept pipeline input? false

  - – Accept wildcard characters? false

- -ComputeVlanIds <String>

  Compute VLAN Id (or range) to be configured on switch ports used by blades which apply this template.

  - – Required? false

  - – Position? named

  - – Default value

  - – Accept pipeline input? false

  - – Accept wildcard characters? false

- -ServiceTemplateId <String>

  Id of the service template to edit.

  – Required? true

  – Position? 1

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- -Name <String>

  Name for the service template being edited.

  – Required? true

  – Position? named

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- -Description <String>

  – Required? false

  – Position? named

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- -BootImageId <String>

  Boot image Id to be used by the template.

  – Required? true

- – Position? named

- – Default value

- – Accept pipeline input? false

- – Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

String

Outputs

Hitachi.UCP.CLI.Domain.UcpServiceTemplate

Notes

The UCP System Administrator role is required.

Example: Change pool for boot vol and remove vol to create

```
C:\PS># Get service template to edit:

C:\PS>$TemplateToEdit = Get-UCPServiceTemplate 20

# Get new pool:

C:\PS>$StorageSystem = Get-UCPStorageSystem

C:\PS>$Pool2 = Get-UCPStoragePool -StorageSystemId $StorageSystem.id
| Select-Object -Last 1


# Edit windows service template:

C:\PS>Set-UCPWindowsServiceTemplate -ServiceTemplateId 20 -
BootUnattendFileLocation
```

```
    $TemplateToEdit.BootUnattendFileLocation -ImageUnattendFileLocation
$TemplateToEdit.ImageUnattendFileLocation
    -BootVolumeStorageSystemId $StorageSystem.Id -BootVolumePoolId
$Pool2.Id -BootVolumeSize
    $TemplateToEdit.BootVolumeSizeInBytes -ComputeVlanIds
$TemplateToEdit.ComputeVlanIds -Name $TemplateToEdit.Name
    -BootImageId 23



    # This edits the template created in example2 for New-
UCPWindowsServiceTemplate.  The boot volume pool is changed
    to the 2nd pool and the extra volume to create is now removed.



    BootVolumeStorageSystemId        : 93040480
    BootVolumePoolId                 : 2
    BootVolumeSizeInBytes            : 120949672960
    BootUnattendFileLocation         :
    \\10.21.24.247\REMINST\Boot\x64\Windows\BootUnattendFiles\
Windows2012DatacenterBootUnattend.xml
    ImageUnattendFileLocation        :
    \\10.21.24.247\REMINST\Boot\x64\Windows\ImageUnattendFiles\
TemplateWindows201-StdServer-ImageUnattend.xml
    Id                               : 20
    Name                             : Win2012
    BootImageId                      : 23
    BootImageName                    : Windows Server 2012
SERVERDATACENTER
    ServiceTemplateType              : Windows
    ComputeVlanIds                   : 26-29
    GlobalResourceId                 : inst.UCP-123-456-
789.svctmplt.20
    ResourceType                     : ServiceTemplate
    InstanceId                       : UCP-123-456-789
```

Related Links

New-UCPWindowsServiceTemplate

New-UCPServiceTemplateVolumeInformation

Get-UCPWindowsServiceTemplate

Get-UCPStorageSystem

Get-UCPStoragePool

Set-UCPZone

Modifies an existing zone.

Syntax

Set-UCPZone [-FabricId] <String> [-ZoneId] <String> -InitiatorWwn <String> -TargetWwn <String> [<CommonParameters>]

Description

Modifies an existing zone.

The zone may be specified in the pipeline. Alternatively, the FabricId and ZoneId parameter may be used.

Parameters

- -FabricId <String>

  Specifies the ID of the zone's fabric. Use Get-UCPFabric to discover fabric IDs.

  – Required? true

  – Position? 1

  – Default value

  – Accept pipeline input? true (ByPropertyName)

  – Accept wildcard characters? false

- -ZoneId <String>

  Specifies the ID for the zone that is to be modified.

  – Required? true

  – Position? 2

  – Default value

  – Accept pipeline input? true (ByPropertyName)

- – Accept wildcard characters? false

- -InitiatorWwn <String>

  Specifies the initiator's WWN for the zone.

  - – Required? true

  - – Position? named

  - – Default value

  - – Accept pipeline input? true (ByPropertyName)

  - – Accept wildcard characters? false

- -TargetWwn <String>

  Specifies the target's WWN for the zone.

  - – Required? true

  - – Position? named

  - – Default value

  - – Accept pipeline input? true (ByPropertyName)

  - – Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

Hitachi.UCP.CLI.Domain.Zone

Outputs

Hitachi.UCP.CLI.Domain.Zone

Notes

The UCP Storage Administrator and UCP View privileges are required.

Example: Modify a zone's target WWN

```
C:\PS>Get-UCPZone 2 ExampleZone | Set-UCPZone -TargetWwn
50.06.0E.80.06.CF.72.12 | Format-List
```

```
Name              : ExampleZone
FabricId          : 2
PortMembers       : {50.00.08.70.00.53.79.F0, 50.06.0E.80.06.CF.72.12}
InitiatorWWN      : 50.00.08.70.00.53.79.F0
TargetWWN         : 50.06.0E.80.06.CF.72.12
Id                : ExampleZone
GlobalResourceId  : inst.v2ProductionB-123-456-
789.fc.1.fab.2.zone.ExampleZone
ResourceType      : StorageZone
InstanceId        : v2ProductionB-123-456-789
```

Related Links

Get-UCPZone

Remove-UCPZone

Get-UCPFabric

Start-UCPServer

Powers on a server.

Syntax

Start-UCPServer [-ServerId] <String> [<CommonParameters>]

Description

Powers on a specified server. If the server is an ESXi host, the pending image will be deployed.

The server may be specified in the pipeline. Alternatively, the ServerId parameter may be used.

Parameters

- -ServerId <String>

  Specifies the ID of the server that is to be powered on.

  – Required? true

  – Position? 1

  – Default value

  – Accept pipeline input? true (ByPropertyName)

  – Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

Hitachi.UCP.CLI.Domain.Server

Outputs

Hitachi.UCP.CLI.Domain.Server

Notes

The UCP Server Administrator and UCP View privileges are required.

Example: Power on a Server

```
C:\PS>Start-UCPServer 6e37f410-b4a7-11e1-94b0-c6aca3093fbb | Format-List
ServerId, HostInformation, PowerState
```

```
ServerId          : 6e37f410-b4a7-11e1-94b0-c6aca3093fbb
HostInformation : esx04.ucp.local
PowerState        : On
```

Related Links

Get-UCPServer

Stop-UCPServer

Reset-UCPServer

Set-UCPServerImage

Deploy-UCPServer

Set-UCPServerLocationId

Stop-UCPServer

Powers off a server.

Syntax

Stop-UCPServer [-ServerId] <String> [-Force] [<CommonParameters>]

Description

Powers off a server. When the server is an ESXi host, UCP Director expects that host to be in maintenance mode before powering it off unless the Force switch has been specified.

When the server's boot type is set to Custom, the server will be powered off regardless of whether the Force switch is present.

The server may be specified in the pipeline. Alternatively, the ServerId parameter may be used.

Parameters

- -ServerId <String>

  Specifies the ID of the server that is to be powered off.

  – Required? true

  – Position? 1

  – Default value

  – Accept pipeline input? true (ByPropertyName)

  – Accept wildcard characters? false

- -Force

  Specifies that the server should be powered off even if it is not in maintenance mode.

  – Required? false

  – Position? named

  – Default value

  – Accept pipeline input? false

  – Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

Hitachi.UCP.CLI.Domain.Server

Outputs

Hitachi.UCP.CLI.Domain.Server

Notes

The UCP Server Administrator and UCP View privileges are required.

Example: Power off a server

```
C:\PS>Stop-UCPServer 6e37f410-b4a7-11e1-94b0-c6aca3093fbb | Format-List
ServerId, HostInformation, PowerState

Confirm
Proceed stopping server?
[Y] Yes  [N] No  [S] Suspend  [?] Help (default is "Y"): Y




ServerId        : 6e37f410-b4a7-11e1-94b0-c6aca3093fbb
HostInformation : esx04.ucp.local
PowerState      : Off
```

Related Links

Get-UCPServer

Stop-UCPServer

Reset-UCPServer

Set-UCPServerImage

Deploy-UCPServer

Set-UCPServerLocationId

Update-UCPActiveImage

Updates active ESXi images.

Syntax

Update-UCPActiveImage [<CommonParameters>]

Description

An ESXi image is "active" when it is applied to a server or servers. With this CLI command, UCP checks repository locations for newer packages than those used by the active image(s). Upon finding newer packages, an updated copy is made of active image(s).

Parameters

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

Hitachi.UCP.CLI.Domain.EsxiImage

Outputs

Hitachi.UCP.CLI.Domain.EsxiImage

Notes

The UCP Server Administrator and UCP View privileges are required.

When updated copies are made of active images, email notifications are sent to the recipient list stored in Image Update Settings.

Example: Update active ESXi images

```
C:\PS>Update-UCPActiveImage


# This cmdlet launches the job "Update Active Images" but does not
return any information in the CLI.
```

Related Links

Set-UCPImageUpdateNotifications

Set-UCPRepositoryLocation

Get-UCPRepositoryLocation

Get-UCPImageUpdateNotification

Update-UCPChassisAndServersFirmware

Updates firmware on chassis and all the servers within the specified chassis.

Syntax

Update-UCPChassisAndServersFirmware [-ChassisId] <String>
[<CommonParameters>]

Description

Updates firmware on chassis and all the servers within the specified chassis when new firmware versions are available. When both chassis and servers have available firmware versions,UCP Director will update chassis firmware prior to updating firmware on servers.

Workload on vCenter hosts will be migrated to other hosts in the cluster using vMotion when the host is being updated. After the update the workload will be migrated back.

For custom boot servers, users should ensure that workload is shutdown before starting to update.

Parameters

- -ChassisId <String>

    – Required? true

    – Position? 1

    – Default value

    – Accept pipeline input? true (ByPropertyName)

    – Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

None

Outputs

Hitachi.UCP.CLI.Domain.Chassis

Notes

The UCP System Administrator role is required.

The available firmware update is uploaded into UCP with Copy-UCPUpdatePackage.

Example: Update a single chassis and its associated servers

```
C:\PS>Update-ChassisAndServersFirmware -ChassisId Hitachi_0_323GG-
RE3A1NBX1-Y00000009


Confirm
Proceed updating Firmware?
[Y] Yes  [N] No  [S] Suspend  [?] Help (default is "Y"): y




HostInformationList              : {r1-hi-cb500-1-b04.pode.local, r1-hi-
cb500-1-b01.pode.local,

                                   r1-hi-cb500-1-b06.pode.local, ...}
ChassisId                        : Hitachi_0_323GG-RE3A1NBX1-Y00000009
FanInformationList               : {0, 1, 2, 3...}
ManagementModuleInformationList  : {0, 1}
SwitchInformationList            : {0, 1, 2, 3}
BladeInformationList             : {4, 1, 6, 0...}
PowerSupplyModuleInformationList : {0, 1, 2, 3}
ChassisPowerState                : On
ChassisLIDState                  : Off
ChassisHealth                    : Healthy
```

```
        LIDColor                          : Blue
        SerialNumber                      : 323GG-RE3A1NBX1-Y00000009
        ModelName                         : RE3A1NBX1-Y000009
        ModelType                         : Hitachi Compute Blade 500
        ModelNumber                       : GG-RE3A1NBX1-Y
        ChassisName                       : RE3A1NBX1-Y000009
        ErrorCount                        : 16
        WarningCount                      : 35
        InformationCount                  : 516
        MaintenanceMode                   : False
        Connectivity                      : True
        LastRefreshed                     : 9/24/2013 10:56:22 PM
        SvpIp                             : 10.21.67.10
        SvpSubnetMask                     : 255.255.255.0
        SvpDefaultGateway                 : 10.21.67.1
        SvpWebconsoleUrl                  : https://10.21.67.10/
        AvailableFirmwareVersion          :
        AvailableDictionaryVersion        :
        AvailableParameterVersion         :
        Id                                : Hitachi_0_323GG-RE3A1NBX1-Y00000009
        GlobalResourceId                  : inst.v2ProductionE-123-456-
        789.cmp.1.ch.Hitachi_0_323GG-RE3A1NBX1-Y00000009
        ResourceType                      : Chassis
        InstanceId                        : v2ProductionE-123-456-789
```

Example: Update all chassis and their associated servers

```
        C:\PS>Get-Chassis | Update-ChassisAndServersFirmware

        Confirm
        Proceed updating Firmware?
        [Y] Yes  [N] No  [S] Suspend  [?] Help (default is "Y"): y




        HostInformationList               : {r1-hi-cb500-1-b04.pode.local, r1-hi-
        cb500-1-b01.pode.local,

                                            r1-hi-cb500-1-b06.pode.local, ...}
        ChassisId                         : Hitachi_0_323GG-RE3A1NBX1-Y00000009
        FanInformationList                : {0, 1, 2, 3...}
        ManagementModuleInformationList   : {0, 1}
        SwitchInformationList             : {0, 1, 2, 3}
        BladeInformationList              : {4, 1, 6, 0...}
        PowerSupplyModuleInformationList  : {0, 1, 2, 3}
        ChassisPowerState                 : On
        ChassisLIDState                   : Off
        ChassisHealth                     : Healthy
        LIDColor                          : Blue
        SerialNumber                      : 323GG-RE3A1NBX1-Y00000009
        ModelName                         : RE3A1NBX1-Y000009
```

```
ModelType                       : Hitachi Compute Blade 500
ModelNumber                     : GG-RE3A1NBX1-Y
ChassisName                     : RE3A1NBX1-Y000009
ErrorCount                      : 16
WarningCount                    : 35
InformationCount                : 516
MaintenanceMode                 : False
Connectivity                    : True
LastRefreshed                   : 9/24/2013 10:56:22 PM
SvpIp                           : 10.21.67.10
SvpSubnetMask                   : 255.255.255.0
SvpDefaultGateway               : 10.21.67.1
SvpWebconsoleUrl                : https://10.21.67.10/
AvailableFirmwareVersion        :
AvailableDictionaryVersion      :
AvailableParameterVersion       :
Id                              : Hitachi_0_323GG-RE3A1NBX1-Y00000009
GlobalResourceId                : inst.v2ProductionE-123-456-
789.cmp.1.ch.Hitachi_0_323GG-RE3A1NBX1-Y00000009
ResourceType                    : Chassis
InstanceId                      : v2ProductionE-123-456-789
```

Related Links

Get-UCPServer

Get-UCPChassis

Update-UCPChassisFirmware

Update-UCPServerFirmware

Update-UCPChassisFirmware

Updates UCP chassis firmware.

Syntax

Update-UCPChassisFirmware [-ChassisId] <String>
[<CommonParameters>]

Description

Performs firmware updates on the specified chassis.

This command should be executed prior to performing firmware update on
any server that belongs to this chassis.

Typically, a chassis has three update files (Firmware, Dictionary, Parameter). A new chassis update package may not contain all three files, in some cases, only firmware and dictionary files have new updates.

Parameters

- -ChassisId <String>

  Id of the chassis to update.

  – Required? true

  – Position? 1

  – Default value

  – Accept pipeline input? true (ByPropertyName)

  – Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

None

Outputs

Hitachi.UCP.CLI.Domain.Chassis

Notes

The UCP System Administrator role is required.

The available firmware update is uploaded into UCP with Copy-UCPUpdatePackage.

Example: Perform firmware update on a specific chassis

```
C:\PS>Update-ChassisFirmware -ChassisId Hitachi_0_323GG-RE3A1NBX1-
Y00000009

Confirm
Proceed updating Firmware?
[Y] Yes  [N] No  [S] Suspend  [?] Help (default is "Y"): y




HostInformationList              : {r1-hi-cb500-1-b04.pode.local, r1-hi-
cb500-1-b01.pode.local, r1-hi-cb500-1-b06.pode.local, r1-hi-cb500-1-
b00.pode.local...}
ChassisId                        : Hitachi_0_323GG-RE3A1NBX1-Y00000009
FanInformationList               : {0, 1, 2, 3...}
ManagementModuleInformationList  : {0, 1}
SwitchInformationList            : {0, 1, 2, 3}
BladeInformationList             : {4, 1, 6, 0...}
PowerSupplyModuleInformationList : {0, 1, 2, 3}
ChassisPowerState                : On
ChassisLIDState                  : Off
ChassisHealth                    : Healthy
LIDColor                         : Blue
SerialNumber                     : 323GG-RE3A1NBX1-Y00000009
ModelName                        : RE3A1NBX1-Y000009
ModelType                        : Hitachi Compute Blade 500
ModelNumber                      : GG-RE3A1NBX1-Y
ChassisName                      : RE3A1NBX1-Y000009
ErrorCount                       : 10
WarningCount                     : 23
InformationCount                 : 396
MaintenanceMode                  : False
Connectivity                     : True
LastRefreshed                    : 9/10/2013 7:03:49 PM
SvpIp                            : 10.21.67.10
SvpSubnetMask                    : 255.255.255.0
SvpDefaultGateway                : 10.21.67.1
SvpWebconsoleUrl                 : https://10.21.67.10/
AvailableFirmwareVersion         :
AvailableDictionaryVersion       :
AvailableParameterVersion        :
```

```
Id                            : Hitachi_0_323GG-RE3A1NBX1-Y00000009
GlobalResourceId              : inst.v2ProductionE-123-456-
789.cmp.1.ch.Hitachi_0_323GG-RE3A1NBX1-Y00000009
ResourceType                  : Chassis
InstanceId                    : v2ProductionE-123-456-789
```

Example: Perform update on all chassis in UCP

```
C:\PS>Get-Chassis | Update-UCPChassisFirmware

Confirm
Proceed updating Firmware?
[Y] Yes  [N] No  [S] Suspend  [?] Help (default is "Y"): y




HostInformationList           : {r1-hi-cb500-1-b04.pode.local, r1-hi-
cb500-1-b01.pode.local, r1-hi-cb500-1-b06.pode.local, r1-hi-cb500-1-
b00.pode.local...}
ChassisId                     : Hitachi_0_323GG-RE3A1NBX1-Y00000009
FanInformationList            : {0, 1, 2, 3...}
ManagementModuleInformationList : {0, 1}
SwitchInformationList         : {0, 1, 2, 3}
BladeInformationList          : {4, 1, 6, 0...}
PowerSupplyModuleInformationList : {0, 1, 2, 3}
ChassisPowerState             : On
ChassisLIDState               : Off
ChassisHealth                 : Healthy
LIDColor                      : Blue
SerialNumber                  : 323GG-RE3A1NBX1-Y00000009
ModelName                     : RE3A1NBX1-Y000009
ModelType                     : Hitachi Compute Blade 500
ModelNumber                   : GG-RE3A1NBX1-Y
ChassisName                   : RE3A1NBX1-Y000009
ErrorCount                    : 10
WarningCount                  : 23
InformationCount              : 396
MaintenanceMode               : False
Connectivity                  : True
LastRefreshed                 : 9/10/2013 7:03:49 PM
SvpIp                         : 10.21.67.10
SvpSubnetMask                 : 255.255.255.0
SvpDefaultGateway             : 10.21.67.1
SvpWebconsoleUrl              : https://10.21.67.10/
AvailableFirmwareVersion      :
AvailableDictionaryVersion    :
AvailableParameterVersion     :
Id                            : Hitachi_0_323GG-RE3A1NBX1-Y00000009
GlobalResourceId              : inst.v2ProductionE-123-456-
789.cmp.1.ch.Hitachi_0_323GG-RE3A1NBX1-Y00000009
```

```
ResourceType                          : Chassis
InstanceId                            : v2ProductionE-123-456-789
```

Related Links

Copy-UCPUpdatePackage

Get-UCPChassis

Update-UCPChassisAndServersFirmware

Update-UCPEthernetSwitchFirmware

Updates Ethernet switch firmware.

Syntax

Update-UCPEthernetSwitchFirmware [[-EthernetSwitchId] <String>]
[<CommonParameters>]

Description

Performs firmware update on one or all Ethernet switches in UCP Ethernet
inventory.

Before the update firmware process starts, UCP Director validates the
redundancy of the physical network path. This validation ensures all
services remain operational when an Ethernet switch undergoes firmware
update process. Users should ensure the hosts have redundant paths setup
for all workloads, if not services should be shutdown for duration of
update.

Use ID to update a specific switch. When no ID is specified, UCP Director
will update all the Ethernet switches sequentially, one path at a time.

Parameters

- -EthernetSwitchId <String>

  – Required? false

  – Position? 1

  – Default value

- — Accept pipeline input? true (ByPropertyName)

  - — Accept wildcard characters? false

- • <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

None

Outputs

Hitachi.UCP.CLI.Domain.EthernetSwitch

Notes

The UCP System Administrator role is required.

The available firmware update is uploaded into UCP with Copy-UCPUpdatePackage.

Example: Update firmware on specific ethernet switch

```
C:\PS>Update-UCPEthernetSwitchFirmware -EthernetSwitchId 1

Confirm
Proceed updating Firmware?
[Y] Yes  [N] No  [S] Suspend  [?] Help (default is "Y"): Y




Type                  : Access
Status                : Active
Name                  : R1-HI-CB500-1-U03-6746A
Make                  : Brocade
Model                 : VDX6746
SerialNumber          : BRK0445G00X
OSVersion             : 3.0.0_dcb
AvailableFirmwareVersion :
```

```
IpAddress               : 10.21.67.214
UserName                : ucpadmin
Ports                   : {TenGigabitEthernet 0/1, TenGigabitEthernet
0/2,

                          TenGigabitEthernet 0/3, TenGigabitEthernet 0/
4...}
Id                      : 1
GlobalResourceId        : inst.v2ProductionE-123-456-789.eth.1.net.1
ResourceType            : EthernetSwitch
InstanceId              : v2ProductionE-123-456-789
```

Example: Execute firmware update on all the Ethernet switches in UCP inventory

```
C:\PS>Update-UCPEthernetSwitchFirmware

Confirm
Proceed updating Firmware?
[Y] Yes  [N] No  [S] Suspend  [?] Help (default is "Y"): y




Type                    : Access
Status                  : Active
Name                    : R1-HI-CB500-1-U03-6746A
Make                    : Brocade
Model                   : VDX6746
SerialNumber            : BRK0445G00X
OSVersion               : 3.0.0_dcb
AvailableFirmwareVersion :
IpAddress               : 10.21.67.214
UserName                : ucpadmin
Ports                   : {TenGigabitEthernet 0/1, TenGigabitEthernet
0/2,TenGigabitEthernet 0/3,
                          TenGigabitEthernet 0/4...}
Id                      : 15
GlobalResourceId        : inst.v2ProductionE-123-456-789.eth.1.net.15
ResourceType            : EthernetSwitch
InstanceId              : v2ProductionE-123-456-789

Type                    : Access
Status                  : Active
Name                    : R1-HI-CB500-1-U03-6746B
Make                    : Brocade
Model                   : VDX6746
SerialNumber            : BRK0445G01D
OSVersion               : 3.0.0_dcb
AvailableFirmwareVersion :
IpAddress               : 10.21.67.215
UserName                : ucpadmin
```

```
Ports                     : {TenGigabitEthernet 0/1, TenGigabitEthernet
0/2, TenGigabitEthernet 0/3,
                            TenGigabitEthernet 0/4...}
Id                        : 19
GlobalResourceId          : inst.v2ProductionE-123-456-789.eth.1.net.19
ResourceType              : EthernetSwitch
InstanceId                : v2ProductionE-123-456-789

Type                      : Aggregate
Status                    : Active
Name                      : R1-BR-6720-A-U41
Make                      : Brocade
Model                     : VDX6720-24
SerialNumber              : BKN2510H00A
OSVersion                 : 3.0.1aa
AvailableFirmwareVersion  :
IpAddress                 : 10.21.67.212
UserName                  : ucpadmin
Ports                     : {TenGigabitEthernet 0/1, TenGigabitEthernet
0/2, TenGigabitEthernet 0/3,
                            TenGigabitEthernet 0/4...}
Id                        : 20
GlobalResourceId          : inst.v2ProductionE-123-456-789.eth.1.net.20
ResourceType              : EthernetSwitch
InstanceId                : v2ProductionE-123-456-789

Type                      : Aggregate
Status                    : Active
Name                      : R1-BR-6720-B-U39
Make                      : Brocade
Model                     : VDX6720-24
SerialNumber              : BKN2510H00B
OSVersion                 : 3.0.1aa
AvailableFirmwareVersion  :
IpAddress                 : 10.21.67.213
UserName                  : ucpadmin
Ports                     : {TenGigabitEthernet 0/1, TenGigabitEthernet
0/2, TenGigabitEthernet 0/3,
                            TenGigabitEthernet 0/4...}
Id                        : 21
GlobalResourceId          : inst.v2ProductionE-123-456-789.eth.1.net.21
ResourceType              : EthernetSwitch
InstanceId                : v2ProductionE-123-456-789
```

Related Links

New-UCPEthernetSwitch

Get-UCPEthernetSwitch

Remove-UCPEthernetSwitch

Update-UCPFibreChannelSwitchFirmware

Updates UCP fibre channel switch firmware.

Syntax

Update-UCPFibreChannelSwitchFirmware [[-FibreChannelSwitchId] <String>] [<CommonParameters>]

Description

Performs firmware update on one or all Fibre channel switches in UCP Fibre Channel inventory.

Before the update firmware process starts, UCP Director validates the redundancy of the physical fibre channel path. This validation ensures that all services remain operational when a Fibre channel switch undergoes firmware update process. Users should ensure that the hosts have redundant paths setup for all workloads. If not, services should be shutdown for the duration of the update.

Use ID to update a specific switch. When no ID is specified, UCP Director will update all the Fibre channel switches sequentially, one path at a time.

Parameters

- -FibreChannelSwitchId <String>

    – Required? false

    – Position? 1

    – Default value

    – Accept pipeline input? true (ByPropertyName)

    – Accept wildcard characters? false

- <CommonParameters>

    This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

None

Outputs

Hitachi.UCP.CLI.Domain.FibreChannelSwitch

Notes

The UCP System Administrator role is required.

The available firmware update is uploaded into UCP with Copy-UCPUpdatePackage.

Example: Update a specific Fibre channel

```
C:\PS>Get-FibreChannelSwitch -Id 4 | Update-
UCPFibreChannelSwitchFirmware

Confirm
Proceed updating Firmware?
[Y] Yes  [N] No  [S] Suspend  [?] Help (default is "Y"): y
```

```
IpAddress                : 10.21.67.178
Username                 : ucpadmin
FirmwareVersion          : v7.0.2c
AvailableFirmwareVersion :
Manufacturer             : Brocade
Model                    : Brocade 5460
Name                     : R1-HI-CB500-1-U03-5460A
SerialNumber             : AUM0421H02A
Status                   : Active
SwitchTopologyRole       : Edge Switch
FabricId                 : 2
SwitchPorts              : {0, 1, 2, 3...}
Id                       : 4
GlobalResourceId         : inst.v2ProductionE-123-456-789.fc.1.fcs.4
ResourceType             : FibreChannelSwitch
InstanceId               : v2ProductionE-123-456-789
```

Example: Update all Fibre channel switches

```
C:\PS>Update-UCPFibreChannelSwitchFirmware
```

```
Confirm
Proceed updating Firmware?
[Y] Yes  [N] No  [S] Suspend  [?] Help (default is "Y"): y




IpAddress                 : 10.21.67.178
Username                  : ucpadmin
FirmwareVersion           : v7.0.2c
AvailableFirmwareVersion  :
Manufacturer              : Brocade
Model                     : Brocade 5460
Name                      : R1-HI-CB500-1-U03-5460A
SerialNumber              : AUM0421H02A
Status                    : Active
SwitchTopologyRole        : Edge Switch
FabricId                  : 2
SwitchPorts               : {0, 1, 2, 3...}
Id                        : 14
GlobalResourceId          : inst.v2ProductionE-123-456-789.fc.1.fcs.14
ResourceType              : FibreChannelSwitch
InstanceId                : v2ProductionE-123-456-789

IpAddress                 : 10.21.67.170
Username                  : ucpadmin
FirmwareVersion           : v7.1.1
AvailableFirmwareVersion  :
Manufacturer              : Brocade
Model                     : Brocade 6510
Name                      : R1-BR-6510-A-U38
SerialNumber              : BRW2513H068
Status                    : Active
SwitchTopologyRole        : Core Switch
FabricId                  : 2
SwitchPorts               : {0, 1, 2, 3...}
Id                        : 15
GlobalResourceId          : inst.v2ProductionE-123-456-789.fc.1.fcs.15
ResourceType              : FibreChannelSwitch
InstanceId                : v2ProductionE-123-456-789

IpAddress                 : 10.21.67.179
Username                  : ucpadmin
FirmwareVersion           : v7.0.2c
AvailableFirmwareVersion  :
Manufacturer              : Brocade
Model                     : Brocade 5460
Name                      : R1-HI-CB500-1-U03-5460B
SerialNumber              : AUM0442G032
Status                    : Active
SwitchTopologyRole        : Edge Switch
```

```
FabricId               : 1
SwitchPorts            : {0, 1, 2, 3...}
Id                     : 16
GlobalResourceId       : inst.v2ProductionE-123-456-789.fc.1.fcs.16
ResourceType           : FibreChannelSwitch
InstanceId             : v2ProductionE-123-456-789


IpAddress              : 10.21.67.171
Username               : ucpadmin
FirmwareVersion        : v7.1.1
AvailableFirmwareVersion :
Manufacturer           : Brocade
Model                  : Brocade 6510
Name                   : R1-BR-6510-B-U37
SerialNumber           : BRW2513H001
Status                 : Active
SwitchTopologyRole     : Core Switch
FabricId               : 1
SwitchPorts            : {0, 1, 2, 3...}
Id                     : 17
GlobalResourceId       : inst.v2ProductionE-123-456-789.fc.1.fcs.17
ResourceType           : FibreChannelSwitch
InstanceId             : v2ProductionE-123-456-789
```

Related Links

Get-UCPFibreChannelSwitch

Update-UCPServerFirmware

Update server firmware.

Syntax

Update-UCPServerFirmware [-ServerId] <String>
[<CommonParameters>]

Description

Server update bundles include EFI BIOS and BMC firmware. The bundle must be uploaded into UCP before it becomes an "available update" for servers.

Update chassis is essential prior to updating firmware on servers. This command will fail if there is an available update for the chassis.

Servers will be rebooted during the update. The user is responsible to ensure that server workloads are protected.

Parameters

- -ServerId <String>

  Server that should be updated.

  – Required? true

  – Position? 1

  – Default value

  – Accept pipeline input? true (ByPropertyName)

  – Accept wildcard characters? false

- <CommonParameters>

  This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see about_ CommonParameters (http://go.microsoft.com/fwlink/ ?LinkID=113216).

Inputs

String

Outputs

Hitachi.UCP.CLI.Domain.Server

Notes

The UCP System Administrator role is required.

The available firmware update is uploaded into UCP with Copy-UCPUpdatePackage.

Example: Update firmware on one server

```
C:\PS>Update-UCPServerFirmware -ServerId 64785278-b41b-11e1-a230-
ea2f318bebfc

Confirm
```

```
Proceed updating Firmware?
[Y] Yes  [N] No  [S] Suspend  [?] Help (default is "Y"): y




HostInformation            : r1-hi-cb500-1-b04.pode.local
ServerDeploymentInformation : HitachiESXiImage
ServerId                   : 64785278-b41b-11e1-a230-ea2f318bebfc
SerialNumber               : 323GGAGC0A1-TNNX14Y00000015
ServerUuid                 : 64785278-b41b-11e1-a230-ea2f318bebfc
Manufacturer               : HITACHI
Model                      : Compute Blade 520HA1
ModelNumber                : GGAGC0A1-TNNX14Y
BootType                   : ESXiStateless
ChassisSerialNumber        : 323GG-RE3A1NBX1-Y00000009
PartitionNumber            : 4
PrimarySlot                : 4
PartitionWidth             : 1
PartitionValid             : True
CpuType                    : Intel(R) Xeon(R) CPU E5-2630L 0 @ 2.00GHz
CoresPerCPU                : 6
NumberOfCpus               : 0
CpuFrequencyInGHz          : 2
CpuCacheSizeInMB           : 30
MemoryAmountInGB           : 96
BmcIp                      : 10.21.67.15
BmcSubnetMask              : 255.255.255.0
BmcDefaultGateway          : 10.21.67.1
BmcDhcpEnabled             : False
PowerState                 : Off
LIDState                   : On
LIDColor                   : Blue
Health                     : Healthy
ErrorCount                 : 0
WarningCount               : 2
InformationCount           : 2
LastRefreshed              : 9/10/2013 7:30:21 PM
CurrentFirmwareVersion     : 01-59
PendingFirmwareVersion     :
AvailableFirmwareVersion   :
EfiFirmwareVersionCurrent  : 04-06
EfiFirmwareVersionPending  :
BmcFirmwareVersionCurrent  : 01-56
BmcFirmwareVersionPending  :
HardwareMaintenanceMode    :
MacType                    : Additional
WwnType                    : Additional
OperatingMode              : Basic
ConsoleUri                 :
NicInformationList         : {Emulex 10Gb 4-port converged network
mezzanine card,
```

```
                                    Emulex 10Gb 4-port converged network
mezzanine card,
                                    Emulex 10Gb 4-port converged network
mezzanine card,
                                    Emulex 10Gb 4-port converged network
mezzanine card}
HbaInformationList          : {Hitachi 8Gb 2-port fibre channel
mezzanine card,
                             Hitachi 8Gb 2-port fibre channel mezzanine
card}
Id                          : 64785278-b41b-11e1-a230-ea2f318bebfc
GlobalResourceId            : inst.v2ProductionB-123-456-
789.cmp.1.ser.64785278-b41b-11e1-a230-ea2f318bebfc
ResourceType                : Server
InstanceId                  : v2ProductionB-123-456-789
```

Related Links

Copy-UCPUpdatePackage

Update-UCPChassisAndServersFirmware

Update-UCPChassisFirmware

Hitachi Data Systems

Corporate Headquarters
2845 Lafayette Street
Santa Clara, California 95050
U.S.A.
www.hds.com

Regional Contact Information

Americas
+1 408 970 1000
info@hds.com

Europe, Middle East, and Africa
+44 (0)1753 618000
info.emea@hds.com

Asia Pacific
+852 3189 7900
hds.marketing.apac@hds.com

⊚ Hitachi Data Systems

MK-92UCP012-05