



## Deploy Golden Templates at customer site

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### Host permissions

The person running the Golden Template process must have these permissions on the ESXi hosts:

- administrator
- resource pool administrator
- network administrator

### Automation tools

Download and then install the following tools on the client from which the automation will be run.

Software	Version	Download
GoldenTemplateTool zip file	10.0(1)	Go to <a href="http://cisco.com/en/US/products/ps12586/tsd_products_support_series_home.html">http://cisco.com/en/US/products/ps12586/tsd_products_support_series_home.html</a> . Click <b>Download Software</b> . Then select Packaged Contact Center Enterprise Deployment Scripts.

Software	Version	Download
PowerCLI	5.0, 32-bit	<a href="http://downloads.vmware.com/d/details/pcli50/dHRAYnQIKmpiZHAJQ==">http://downloads.vmware.com/d/details/pcli50/dHRAYnQIKmpiZHAJQ==</a>
OVF tool	32-bit	<a href="https://my.vmware.com/group/vmware/details?downloadGroup=OVFTOOL350&amp;productId=353">https://my.vmware.com/group/vmware/details?downloadGroup=OVFTOOL350&amp;productId=353</a> <b>Note</b> WinImage is shareware. If you choose to not purchase a licensed copy, you will see pop-ups when you run this tool. Clicking <b>No</b> at the pop-ups allows you to proceed.
WinImage	8.5, 32-bit	<a href="http://winimage.com/download.htm">http://winimage.com/download.htm</a> .
Microsoft Excel	Release 2003 or later	--

## Complete automation spreadsheet for export

Complete the automation spreadsheet for export, filling in *only* the columns in each row that the export automation script requires to create export OVF's in the OVF subfolder of the GoldenTemplate\_10 directory. Leave all other columns blank.

Fill in rows for only the following VM\_TYPES:

- UCCE\_CallServer\_SideA
- UCCE\_DataServer\_SideA
- CVP\_Call/VXML\_1\_SideA
- CVP\_RPT\_SideB
- CVP\_OAMP\_SideA
- CUCM\_PUB\_SideA
- CUIC\_PUB\_SideA
- FINESSE\_PRIMARY\_SideA

During the import phase, these templates can be used to create the VMs for the remaining servers including those that are subscribers and those that reside on side B.

**Table 1: Required columns for automation spreadsheet for export**

Column	Description	Example
OPERATION	Select <b>ExportServer</b> to specify the operation you are performing with the script.  Exports a compressed OVF file from the VMware environment where the template systems were installed.	ExportServer

Column	Description	Example
SOURCE_HOST_IP	The IP address or the DNS name of the ESXi hosting the VM to be exported.	xx.xx.xxx.xxx
SOURCE_DATASTORE_NAME	The name of the Datastore defined in VMware.	datastore1(3)
SOURCE_VMNAME	The name of the VM. Cannot contain spaces or special characters. Maximum of 32 characters.	CallServerSideA
GOLDEN_TEMPLATE_NAME	The name of the Golden Template that will be exported. Cannot contain spaces or special characters. Maximum of 32 characters.	My_CallServerA

## Run automation script for export

The disk space required for the exported servers is from 50GB - 70GB, depending on what servers are exported.

### Procedure

- Step 1** From the GoldenTemplate\_V-10-pcce directory, launch VMware vSphere PowerCLI (32-Bit) to run the automation script.
- Step 2** Enter this command to change the execution policy so you can run unsigned scripts that you write locally as well as signed scripts from other users: **Set-ExecutionPolicy Unrestricted -Force**.
- Step 3** Enter this command so that the VMware vSphere PowerCLI does not use a proxy server to connect to the vSphere server: **Set-PowerCLIConfiguration -ProxyPolicy NoProxy -Confirm:\$false**.
- Step 4** Enter a command using the following syntax:

Syntax:	Example:
<pre>&lt;Path to the script&gt; &lt;Full Path of the spread sheet&gt; &lt;vCenter IP / Hostname&gt; &lt;vCenter User&gt; &lt;Password to connect to vCenter&gt;</pre>	<pre>.\scripts\DeployVM.PS1 c:\GoldenTemplate_VMDataSheet_V10.xls testvCenter testuser testpassword</pre>

This starts a script that creates entries in the OVF folders in the GoldenTemplate\_10 directory. It will typically complete in several hours. If there are errors, the script will fail but will keep running. The errors display on the screen and are stored in the log file. Completion of the script generates a status report in the Report folder. The status report has a link to the Log file.

## Transport to customer

During import, the operation mode is set to ImportServer, so that the golden template process imports the exported OVF templates at the customer site.

Bring your laptop to the customer site; then complete the import spreadsheet and run the import script from your local directory.

You can also transfer the directory to a USB device and run the import script from the USB drive.

## Ensure readiness of customer site

Before completing the import spreadsheet and running the import script, the customer environment must be set up with ESXi hosts on which the datastores have been configured.

## Complete the spreadsheet for import

Complete all rows of the spreadsheet for import. The same template can be used to import multiple VMs. For example, the `GOLDEN_TEMPATE_NAME` can be the same for both `UCCE_DataServer_SideA` and `UCCE_DataServer_SideB`, though other columns such as the `NEW_VM_NAME` must be unique.

**Table 2: Complete automation spreadsheet columns for import**

Column	Description	Example
CREATEVM	Select <b>YES</b> to create a VM.	YES
CUSTOMIZATION	Select <b>YES</b> to apply values in the spreadsheet to the imported server. <b>Note</b> Selecting <b>Yes</b> creates Publishers and Subscribers for the VOS products.  Set this to <b>NO</b> only if you do not have the values at the time you complete the spreadsheet and plan to create the VOS publishers and subscribers manually	YES
OPERATION	Select <b>ImportServer</b> .  Imports the OVF templates into the end customer's VMware environment.	ImportServer
SOURCE_HOST_IP	Leave blank.	Leave blank.
SOURCE_DATASTORE_NAME	Leave blank.	Leave blank.

Column	Description	Example
SOURCE_VMNAME	Leave blank.	Leave blank.
GOLDEN_TEMPLATE_NAME	Enter the name of the exported Golden Template.	My_CallServerA
NEW_VM_NAME	Required. The name for the new VM. Cannot contain spaces or special characters. Maximum of 32 characters.	CallServerSideA
DEST_HOST_IP	Required. The IP address or the DNS name of the ESXi Host for the new VM.	xx.xx.xxx.xxx
DEST_DATASTORE_NAME	Required. The name of the Datastore for the new VM.	datastore2(1)
PRODUCT_VERSION	This field is applicable for all VOS platforms.	
COMPUTER_NAME	Required. The NET BIOS name for the new computer. 15-character maximum. Do not use special characters /, \, ?, ;, *, ", <, >, ., ..	Demo-CallSrvA
WORK_GROUP	Dropdown: YES adds the VM to a WorkGroup and enables WORK_GROUP_NAME.	NO
WORK_GROUP_NAME	Enter the Workgroup name if WORK_GROUP is set to YES.	NA
DOMAIN_NAME	The name of the domain. Used only if WORK_GROUP is set to NO.	mydomain.com
TIME_ZONE_LINUX_AREA	Required. Drop-down selection of the timezone area to be set Unified CM. For the United States of America, select <i>America</i> .	America
TIME_ZONE_LINUX_LOCATION	Required. Drop-down selection of the timezone location to be set for Unified CM, CUIC, or Finesse.	New York

Column	Description	Example
TIME_ZONE_WINDOWS	Required. Drop-down selection of the timezone to be set for the Unified CVP and Unified CCE VMs.	(GMT-05:00) Eastern Time (US & Canada)
DOMAIN_USER	Required. The user name for a domain user with privileges to add the new computer to the domain. Enabled only if WORK_GROUP is set to NO.  Do not specify user name in the <i>DOMAINusername</i> or the <i>username@</i> format.	Username
DOMAIN_PASSWORD	Required. The password for the domain user. Enabled only if WORK_GROUP is set to NO.	package123
PRODUCT_KEY	Required. The valid Windows OS product key in the format xxxxx-xxxxx-xxxxx-xxxxx-xxxxx.	ZZZM2-Y330L-HH123-99Y1B-GJ20B
OWNER_NAME	Required. The full name of the owner.  <i>Administrator</i> and <i>Guestare</i> not allowable names.  This is a mandatory field for Windows.	LabAdmin
ORGANIZATION_NAME	Required. The Organization Name to be set for Unified CM, CUIC, or Finesse.	MyName
ORGANIZATION_UNIT	Required. The Organization Unit to be set for Unified CM, CUIC, or Finesse.	MyUnit
ORGANIZATION_LOCATION	Required. The Organization Location to be set for Unified CM, CUIC, or Finesse.	MyCity
ORGANIZATION_STATE	Required. The Organization State to be set for Unified CM, CUIC, or Finesse.	MyState
ORGANIZATION_COUNTRY	Required. Drop-down selection of the Organization Country to be set for Unified CM, CUIC, or Finesse.	United States of America

Column	Description	Example
NTP_SERVER See <a href="#">NTP and time synchronization</a>	Required. The IP Address of the NTP server.	xx.xx.xxx.xxx
IP_ADDRESS_NIC1	Required. A valid IPv4 address for NIC1.	xx.xx.xxx.xxx
SUB_NET_MASK_NIC1	Required. A valid subnet mask (IPv4 address) for NIC 1.	xx.xx.xxx.xxx
NIC_NUM	Values in the field are pre-populated based on VM_TYPE field and are protected. Values are "1" or "2".  This value indicates the number of NICs to be configured for the VMs.	2
DEFAULT_GATEWAY_NIC1	Required. A valid Default gateway (IPv4 address) for NIC1.	xx.xx.xxx.xxx
DNS_IP_NIC1	Required. A valid IPv4 address for the primary DNS for NIC1.	xx.xx.xxx.xxx
DNS_ALTERNATE_NIC2	Optional. A valid IPv4 address for the alternate DNS for NIC1. For Unified CCE VMs only. Must differ from the address of the primary DNS for NIC1.	xx.xx.xxx.xxx
IP_ADDRESS_NIC2	Required. A valid IPv4 address for NIC 2.  Valid only if the value in the NIC_NUM fields is 2.	xx.xx.xxx.xxx
SUB_NET_MASK_NIC2	Required. A valid subnet mask (IPv4 address) for NIC 2. For Unified CCE VMs only.	255.255.255.255
DEFAULT_GATEWAY_NIC2	Required. A valid Default gateway (IPv4 address) for NIC2.  This will be removed later but is required during the customization.	xx.xx.xxx.xxx
DNS_IP_NIC2	Required. A valid IPv4 address for the primary DNS for NIC2. For Unified CCE VMs only.  This will be removed later but is required during the customization.	xx.xx.xxx.xxx

Column	Description	Example
DNS_ALTERNATE_NIC2	Optional. A valid IPv4 address for the alternate DNS for NIC2. For Unified CCE VMs only. Must differ from the address of the primary DNS for NIC2.	xx.xx.xxx.xxx
VM_NETWORK	Required. Primary network for this server	UCCE Public

## Run automation script for import

The script imports the templates and creates new VMs



### Note

If you import any of the VOS VMs and have an un-licensed copy of WinImage, you will see one pop-up dialog for each VOS platform. Click **OK** to continue the import process.

### Procedure

- Step 1** From the GoldenTemplate\_V10-pcce directory, launch VMware vSphere PowerCLI (32-Bit) to run the automation script.
- Step 2** Enter this command to change the execution policy so you can run unsigned scripts that you write locally as well as signed scripts from other users: **Set-ExecutionPolicy Unrestricted -Force**.
- Step 3** Enter this command so that the VMware vSphere PowerCLI does not use a proxy server to connect to the vSphere server: **Set-PowerCLIConfiguration -ProxyPolicy NoProxy -Confirm:\$false**.
- Step 4** Enter a command using the following syntax:

Syntax:	Example:
<pre>&lt;Path to the script&gt; &lt;Full Path of the spread sheet&gt; &lt;vCenter IP / Hostname&gt; &lt;vCenter User&gt; &lt;Password to connect to vCenter&gt;</pre>	<pre>\scripts\DeployVM.PS1 c:\GoldenTemplate_VMDataSheet_V10.xls testvCenter testuser testpassword</pre>

The script will typically complete in several hours. If there are errors, the script will fail but will keep running. The errors display on the screen and are stored in the log file. Completion of the script generates a status report in the Report folder. The status report has a link to the Log file.

**Status Report of Golden Template to VM conversion**

VM NAME	DESTINATION HOST	DESTINATION DATASTORE	STATUS	DESCRIPTION
CallServerSideA	203.0.113.84	EMC2-disk15 600GB FC 10DSK R5 RG13 LUN13	Success	VM deployed successfully
DataServerSideA	203.0.113.84	EMC2-disk15 600GB FC 10DSK R5 RG13 LUN13	Success	VM deployed successfully
CallServerSideB	203.0.113.85	EMC2-disk15 600GB FC 10DSK R5 RG13 LUN13	Success	VM deployed successfully
DataServerSideB	203.0.113.85	EMC2-disk15 600GB FC 10DSK R5 RG13 LUN13	Success	VM deployed successfully
CVPCallServerSide1A	203.0.113.84	EMC2-disk20 600GB FC 10DSK R5 RG15 LUN18	Success	VM deployed successfully
CVPCallServerSide2A	203.0.113.84	EMC2-disk20 600GB FC 10DSK R5 RG15 LUN18	Success	VM deployed successfully
CVPCallServerSide1B	203.0.113.85	EMC2-disk20 600GB FC 10DSK R5 RG15 LUN18	Success	VM deployed successfully
CVPCallServerSide2B	203.0.113.85	EMC2-disk20 600GB FC 10DSK R5 RG15 LUN18	Success	VM deployed successfully
CVPRPTSIDEA	203.0.113.84	EMC2-disk20 600GB FC 10DSK R5 RG15 LUN18	Success	VM deployed successfully
CVPOAMPSIDEB	203.0.113.84	EMC2-disk20 600GB FC 10DSK R5 RG15 LUN18	Success	VM deployed successfully
CUCM_PUB_SideA	203.0.113.84	EMC2-disk20 600GB FC 10DSK R5 RG15 LUN18	Success	VM deployed successfully
CUCM_SUB_SideA	203.0.113.84	EMC2-disk20 600GB FC 10DSK R5 RG15 LUN18	Success	VM deployed successfully
CUCM_SUB_SideB	203.0.113.85	EMC2-disk20 600GB FC 10DSK R5 RG15 LUN18	Success	VM deployed successfully
CUIC_PUB_SideA	203.0.113.84	EMC2-disk20 600GB FC 10DSK R5 RG15 LUN18	Success	VM deployed successfully
CUIC_SUB_SideA	203.0.113.84	EMC2-disk20 600GB FC 10DSK R5 RG15 LUN18	Success	VM deployed successfully
Finesse_PUB	203.0.113.84	EMC2-disk24 600GB FC 5DSK R5 RG16 LUN22	Success	VM deployed successfully
Finesse_SUB	203.0.113.85	EMC2-disk24 600GB FC 5DSK R5 RG16 LUN22	Success	VM deployed successfully

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