

How to Import an OVF Package as a Client Image

Description

This article describes how to import an OVF package to create a new Client Image using the CloudControl UI. There are differences depending on whether you are importing as a Guest OS Customization or Non-Guest OS Customization Image. For details on the distinction between these images, see [Introduction to Cloud Server Provisioning, OS Customization, and Best Practices](#).

Prerequisites:

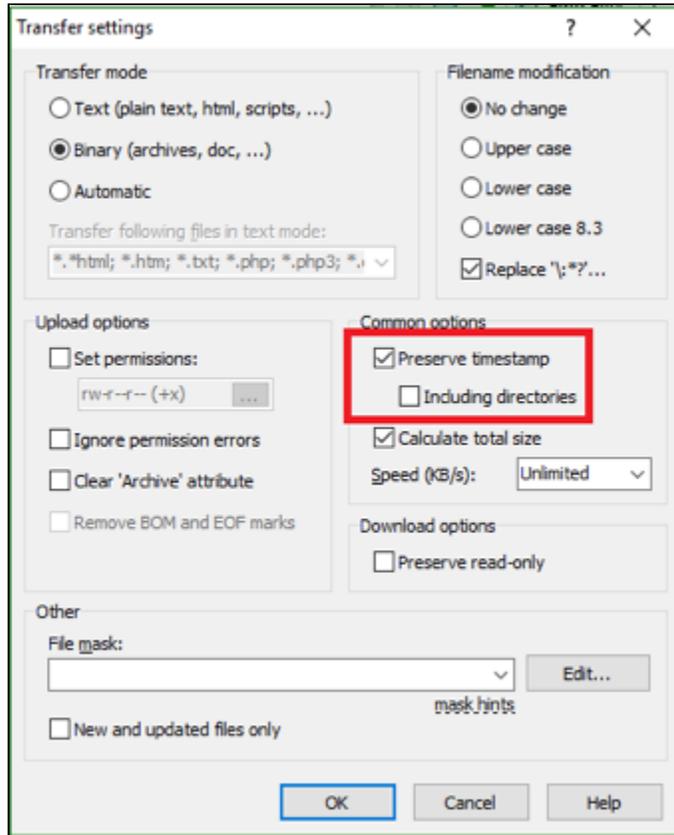
Pre-Requisites Vary Between Guest OS Customization and Non-Guest OS Customization Images

Guest OS Customization Images Have Additional Pre-Requisites - please ensure you review the Prerequisites applicable to the type of Image you are trying to import.

Prerequisites Applicable To All Client Image Imports

1. User must be the Primary Administrator or have the 'Create Image' role assigned
2. The Operating System must be supported on CloudControl. *Note that only a subset of supported Operating Systems are available for Guest OS Customization Images.* For details, see [What Operating Systems are Currently Supported on CloudControl?](#).
3. The OVF file, MF file, and VMDKs associated with the Client Image must be uploaded into the FTPS site associated with the Geographic Region in which the Target Location for the Import is located. For details on his process, see [How to Access your Client Image Import and Export OVF Package Staging Folder](#). The package must consist of:
 - a. OVF - The descriptor, or definition of the VM.
 - b. MF - The MF file details the package contents with hashes for verification. The MF file hash must match the hash embedded within the corresponding OVF file. CloudControl supports SHA1, SHA256, and SHA512 hash methods for the MF file.
 - c. VMDK - One per disk associated with the VM.
4. The imported image must also meet certain hardware requirements:
 - a. The Virtual Server Virtual Hardware Version for the Target Data Center must be equal to or greater than the one associated with the Image you are trying to import.
 - i. Data Center Virtual Hardware Version can be seen on the Data Center Dashboard. See [Navigating the Data Center Dashboard](#)
 - ii. **Note:** Virtual Hardware Version must be at least Hardware Version 4, (see <http://kb.vmware.com/kb/1003746>).
 - b. The image can have up to four SCSI controllers, four SATA controllers, two IDE controllers, and two floppy drives. For more details, see [Introduction to Cloud Server Local Storage \("Disks"\) and Disk Speeds](#)
 - c. If not supplied in the OVF file, the Cores per Socket will be set to 1.
 - d. If there is a file attached to a CD-ROM, it must be an ISO (.ISO)
 - e. If there is a file attached to a Floppy, it must be a FLP (.FLP)
 - f. **Important Note:** Any Shares, Reservations, and Limits associated with an imported Image are ignored and replaced as part of the server deployment process.
5. The Image must meet the Target Data Center Location's requirements as identified in [How do I Identify Hardware Specifications and Capabilities Available in a Data Center Location](#):
 - a. Total number of disks must range within the Minimum and Maximum Disk Count
 - i. **Note:** CD-ROM / ISO and Floppy drives / FLP do not count towards the either the Minimum Disk Count or the Maximum Disk Count.
 - ii. The Combined size of all ISO and FLP files sizes must not exceed the Maximum Disk Size for the Data Center. See [How do I Identify Hardware Specifications and Capabilities Available in a Data Center Location](#)
 - b. The combined size of all local disks (SCSI, SATA, IDE) and ISO/FLP files can not exceed the Maximum Total Storage for an Image
 - i. ISO/FLP sizes do count towards the Maximum Total Storage for an Image.
 - c. The amount of vCPU and RAM must be supported in the data center location. Note if you are importing to a specific User-Manageable Cluster, it is not required that the target cluster support the Image - only that at least one other cluster in the same location can support it.
6. The OVF import process currently allows a maximum of two simultaneous imports in progress per organization in a given Geographic Region.
 - a. Note - as shown in Step 7 below you can view any imports currently in progress.
7. The Data Center location in which you are trying to import cannot be in maintenance
8. The OVF file must have a 'last modified' date within the last two weeks. If an Image has a 'last modified' date that is older than two weeks, it will be blocked from import and be subject to removal from the FTPS server.
 - a. **Note:** When uploading an OVF Package to the FTPS servers, most FTP Client applications, such as WinSCP, Filezilla, CuteFTP or Cyberduck default to preserving file modification times when uploading or downloading files. You do not want this default setting. Please

disable the default setting so the file's modification time will be set to the date and time that you upload the file. Below is an example from WinSCP:



9. Regarding Images with vApp Properties:
 - a. Import of OVF with **numa.autosize** & **numa.autosize.once** settings is not supported if:
 - i. **numa.autosize** & **numa.autosize.once** are explicitly set to different values (i.e. one is true, one is false)
 1. One of **numa.autosize** & **numa.autosize.once** is explicitly set, but not the other value
 - ii. **enableHostInfoToVMTools** value in the OVF (optional) must be either "true" or "false" which are the only valid values
 - b. none of the **vApp Properties** can have the **type** set to a value in the ovf file other than the ones we've defined as supported. See [Introduction to vApp Properties](#)

Prerequisites Applicable ONLY to Guest OS Customization Client Image Imports

1. Imported Guest OS Customization Images **must** have VMware Tools or Open VM Tools installed
 - a. If VMware Tools is used, the version **must** be at least version 8384 (VMware Infrastructure 5.0)
2. Disable any anti-virus software on the server before importing as a Client Image. For more information, see [Disable Antivirus Software Before Creating a Client Image](#).
3. There are OS-specific requirements/limitations and best practices for most Operating Systems. For details, see the "notes" column for your Operating System in [What Operating Systems are Currently Supported on CloudControl?](#)
4. Client Images must only have one Virtual NIC, as additional NICs are added through the Guest OS Customization process.
5. You cannot import Images with local disks on a mix of SCSI/SATA/IDE controllers. All local disks must be on the same controller type.
 - a. CD-ROM devices do **not** need to be on the same controller as the local disks, but note that GOC images will always boot onto a local disk.
6. If the Image was created in VMware Workstation, the "VMware Tools update" option on the source image must be set to "Manual" before exporting. If it is set to anything else, it will fail to import due to a known issue with VMware. See [VMware Knowledge Base article 2036689](#).
7. Guest OS Customization Images are the only images supported in MCP 1.0 locations. You cannot import a Non-Guest OS Customization Image into a MCP 1.0 location.

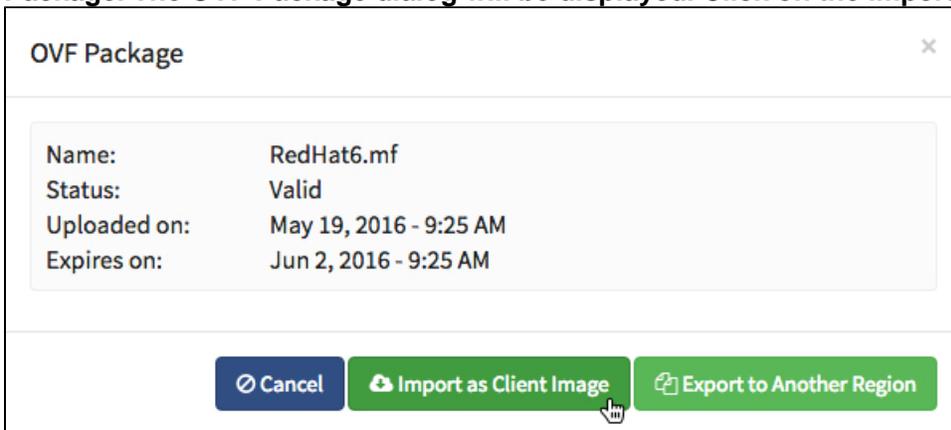
Content / Solution:

1. From the Home page, click on the Compute button, then select FTSP OVF Packages from the drop-down menu:



Note: For FTSP details, see [Support and Additional URLs](#)

2. The system will display the OVF Packages that are available for import. Click on the desired OVF Package. The OVF Package dialog will be displayed. Click on the Import as Client Image button:



3. The Import OVF Package as a Client Image dialog will be displayed. Fill out the form with the appropriate information:

Import OVF Package as a Client Image
✕

OVF File Name
Redhat6.mf

Destination Data Center*

Client Image Name*

Redhat6

Client Image Description

Import without Guest OS Customization

Add/ Update Tag to List

Tag Key Name	Value	Actions
Tag Key Name	Value(Optional) / (R)	Add

⊗ Cancel

✓ Import

- **Destination Data Center** - Choose the destination data center for your Client Image import. If your Cloud product has more than one location available there will be multiple entries in the drop-down list. Each Client Image exists within the context of a single data center location.
- **Destination Cluster** - If the Destination Data Center is enabled for User-Manageable Clusters, you will be prompted to select a Destination Cluster. See [Introduction to User-Manageable Clusters](#) for more information.
- **Client Image Name** - Enter a name for the Client Image, this will appear in the Client Images browser in the Administrative UI. The Image Name must be unique in the Target Data Center for your organization and be alphanumeric with a maximum length of 75 characters. The following character exceptions are also permitted (as are spaces): _+=#.,;()-
- **Client Image Description** - Enter an optional description for the Client Image.
- **Import without Guest OS Customization** - Check the box to import the OVF Package without Guest OS Customization. See [Introduction to Cloud Server Provisioning, OS Customization, and Best Practices](#)
- **Add/Update Tag to List** - *Optionally* add Tags to the Server. For more information on tagging, see [Introduction to Tagging, Tag Keys and Tag Values](#)

4. Once the form has been filled out, click the Import button:

Import OVF Package as a Client Image ✕

OVF File Name
Redhat6.mf

Destination Data Center*
US - East 3 - MCP 2.0 (NA9)

Destination Cluster
QA1_N2_VMWARE_1-01

Client Image Name*
Redhat6

Client Image Description
Importing RH6 Image to NA9

Import without Guest OS Customization

Add/ Update Tag to List

Tag Key Name	Value	Actions
<input type="text" value="Tag Key Name"/>	<input type="text" value="Value(Optional) / (Ri"/>	<input type="button" value="Add"/>

5. The system will display a message indicating that the operation has begun:



6. Click on Client Images in the Image Type filter to view the progress of the Import:

Filter Images By [Reset](#)

Image Type **-**

- Standard OS Images
- Standard Priced Software Images
- Client Images
- Long-Term Retention Snapshot Images

OS Customization Type **+**

OS Type **+**

Data Center **+**

Standard Priced Software **+**



Redhat6

Import Image

Step 1 of 12 : 0% - Create Folder

QA1_N2_VMWARE_1

7. Once the Import has completed, you will be able to interact with the Imported Image from the Client Images page:

RedHat6_Import
 Id: 31253c98-3b7c-46e3-ab3c-3be5d26a7c8f

For Documentation screenshots

OS: UNIX - REDHAT7/64

Department 1: R&D



OS Units Details

OS Units Group Id	OS Rate Type
REDHAT	55 Units/Hr (1-4 CPU) 121 Units/Hr (5+ CPU)

Hardware

CPU:	1
Cores per socket:	1
CPU Speed:	STANDARD
RAM:	1 GB
Total Storage:	50 GB

Advanced Virtualization Settings

Nested Hardware Virtualization:	False
CPU Latency Sensitivity:	Normal

Storage

SCSI	IDE	SATA	Floppy															
<table border="1"> <thead> <tr> <th>Name</th> <th>SCSI Key</th> <th>SCSI Adapter</th> </tr> </thead> <tbody> <tr><td>SCSI Controller 0</td><td>1000</td><td>LSI_LOGIC_PARALLEL</td></tr> <tr><td>SCSI Controller 1</td><td>1001</td><td>LSI_LOGIC_SAS</td></tr> <tr><td>SCSI Controller 2</td><td>1002</td><td>LSI_LOGIC_PARALLEL</td></tr> <tr><td>SCSI Controller 3</td><td>1003</td><td>LSI_LOGIC_PARALLEL</td></tr> </tbody> </table>				Name	SCSI Key	SCSI Adapter	SCSI Controller 0	1000	LSI_LOGIC_PARALLEL	SCSI Controller 1	1001	LSI_LOGIC_SAS	SCSI Controller 2	1002	LSI_LOGIC_PARALLEL	SCSI Controller 3	1003	LSI_LOGIC_PARALLEL
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Available Data Centers: MA9

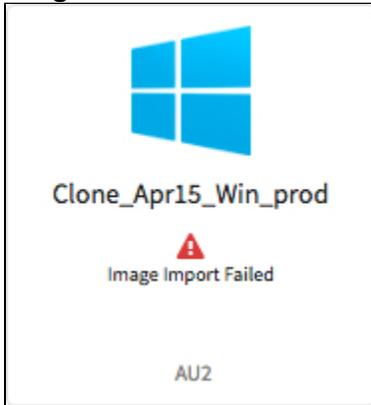
Cancel Actions

- > Continue to Deploy
- Manage Client Image Tags
- Edit Image
- Delete
- Copy to another Data Center
- Move to another Cluster
- Export Image

Important Notes:

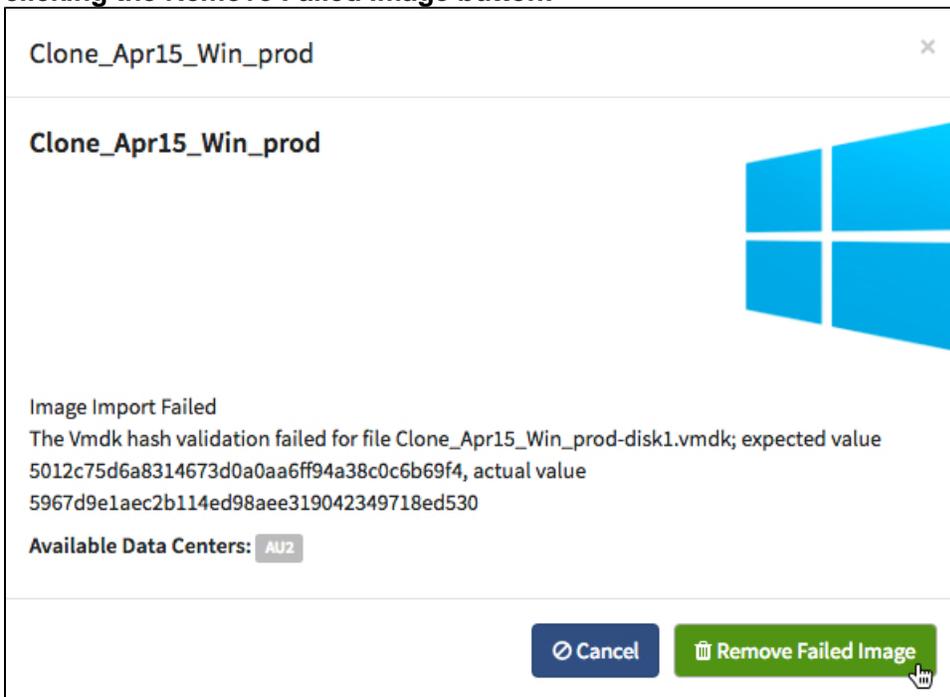
- Client Images lose any disk speed characteristics when a Client Image is exported, as the OVF format does not support disk speed information. This means that all Imported images will have all disk speeds set to Standard. For more details on "default speeds", see [Introduction to Cloud Server Local Storage \("Disks"\) and Disk Speeds](#)
- In MCP 2.0 locations, Client Images are reduced to the single Primary NIC when they are created, so an exported NIC configuration may not match what you currently have deployed on the server in the data center location.
- OVF does not provide a way to distinguish between the "Standard", "Enterprise", and "Datacenter" versions of Windows operating systems. Therefore, servers imported from Windows will be designated with a question mark in the OS type - i.e. rather than WIN2008S/64 or WIN2008E/64, an imported Windows 2008 server will be designated with "WIN2008?/64".
- Regardless of what setting cpuLatencySensitivity is on the OVF, cpuLatencySensitivity will be set to Normal when it is imported

8. If the Import fails during the long-running, asynchronous part of the process, the new Client Image will indicate that the import function failed:

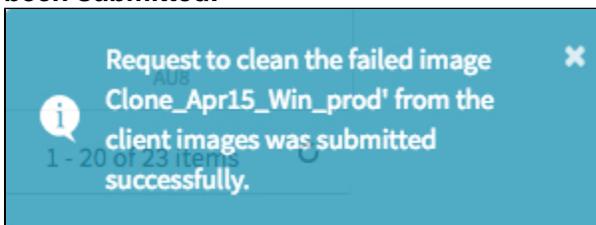


Note: The image will remain on the Client Images screen. Its appearance will be updated to show that the import was not successful. Click on the failed image to see the reason for the failure. Usually, this will be a VMDK hash validation failure or VMware Tools version incompatibility. See [Pre condition #4](#)

9. When you have taken note of the reason for the import failure you can remove the item by clicking the Remove Failed Image button:



10. The system will display a message indicating that the request to remove the failed image has been submitted:



11. The failed Client Image will be deleted and removed from the UI.

Note: The reason for the import failure is saved in the Administrator Logs for future reference. See [How to View an Administrator Logs Report](#)

Recently Updated

- [How to Move a Client Image between User-Manageable Clusters](#)
- [How to Remove a Failed Client Image Deployment](#)
- [How to Export a Client Image to an OVF Package](#)
- [How to Copy a Client Image between Locations in the Same Geographic Region](#)
- [Navigating the Images and Applications Dashboard](#)