



Cisco TelePresence Server on Virtual Machine

Installation Guide

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General information

About the Cisco TelePresence Server on Virtual Machine

The Cisco TelePresence Server on Virtual Machine is a technologically advanced media processing platform. With a supported hardware platform and the software application, it provides ActivePresence high-definition video conferencing and the highest possible voice quality.

There are three deployment configurations for the Cisco TelePresence Server on Virtual Machine for:

- platforms with 8 CPUs
- platforms with 16 CPUs
- high density deployment that requires the Multiparty Media 400v platform.

These deployments have different processing capacities and licensing requirements.

Cisco TelePresence Conductor is required to manage the Cisco TelePresence Server on Virtual Machine.

Licensing

For software licensing information, refer to the [Cisco TelePresence Server datasheet](#).

For information on the open source software used in Cisco TelePresence on Virtual Machine, refer to the appropriate version of the Open Source documentation at

http://www.cisco.com/en/US/products/ps11339/products_licensing_information_listing.html.

Co-residency support

Co-residency with Cisco TelePresence Conductor is supported.

The TelePresence Server can co-reside with applications (any other VMs occupying same host) subject to the following conditions:

- No oversubscription of CPU. 1:1 allocation of vCPUs to physical cores must be used
- No oversubscription of RAM. 1:1 allocation of vRAM to physical memory
- Sharing disk storage subsystem is supported, subject to correct performance characteristics (latency, BW)

Note: Co-residency is not supported on the Multiparty Media 400v platform.

Related documents

For information on configuring TelePresence Conductor for your deployment, refer to the appropriate TelePresence Conductor deployment guide on the [Conductor installation and configuration guides page](#).

- In networks where the TelePresence Conductor is trunked to Cisco Unified CM, refer to *Cisco TelePresence Conductor with Cisco Unified Communications Manager Deployment Guide*
- In networks where the TelePresence Conductor is trunked to Cisco VCS refer to *Cisco TelePresence Conductor with Cisco TelePresence Video Communication Server Deployment Guide*

Platform licensing comparison

Table 1: TelePresence Server conferencing capacity on various platforms

Call type description				Screen licenses required per call									Maximum calls by hardware type (with licenses to provide 100% of capacity)								
Main video	Audio	Content		8 Cores VM	Media 310 or MCU 5310	16 Cores VM	Media 320 or MCU 5320	7010	MSE 8710 or MCU MSE 8510	Media 400v [‡]	Biggest appliance cluster (two appliances)	Biggest blade cluster (four blades)									
				4 screen licenses	5 screen licenses	8 screen licenses	10 screen licenses	12 screen licenses	12 screen licenses	14 screen licenses	20 screen licenses	48 screen licenses									
-	Mono	-	1/52	200*	200*	200*	200*	200*	200*	200*	200*	200*									
360p30 [†]	Mono	In main video	¼	33	41	65	81	97	97	113	163	200*									
360p30 [†]	Stereo	720p5	¼	16	20	32	40	48	48	56	81	195									
480p30	Stereo	In main video	¼	16	20	32	40	48	48	56	81	195									
480p30	Stereo	720p5	¼	12	15	24	30	36	36	42	61	146									
720p30	Stereo	720p5	½	8	10	16	20	24	24	28	40	97									
720p30	Stereo	720p30	1	4	5	8	10	12	12	14	20	48									
1080p30	Stereo	720p15	1	4	5	8	10	12	12	14	20	48									
720p60	Stereo	720p15	1	4	5	8	10	12	12	14	20	48									
1080p30	Stereo	720p30	1 ½	2	3	5	6	8	8	9	13	32									
Three-screen 720p30	Multichannel	720p5	1 ½	2	3	5	6	8	8	9	13	32									

Table 1: TelePresence Server conferencing capacity on various platforms (continued)

Call type description				Screen licenses required per call									Maximum calls by hardware type (with licenses to provide 100% of capacity)	
Main video	Audio	Content		8 Cores VM	Media 310 or MCU 5310	16 Cores VM	Media 320 or MCU 5320	7010	MSE 8710 or MCU MSE 8510	Media 400v‡	Biggest appliance cluster (two appliances)	Biggest blade cluster (four blades)		
				4 screen licenses	5 screen licenses	8 screen licenses	10 screen licenses	12 screen licenses	12 screen licenses	14 screen licenses	20 screen licenses	48 screen licenses		
Three-screen 720p30	Multichannel	720p30	2	2	2	4	5	6	6	7	10	24		
1080p30	Stereo	1080p30	2	2	2	4	5	6	6	7	10	24		
Dual-screen 1080p30	Stereo	720p30	2	2	2	4	5	6	6	7	10	24		
Three-screen 1080p	Multichannel	720p30	3	1	1	2	3	4	4	4	6	16		
Three-screen 1080p	Multichannel	1080p30	4	1	1	2	2	3	3	3	5	12		
Four-screen 1080p	Stereo	1080p30	4	1	1	2	2	3	3	3	5	12		

* 200 is the maximum number of calls that is possible on a TelePresence Server. Requires Cisco TelePresence Conductor XC2.3.

† Requires TelePresence Conductor XC2.2 or later.

‡ To achieve the maximum number of calls, Cisco TelePresence Server on Virtual Machine must be the only VM hosted on the Multiparty Media 400v. It cannot be co-resident with any other UC application (unlike the 8-core and 16-core VMs that run at 2.4GHz minimum and can be co-resident).

Note: The table above assumes that calls of one type are being used to reach these maximum values. To calculate the total number of licenses required for a variety of concurrent calls, sum the screen licenses required for each concurrent call.

Prerequisites

Recommended platform

Recommended hardware on which to run Cisco TelePresence Server on Virtual Machine:

- Cisco UCS C220 running the tested reference configuration (TRC#3) as specified at the following location: http://docwiki.cisco.com/wiki/UC_Virtualization_Supported_Hardware#C220_M3S_.28SFF.29_TRC.233
- Cisco UCS C240 running the tested reference configuration (TRC#1) as specified at the following location: http://docwiki.cisco.com/wiki/UC_Virtualization_Supported_Hardware#C240_M3S_.28SFF.29_TRC.231
- Cisco UCS C220 running the tested reference configuration (TRC#2) as specified at the following location: http://docwiki.cisco.com/wiki/UC_Virtualization_Supported_Hardware#C220_M3S_.28SFF.29_TRC.232

Note: the Cisco UCS C220 TRC#2 platform does not support hyperthreading. This hardware configuration has 8 physical CPUs, so only the 8 vCPU configuration may be deployed on this platform as we do not support oversubscription of CPUs.

- Cisco Multiparty Media 400v, which is a Cisco UCS C220 with the following configuration:

Table 2: Cisco Multiparty Media 400v platform configuration

SKU	Description	Quantity
UCSC-C220-M3S	UCS C220 M3 SFF w/o CPU mem HDD PCIe PSU w/ rail kit	1
UCS-CPU-E52667B	3.30 GHz E5-2667 v2/130W 8C/25MB Cache/DDR3 1866MHz	2
UCS-MR-1X082RY-A	8GB DDR3-1600-MHz RDIMM/PC3-12800/dual rank/1.35v	8
A03-D300GA2	300GB 6Gb SAS 10K RPM SFF HDD/hot plug/drive sled mounted	2
UCSC-PSU-450W	450W power supply for C-series rack servers	2
UCSC-RAID-MZ-220	Cisco UCS RAID SAS 2008M-8i Mezz Card for C220 (0/10/10)	1
R2XX-RAID1	Enable RAID 1 Setting	1
N20-BBLKD	UCS 2.5 inch HDD blanking panel	6
UCSC-HS-C220M3	Heat Sink for UCS C220 M3 Rack Server	2
UCSC-PCIF-01F	Full height PCIe filler for C-Series	1
UCSC-PCIF-01H	Half height PCIe filler for UCS	1
UCSC-RAIL1	Rail Kit for C220 C22 C24 rack servers	1

Note: The Cisco Multiparty Media 400v requires Hypervisor version ESXi 5.5.

CPU requirements

There are three deployment configurations for Cisco TelePresence Server on Virtual Machine: *8 Cores Cisco TelePresence Server*, *16 Cores Cisco TelePresence Server* and *High Density Cisco TelePresence Server*.

The number of cores in the first two options refer to the number of physical cores required for each. That is, the 8 Cores option requires 8 CPU cores and the 16 Cores option requires 16 CPU cores. The TelePresence Server on Virtual Machine must have exclusive access to all the processing capacity provided by these physical cores, even when hyperthreading is enabled.

We recommend that you enable hyperthreading where possible, because it gives the TelePresence Server a small performance advantage, but the TelePresence Server must have exclusive access to the stated number of physical cores and you may not share them with other virtual machines.

The High Port Density deployment configuration requires the Multiparty Media 400v platform (3.3 GHz processor) with Hyperthreading enabled. This platform should be exclusively dedicated for the Cisco TelePresence Server on Virtual Machine.

Example with 8 CPU cores and hyperthreading enabled: You may deploy the 8 Cores option but not the 16 Cores option. In this example, the 8 Cores TelePresence Server is using all 16 logical cores and you may not use any of them for other applications.

Examples with 16 CPU cores and hyperthreading enabled: You may deploy either the 16 Cores option or the 8 Cores option. In the 16 Cores case, you may not share the CPU capacity with other applications. In the 8 Cores case, you must dedicate half the CPU capacity (8 physical = 16 logical CPUs) to the TelePresence Server VM, but you can use the other half for other VMs.

Other requirements

- VT is enabled in the BIOS before installing VMware ESXi
- VMware version is ESXi 5.0 Update 1, ESXi 5.1, or ESXi 5.5
- The VM host “Virtual Machine Startup/Shutdown” is configured to “Allow Virtual machines to start and stop automatically with the system”, and that the TelePresence Server on Virtual Machine has been moved to the Automatic startup section
- Your UCS system is configured with RAID 5
- Only one network interface is configured

Note: The Cisco Multiparty Media 400v requires Hypervisor version ESXi 5.5.

Specifications-based system minimum requirements

If using a specifications-based system, the requirements are:

- 2 x Intel Xeon processor E5-2600 series with 2.4GHz or faster processor
- At least 8 GB RAM to be dedicated to Cisco TelePresence Server on Virtual Machine
- At least 53 GB of local or SAN storage
- IOPS (input/output operations per second) and storage performance must meet or exceed the following requirements:

Table 3: Storage performance requirements

Mean # IOPS	Mean read latency	Mean write latency	Peak read latency	Peak write latency
6	4ms	10ms	15ms	15ms

- 1 GigE NIC

- The OVA is pre-configured to have 8GB of RAM, and 8 or 16 CPUs
- No oversubscription of resources is allowed, even if hyperthreading is enabled
- Hypervisor version ESXi 5.0 Update 1, ESXi 5.1, or ESXi 5.5
- VMware client to access Hypervisor directly or through Virtual Center to deploy the OVA

Note: The Cisco Multiparty Media 400v requires Hypervisor version ESXi 5.5.

Before installing Cisco TelePresence Server on Virtual Machine

Before deploying the Cisco TelePresence Server on Virtual Machine OVA, make sure your environment meets the following conditions:

- Your server is powered up
- Your server is connected to the network
- VMware is installed and running on your server
- **Cisco_tsVirtualMachine_<version>.ova** is downloaded

Installing the TelePresence Server

This process guides you through installing the virtual machine (VM); it assumes that you are using vSphere client, but you could use vCenter.

Configuring the VM host

Ensure that the VM host is configured with a valid NTP server – the same NTP server that will be specified in Cisco TelePresence Server on Virtual Machine.

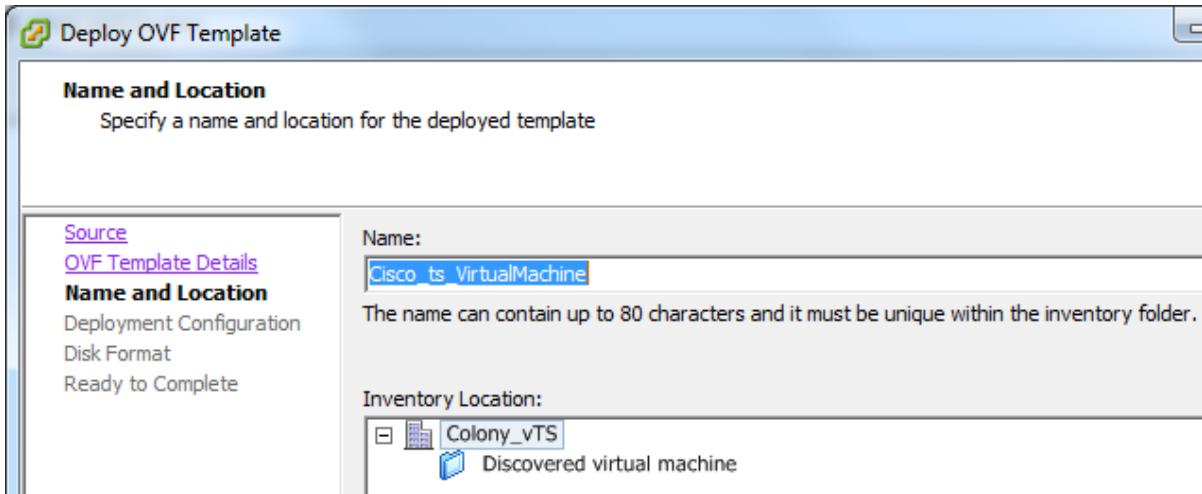
1. Select the host
2. Go to the **Configuration** tab
3. Select **Time configuration**
4. Select **Properties**
If the date and time were red on the previous page, then set the date and time manually to the current time.
5. Click **Options**
6. Select **NTP Settings**
7. Click **Add**
8. Enter the IP address of the NTP server
9. Click **OK**
10. Select the **Restart NTP service to apply changes** check box
11. Click **OK**
12. Click **OK**

Deploying OVA to host

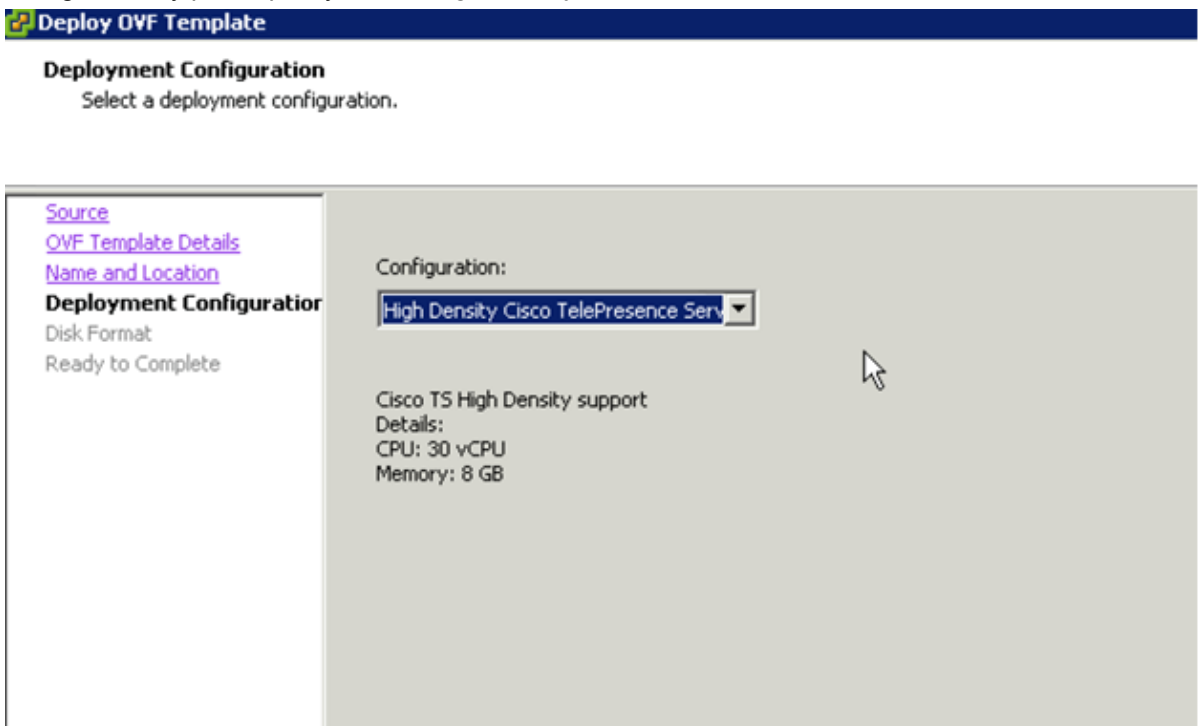
These instructions represent a typical installation; not all of the steps listed may be necessary, depending on your deployment environment. The Deploy OVF Template wizard dynamically changes to reflect the host configuration.

Note: The same process is used to deploy the 8 Cores or 16 Cores option, except for the **Configuration** option on the **Deployment Configuration** screen of the wizard (step 7 below).

1. Log in to vSphere to access the ESXi Host
2. Select **File > Deploy OVF Template**
3. Click **Browse**, find the location of the **.ova** file, click **Open** and then click **Next**
4. On the **OVF Template Details** page, click **Next**
5. If an **End User License Agreement** page appears, read the EULA, click **Accept** and then click **Next**
6. On the **Name and Location** page, enter a **Name** for this Cisco TelePresence Server on Virtual Machine guest, for example "Cisco_ts_VirtualMachine", and select the **Inventory Location** where the virtual machine will reside.

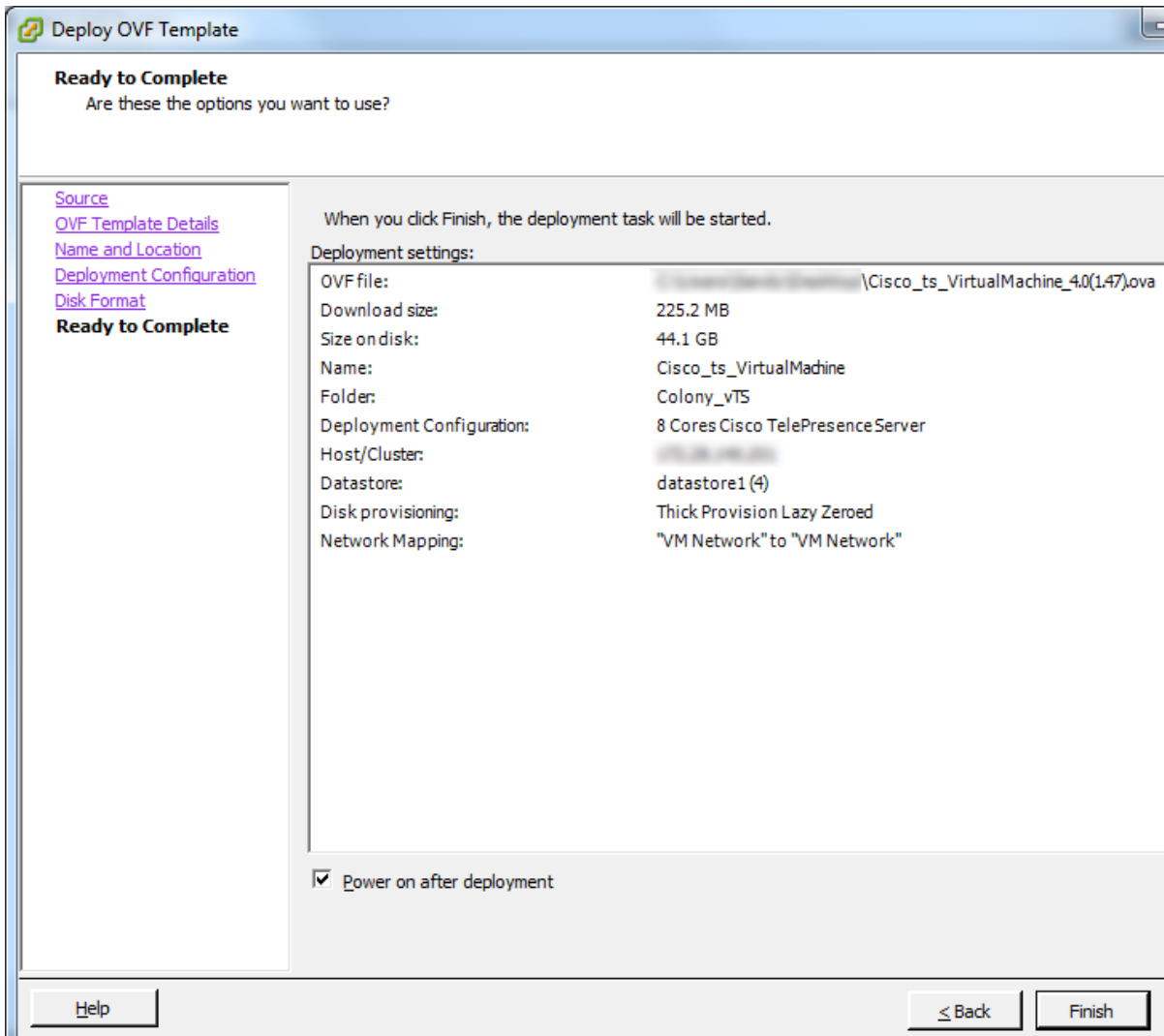


- On the **Deployment Configuration** page, for an 8 vCPU virtual machine select *8 Cores Cisco TelePresence Server*, for a 16 vCPU virtual machine, select *16 Cores Cisco TelePresence Server*, or for 28 High Density port capacity, select *High Density Cisco TelePresence Server* and then click **Next**.



- On the **Host / Cluster** page, select which host or cluster will run the deployed virtual machine and click **Next**
- On the **Resource Pool** page, select the resource pool in which you want to run the deployed virtual machine and click **Next**
- On the **Storage** page, select the datastore onto which the TelePresence Server files will be deployed and then click **Next**
- On the **Disk Format** page, select **Thick Provision Lazy Zeroed** and click **Next**
Thin Provision is not supported as VM performance may degrade during resizing of a partition

12. On the **Network Mapping** page, select the network mapping that applies to your infrastructure and then click **Next** (default is *VM Network*)
13. On the **Ready to Complete** page, confirm the deployment settings
14. Select the **Power on after deployment** check box



15. Click **Finish**
A progress indicator shows the deployment progress. When it has finished, the TelePresence Server is deployed as a guest on the VM Host.

Configuring the TelePresence Server

Task 1: Assign an IP address

1. Open the TelePresence Server's console in one of the following ways:
 - Select the VM guest, eg. "Cisco_ts_VirtualMachine", and then select the **Console** tab
 - Right-click the VM guest and select **Open Console** from the context menu
 The VM guest will take some time to boot, create its second hard disk partition, and then reboot before displaying the TelePresence Server console. The console is ready for input when you see the **TS:>** prompt.

```
DSP watcher is 5143
DSP log
validating image, please wait...
image validation complete
Warning: normal_pt 60
120814.621 SYSTEM : Info : Cisco TelePresence Server on Virtual Machine with 8 v
CPUs 4.0(1shell initshell init.47) (Build 13.2(1.47)) starting
IDSP:2IDSP starting
Serial: 0BB67F93
120814.621 CONFIGURATION : Event logging to serial console now disabled
TS:> _
```

2. Enter the command **help static**
3. Enter a **static** command, using the syntax described in the console help, to configure a static IP address.
For example, **static 192.168.1.2 255.255.255.1 192.168.1.1** assigns the address 192.168.1.2 to the TelePresence Server, with subnet mask 255.255.255.1 and default gateway 192.168.1.1.
4. Restart the TelePresence Server.

Task 2: Log in to the Cisco TelePresence Server on Virtual Machine

To log in to the web interface of the device:

1. Use your browser to navigate to the IP address or hostname of the unit.
2. Enter the user name **admin** with no password, and click **Log in**.
The **Status** page is displayed.

Note: We recommend that you change the admin account to use a password as soon as possible. To do that, go to **Configuration > Change password**.

Task 3: Apply license or feature keys

Repeat the following procedure for your license key and any feature keys you wish to install. The procedure is license key specific but is exactly the same for feature keys.

1. Go to **Configuration > Upgrade**.
2. Locate the **Feature management** area.

3. Type the license key exactly as you received it, including any dashes.
4. Click **Add key**.
The key is verified against the device serial number, and then appears in the "License keys" list in the web interface.
5. Keep a record of the license key in case you need it again. For example, if you get locked out of the device and do not have a configuration backup. (Keys are stored in the configuration.xml file, but the file does not contain the names of the keys.)

Task 4: (Optional) Configure DNS settings

1. Go to **Network > DNS**
2. Enter a **Host name** if required
3. Add the details of your **Name server(s)**
4. Click **Update DNS configuration**

Configuring the TelePresence Server for administration by TelePresence Conductor

Task 5: Create an administrator account for TelePresence Conductor

For the TelePresence Conductor to communicate with the TelePresence Server it must use credentials for a user that has administrator rights. We recommend that you create a dedicated administrator level user for this task.

1. Go to the web interface of the TelePresence Server you want to configure and log in as an administrator.
2. Go to **User > Add New User**.
3. Enter the following in the relevant fields:

User ID	Enter a username for the TelePresence Conductor to use.
Name	Enter a name for this user.
Password	Enter a password for the TelePresence Conductor to use.
Access rights	Select <i>Administrator</i> .

Add new user You are here: [Users](#) > [Add new user](#)

User

User ID	<input type="text" value="conductoradmin"/>
Name	<input type="text" value="Admin for Conductor"/>
Password	<input type="password" value="....."/>
Re-enter password	<input type="password" value="....."/>
Access rights	<input type="text" value="Administrator"/> ▼
<input type="button" value="Add user"/>	

4. Click **Add user**.

Task 6: Enable encryption and encrypted SIP (TLS)

To verify that the *Encryption* key is installed or to install the key, perform the following tasks:

1. Go to **Configuration > Upgrade**.
2. Go to the **Feature management** section and verify that the **Encryption** key is installed. If the key is not installed, enter the key into the **Add key** field and click **Add key**.

The screenshot shows the 'Feature management' section of a configuration interface. It includes a sidebar with 'Feature keys', 'License keys', and 'Add key'. The main area displays 'Virtual Machine activation', 'Encryption' (with a 'remove' link), and 'TS screen licenses x 8'. There is an empty text input field for adding a key and an 'Add key' button below it.

To verify that TLS is enabled on the TelePresence Server:

1. Go to **Network > Services**.
2. Ensure that **Encrypted SIP (TLS)** is checked.
3. Ensure that **SIP (TCP)** and **SIP (UDP)** are not checked.
4. Ensure that **HTTPS** is enabled on port 443.

	Port A
TCP service IPv4	
HTTP	<input checked="" type="checkbox"/> 80
HTTPS	<input checked="" type="checkbox"/> 443
SIP (TCP)	<input type="checkbox"/> 5060
Encrypted SIP (TLS)	<input checked="" type="checkbox"/> 5061

	Port A
UDP service IPv4	
SIP (UDP)	<input type="checkbox"/> 5060

Ephemeral Port Range	
Minimum	49152
Maximum	65535

Apply changes

5. Click **Apply changes**.

Task 7: Configure SIP settings

1. Go to **Configuration > SIP Settings**.
2. Enter the following values into the relevant fields:

Outbound call configuration	Select <i>Call direct</i> from the drop-down list.
Outbound address	Leave blank.
Outbound domain	Leave blank.
Username	Leave blank.
Password	Leave blank.
Outbound transport	Select <i>TLS</i> from the drop-down list.
Advertise Dual IPv4/IPv6	Leave as <i>Disabled</i> , unless your deployment uses both IP addressing schemes.
Negotiate SRTP using SDES	Select <i>For Secure Transport (TLS) only</i> from the drop-down list.
Use local certificate for outgoing connections and registrations	Check the box. This checkbox is not on all TelePresence Server models: it only appears on the 7010 and MSE 8710 models.

The screenshot shows the SIP configuration page with the following settings:

- Outbound call configuration: Call direct
- Outbound address: (blank)
- Outbound domain: (blank)
- Username: (blank)
- Password: (blank)
- Outbound transport: TLS
- Advertise Dual IPv4/IPv6: Disabled
- Negotiate SRTP using SDES: For secure transports (TLS) only

An **Apply changes** button is located at the bottom of the configuration area.

3. Click **Apply changes**.

(Optional) Migrating the TelePresence Server to a new host

vMotion has been tested and TelePresence Server will move (migrate) successfully. If you need to move TelePresence Server to a new host you must perform a host migration via vMotion.

We recommend that a vMotion move is carried out when there is low conference activity on the TelePresence Server.

Checking for updates

It is a good idea to regularly check for updates to the device's main software image on the Cisco web site. This section describes how to upgrade the device using the web interface.

To check for, and download, updates:

1. Log in to the web interface and go to **Status > Status**.
2. Make a note of the software version that is currently installed.
3. Go to the support section of the web site and check if a more recent release is available.

Note: the upgrade file for Cisco TelePresence Server on Virtual Machine has a **.tgz** extension, while the original install file has a **.ova** extension

4. If a more recent release is available, download it and save it locally.

Upgrade instructions

1. In a web browser, navigate to the web interface of the device.
2. Sign in as an administrator.
The username is *admin* and there is no password on a new unit.
3. Go to **Configuration > Upgrade**.
4. In the **Main software image** section, locate the **New image file** field. Browse to and select the new image file.
5. Click **Upload software image**.
The web browser uploads the file to the device, which may take a few minutes.

Note: Do not browse away from the **Upgrade** page, or refresh the page, during the upload process – this will cause the upload to fail.

A pop-up window displays to show upload progress. When complete, close the message. The web browser refreshes automatically and displays the message *Main image upload completed*.

6. Click **Shut down TelePresence Server**. This option will now change to **Confirm TelePresence Server shutdown**. Click to confirm.
7. Click **Restart TelePresence Server and upgrade**.
The unit will reboot and upgrade itself; this can take up to 25 minutes.

Note: You may be logged out due to inactivity. If this happens, log in again, go to **Configuration > Shutdown** and click **Restart TelePresence Server and upgrade**.

8. Go to the **Status** page to verify that your device is using the new version.
9. If necessary, restore your configuration; refer to the online help for details.

Troubleshooting and technical support information

Using the event log to help solve a problem

You can use the event log to produce debugging information to assist technical support in solving any problems. Event logging capture filter topics are set by default to **Errors, warnings and information**. Do not change the capture filter topic level without the guidance of technical support.

Getting more help

If you experience any problems when configuring or using the TelePresence Server, consult the online help available from the user interface.

If you cannot find the answer you need in the documentation, check the web site at <http://www.cisco.com/cisco/web/support/index.html> where you will be able to:

- Make sure that you are running the most up-to-date software.
- Get help from the Cisco Technical Support team.

Make sure you have the following information ready before raising a case:

- Identifying information for your product, such as model number, firmware version, and software version (where applicable).
- Your contact email address or telephone number.
- A full description of the problem.

To view a list of Cisco TelePresence products that are no longer being sold and might not be supported, visit http://www.cisco.com/en/US/products/prod_end_of_life.html and scroll down to the TelePresence section.

Checking VMware compatibility

If you are using third party hardware for hosting the Cisco TelePresence Server on Virtual Machine application, check the hardware compatibility. This can be done using the VMware compatibility guide tool available from <http://www.vmware.com/resources/compatibility/search.php>.

VMware checklist

1. Check the accessibility to the VM host server (by ping, physical console access, ssh remote access, KVM-over-IP console, and so on)
2. Check the network connectivity of the VMkernel (by executing the vmkping command using Tech Support Mode to verify network connectivity from the VMkernel NIC level)
3. If you are having problems connecting to the vSphere Client management console, execute the command `/sbin/services.sh` from an SSH session to restart the ESXi management agent
4. Check the utilization of the VM host server (CPU utilization, memory utilization, disk access speed, storage access speed, network access status, power utilization, and so on). If any specific application causes high utilization, stop or restart this application to isolate the overall VM host performance level.

Alternatively execute the command `esxtop` from Tech Support Mode to list all system processes running on the ESXi host application

5. Check the ESXi server file log (`hostd.logs`) under the folder `/var/log/vmware`
This log contains common error logs such as iSCSI naming error, authentication error, host convertibility error, and so on.
6. Verify that there is adequate disk space available on the volume that is storing the database files to ensure correct operation of the database. If there is not adequate space available on the physical volume that stores the database files, free up disk space
7. Validate the authentication to the vCenter Server database. The vCenter Server service may not be able to authenticate with the database in the following circumstances:
 - There are permission issues with the database when importing from one instance to another
 - The password on the account you are using to authenticate to the database has changed but the password in the registry has not changed as well
 - The vCenter Server database user is not granted correct permissions

Analyzing the cause of VMware issues

Table 4: VMware issues and possible root causes

Potential source of issue	Symptoms to look for
Storage	<p>Look for the VM store application image stored either on the local drive, SAN or NFS. VMs often freeze or hang up if the application failed to access the storage.</p> <p>Possible error messages are:</p> <ul style="list-style-type: none"> ■ vCenter Server does not start ■ vCenter Server is slow to respond ■ vCenter Server fails after an indefinite amount of time
Network	<p>Any network failure or locking causes a connection failure between the VM and the virtual network. Also, if using NFS or iSCSI, storage may cause application failures because the application cannot access the file system.</p>
DNS	<p>DNS server failures or communication failures between DNS and the VM server may cause the VMware application or the Cisco TelePresence Server on Virtual Machine application to fail.</p>
vCenter Server	<p>If vCenter is not operating properly, even though the Cisco TelePresence Server on Virtual Machine application is still up and running, you may lose connection to the application from the network.</p>
Host application	<p>Check any critical alarms on the VM application for events on the host or application level (check the event information from vSphere Client).</p>

Known sources of issues with Cisco TelePresence Server on Virtual Machine

VM Image Fails to Boot

If the VM image fails to boot, check the VT (Virtualization Technology) setting in BIOS. This needs to be enabled for hosting VMs. If it is not set, set it and re-install ESXi then load the .ova file.

Guest console in vSphere 5 fails to run on some Microsoft platforms

When attempting to open a console screen from vSphere for the VM:

- Error message: “The VMRC console has disconnected...attempting to reconnect.”
- Screen remains black

The following operating systems are at risk:

- Windows 7 64 bit – reported on VMware forum (<http://communities.vmware.com/thread/333026>)
- Windows Server 2008 R2 (64-bit)

Raid Controller Synchronization

If the VMware system is synchronizing its RAID disks, disk performance is seriously degraded. We strongly recommend that you do not install Cisco TelePresence Server on Virtual Machine on VM platforms where RAID disks are in a degraded or synchronizing state.

TelePresence Server Displays Different Serial Number/MAC address on Reboot

This situation can occur if multiple network interfaces are configured. Only one network interface is supported.

Collecting logs from the host

If VMware is causing problems on a Cisco TelePresence Server on Virtual Machine host, we recommend that you collect logs from the host for analysis:

1. Using the vSphere client (or the vCenter Server managing this ESXi host) connect to the ESXi host on which the Cisco TelePresence Server on Virtual Machine is running
2. Go to **File > Export > Export System logs**, choose the appropriate ESXi host and go with the default settings

After you have downloaded the logs analyze them, or have them analyzed to determine the issue.

More information on exporting logs can be found at [Collecting diagnostic information for VMware ESX/ESXi using the vSphere Client \(653\)](#).

Restoring default configuration (factory reset)

Very rarely, it may become necessary to run the `reset_config` command on a TelePresence Server. This resets the configuration of the TelePresence Server to its original default settings.

Note: This command removes the IP address and other network configurations, the installed licenses and the configured users.

To restore the default configuration:

1. Restart the TelePresence Server
2. Within 30 seconds after reboot, enter `reset_config` at the console

The configuration reset is complete.

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