Cisco TelePresence Management Suite Provisioning

Troubleshooting guide

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Table of Contents

Introduction

This document provides troubleshooting information for Cisco TelePresence Management Suite (Cisco TMS) administrators who configure and maintain provisioning for Cisco TelePresence products.

The document contains:

- Overviews of logs that may be of assistance in troubleshooting provisioning.
- Strategies for resolving provisioning-related problem scenarios in TMS, Cisco TelePresence Movi (Movi), and Cisco IP Video Phone E20 (E20), with references to error messages that the user or administrator may encounter.

Provisioning logs

This section describes logs that may be helpful in troubleshooting provisioning. Some of them, like Movi audit log, are readable to the IT administrator; others will primarily be helpful as debugging tools if you are in contact with customer support.

Cisco TMS provisioning directory logs

If you want to monitor the logs Cisco TMS provides for the provisioning directory specifically, they can be found on the Cisco TMS server at the following location:

`C:\Program Files\TANDBERG\TMS\wwwTMS\Data\Logs\tmsdebug`

The names of the relevant log files are:

▸ log-TMSAgent.txt

▸ log-tmsagentproxy.txt

▸ log-tmsagentservice.txt

▸ log-TMSAgentDiagnostics.txt

▸ log-TMSAgentReplicationSetup.txt

If you contact a support representative and need to supply them with logs, you can go to **Administrative Tools > TMS Server Maintenance** and click **Download Log Files** to grab a zipped archive of all logs.

Cisco VCS provisioning logs

On the Cisco VCS, go to **Status > Logs > Event Log**.

The Cisco VCS Event Log is displayed on the format `date time process_name: message_details`. Messages related to the TMS Agent all have the process name `tprovisioning`.

Use the search field to filter the log by *tprovisioning* so that only Cisco TMS Agent messages are showing. For more information on the `message_details` field of the Status event log, please refer to the Cisco VCS Administrator guide.

Movi client logs

There are currently six Movi log files total, as described below. Movi places its log files in `<CSIDL_LOCAL_APPDATA>\TANDBERG\Movi\2.0\Logs\`. The `<CSIDL_LOCAL_APPDATA>` folder is typically:

▸ Windows XP: `%USERPROFILE%\Local Settings\Application Data\`

▸ Windows Vista and Windows 7: `%LOCALAPPDATA%` (typically `%USERPROFILE%\AppData\Local`)

The directory is hidden by default on these systems.

Log files created by Movi

File name	Description
Audio.log	Audio-specific information
Audit.log	Communication between Movi and the VCS, see previous section

File name	Description
Client.log	Information related to the client, the GUI and the "business logic" of the client
GStreamer.log	Information from the GStreamer layer
SIP.log	Information from the SIP signalling
TAF.log	Application framework layer information

Log parameters

Logging is controlled by the Logs.ini file in the same directory. This file has one section for each of the log files above. If any parameters are not set for a log file, the corresponding values from the Default section of the file are applied.

The default parameters include:

▸ The maximum file size is 2000000

▸ Two log generations are stored

Audit.log

The log that will be most useful to you as an administrator is Audit.log. Here, provisioning communication between Movi and the server is recorded. By looking at the audit log you can tell which advanced settings the user has, and whether provisioning succeeds or fails. Some error messages from the server are also recorded here, although this feature is not fully developed in Movi 3.0.

Note: The parameters for Audit.log are *not* in Logs.ini and cannot be edited.

E20 logs

The E20 includes a web server that can be used to manage the endpoint. You access it by opening its IP address in a web browser (http://<your.IP.address>).

To find your E20's IP:

1. On the E20, go to **Menu > System information**.
2. Under **NETWORK**, you will find the endpoint's **IP address**.

Logs can be viewed and downloaded from the **Logs** tab on the page that opens.

The Cisco TMS Provisioning Directory backend

Cisco TMS Agent Diagnostics

In Cisco TMS, you can go to **Administrative Tools > TMS Agent Diagnostics** to monitor and schedule various diagnoses for the Cisco TMS Agents.

Cisco TMS Agent Diagnostics are run automatically after you have added any Cisco VCS to the Cisco TMS and then enabled Cisco TMS Agent data replication on the VCS or VCS cluster. No configuration is required by the administrator. When issues are identified by the diagnostics, the issues can be corrected by the administrator automatically, if desired.

Note: For any Cisco VCS that have the Cisco TMS Agent installed, the Cisco TMS Agent Diagnostics pane is found by going to **Systems > Navigator > TMS Agent**.

Each diagnostic test can also be run manually at any time. The troubleshooting strategies in this document refer directly to relevant diagnoses to run for specific situations.

For more information on each of the diagnoses, see the 'Diagnosing the provisioning process' chapter in the Provisioning Deployment guide.

Backend problem scenarios

Provisioning directory not visible in Cisco TMS

If you do not see Directory showing up under **Systems > Provisioning** in Cisco TMS, check the following:

▸ Are you running TMS version 12.5 or later? In the TMS web view, check the lower right corner for version information.

▸ Are you running a trial version of Cisco TMS? Provisioning is not supported in trial versions.

▸ Do you have have the required privileges to see this directory?

▸ Has **Enable TMS Agents (Provisioning)** been set to *Yes* under **Administrative Tools > Configuration > General**?

▸ On the TMS server, make sure the TMSProvisioningService is running. Start/restart the service.

Browser error displayed when trying to view Provisioning directory

If, when going to **Systems > Provisioning > Directory**, you receive a browser error page:

▸ Are you testing directly on the Cisco TMS, or through a pc/laptop? The former is preferable.

▸ Do you have the required privileges to see this directory?

▸ Has **Enable TMS Agents (Provisioning)** been set to *Yes* under **Administrative Tools > Configuration > General**?

▸ On the Cisco TMS server, make sure the TMSProvisioningService is running. Start/restart the service.

▸ Directly on the Cisco TMS server, verify that you can browse to the Provisioning Directory by opening the browser and opening the following URL: http://localhost:8787/

Error message after Cisco TMS upgrade: "The Provisioning Directory is not running"

After upgrading Cisco TMS to version 12.5, when navigating to **System > Provisioning > Directory**,if

▸ the following error message appears: "The Provisioning Directory is not running or is still initializing. If the TMS Server or TMSAgentService were just restarted, please wait for the Directory to finish initializing. If the Directory does not load after a few minutes, log on to the server and open Control Panel, Administrative Tools, Services and restart the TMSAgentService.

▸ and/or starting the TMSAgentService fails

Follow this procedure:

1. Check the file `log-tmsagentservice.txt` for these lines:
   ```
   10:05:39,297 [4] WARN  TMSAgentWindowsService.TMSAgentWindowsService -
   Service startup...
   10:05:39,313 [4] WARN  TMSAgentWindowsService.TMSAgentWindowsService -
   Starting TMS agent...
   10:05:39,545 [4] WARN  TMSAgentWindowsService.TMSAgentWindowsService -
   Start script execution failed. Exit Code: 1 Output: Starting Argon
   Expecting java located at: D:\Program Files\TANDBERG\TMS\Provisioning\jre
   Expecting opends located at: D:\Program
   Files\TANDBERG\TMS\Provisioning\OpenDs-2.0
     Error:
   ```
   This confirms that the problem is caused by jar files not being copied into the `... /provisioning/ ...` folders on the TMS server.

2. Check the `log-TMSAgent-console.txt` file for a NoClassDefFoundException. Details will differ based on which specific jar files are missing.

3. If both criteria above are met, solve the issue by uninstalling Cisco TMS (the application only, leaving the databases untouched) and reinstalling it.

Adding VCS to TMS fails

If you are having problems adding Cisco VCS to Cisco TMS, check the following:

▸ Is SNMP enabled on VCS? Go to **Administrative Tools > TMS Agent Diagnostics** and run Provisioning Diagnostic Tool test **SNMP** to verify that SNMP is being used on the Cisco VCS.

▸ Is the SNMP community name being used in the VCS found in list of 'SNMP Community Names' on the Cisco TMS on page: **Administrative Tools > Configuration > Network Settings**? Note that SNMP community names are case sensitive.

▸ Is the management address on the Cisco VCS the IP address of the Cisco TMS?

▸ Utilise Cisco TMS Tools found on the server under **Start > Programs > Tandberg** to check and verify SNMP connectivity to the Cisco VCS. In Cisco TMS Tools, select Utilities > Check SNMP

▸ Ensure that SNMP is not being blocked on the network, that is UDP port 161 (both directions)

Error message received when enabling provisioning

If, when creating a new cluster in TMS and selecting Enable Provisioning, the provisioning fails with the following error message: *Verify that the tmsprovisioningservice is running …* check the following:

▸ Are you running Cisco TMS version 12.5 or later?

▸ Are you running Cisco VCS version X5.0 or later?

▸ Was the Cisco TMS upgraded prior to the Cisco VCS?

▸ Have the time settings on Cisco TMS and Cisco VCS are synchronized, preferably using an NTP server?

▶ Has the Device Provisioning option key been enabled on the Cisco VCS Control? Go to **Administrative Tools > TMS Agent Diagnostics**, select the Cisco VCS and run **Verify that the "Device Provisioning" option key is installed on the VCS Control.**

▶ Has the Movi option key has been added to the Cisco TMS? Go to **Administrative Tools > Configuration > General** to verify this.

▶ Has **Enable TMS Agents (Provisioning)** been set to *Yes* under **Administrative Tools > Configuration > General**?

▶ On the TMS server, make sure the TMSProvisioningService is running. Start/restart the service.

▶ Are there any spaces in the Cisco VCS system names? If so:

1. Rename the Cisco VCS, removing the spaces.

2. Restart the Cisco VCS.

3. Force refresh the system in Cisco TMS for the name change to be updated.

4. Delete and rebuild the cluster on the Cisco TMS again.

5. Go to **Administrative Tools > TMS Agent Diagnostics** and run **Verifies that all host names in the replication domain can be resolved by doing DNS lookups.**

Importing from Microsoft Active Directory fails

1. Make sure that the URL to the AD Global Catalog server and port are correct, for example `ldap://globalcatalog.company.int:3268`?

Note: Secure LDAP is not supported.

2. Has the search filter been correctly configured?

3. Make sure the correct username and password are used when logging on and importing from the AD.

Cannot distribute email with username and password

If email distribution of account information to a single user or all users fails, check the following:

▶ Has the Configure Mail Settings been configured on the **System > Provisioning > Directory > Workspace** pane?

▶ Is anything on the network blocking SMTP traffic?

Movi troubleshooting

Error messages

A short error message is displayed on-screen when communication errors occur with the Cisco VCS. Below are descriptions of relevant troubleshooting strategies, grouped by error message headings.

Login failed

Wrong username, domain, and/or password

- Check Audit.log and make sure that the username and domain used for the login attempt are correct.

- In Cisco TMS, go to **Systems > Provisioning > Directory** and verify that the user exists and has been provided with the correct username and password.

- In Cisco TMS, go to **Administrative Tools > TMS Agent Diagnostics** and verify that replication between the Cisco TMS and Cisco VCS works by running **Verifies that users created on the Local TMS Agent replicates to all the TMS Agent LDAP databases in the cluster.**

- If connecting through a Cisco VCS Expressway:

  - Go to **VCS configuration > Registration > Deny List** and check whether the Deny list is enabled.

  - If so, go to **VCS configuration > Registration > Allow List** and verify that the user has been added to the Allow list.

- Check whether the Cisco VCS is in maintenance mode and therefore new calls and registrations are disallowed, and existing registrations are allowed to expire.

Out of licenses

All available licenses are already in use. Check for available Movi licenses in Cisco TMS under **Administrative Tools > Configuration > General Settings > License and Option Keys.**

Connection rejected by server application

- Something other than the Cisco VCS may be rejecting the connection. Trace where the error message is coming from. Is there a SIP proxy in use?

- Make sure Movi is trying to connect to the right IP address for the Cisco VCS.

The server application is not responding

The Cisco TMS Agent could be down.

1. Go to **Administrative Tools > TMS Agent Diagnostics.**

2. Check the status of the Cisco TMS Agent on the Cisco VCS the user is trying to connect to.

The server did not respond in time

The login request reached the server, but no provisioning message reached the client.

- Make sure no firewalls are blocking communication from the server to the client.

- The user's subzone may be missing from the Cisco VCS configuration.

  - Go to **VCS configuration > Local Zone > Subzones.**

  - Verify that the user is included in an existing subzone.

Could not find server in DNS

▸ Look at Audit.log. Did Movi receive provisioning data from server before the error occurred?

- If the error occurred before receiving provisioning data, make sure that Movi is trying to connect to the correct VCS. This is configured in Movi's **Advanced settings**, but can be read from Audit.log. If a setting has not been configured, Audit.log will note it as *<empty>.*

- If the error occurred after receiving provisioning data, go to **Systems > Provisioning > Directory** and verify that the **SIP Server Address** configuration is present and correct.

▸ Go to **Administrative Tools > TMS Agent Diagnostics** and verify that replication between the Cisco TMS and Cisco VCS works by running **Verifies that users created on the Local TMS Agent replicates to all the TMS Agent LDAP databases in the cluster.**

Unable to connect to server

▸ Look at Audit.log. Did Movi receive provisioning data from server before the error occurred?

- If the error occurred before receiving provisioning data, make sure that Movi is trying to connect to the correct VCS. This is configured in Movi's **Advanced** settings, but can be read from Audit.log. If a setting has not been configured, Audit.log will note it as *<empty>.*

- If the error occurred after receiving provisioning data, go to **Systems > Provisioning > Directory** and verify that the **SIP Server Address** configuration is present and correct.

▸ On the VCS, go to **VCS configuration > Protocols > SIP > Configuration**

- Verify that **TCP** and **TLS** are both set to *On*.

- Make sure Cisco VCS is listening on the ports Movi is trying to access, by default 5060 for TCP and 5061 for TLS.

▸ Go to **Administrative Tools > TMS Agent Diagnostics** and verify that replication between the Cisco TMS and Cisco VCS works by running **Verifies that users created on the Local TMS Agent replicates to all the TMS Agent LDAP databases in the cluster.**

Call failed

Your call was denied due to mismatching encryption settings
In Movi's **Advanced** settings, the **Transport** options are *Auto, TLS,* and *TCP*. The default setting in Movi is *Auto*. If the caller or the receiver has TLS enabled and the other party uses TCP, the call will fail. This problem can only be solved by changing the **Transport** setting for either party.

The user could not be found. The user is offline or does not exist.
The user has probably either:

▸ tried to reach someone who is currently offline

▸ mistyped a SIP address

▸ tried to reach someone not available in their network

The user could not be found
Check the Cisco VCS routing configurations.

The user could not be reached. Please try again later.
The user did not respond.

An error was received from the server
The call was rejected by the Cisco VCS. The error message received from the server is in the user's Audit.log.

Not enough call licenses
All available licenses may already be in use. Check for available Movi licenses in Cisco TMS under **Administrative Tools > Configuration > General Settings > License and Option Keys.**

Phone book services are unavailable

▸ In Cisco TMS, go to **Systems > Provisioning > Directory** and verify that the **Phonebook Server** configuration is specified for the user/user group in TMS.

▸ Use a tool such as Wireshark to:

  • Verify that the client sends information requests.

  • If requests are being sent, get the response code from the server.

▸ Problems with Phonebook services could also be indicative of degraded indexes in the VCS database.

  • In TMS, go to **Administrative Tools > TMS Agent Diagnostics.**

  • Run the diagnosis **Verify that OpenDS database indexes are not degraded.**

Phonebook services are disabled

Phone book provisioning has not been enabled, or is configured incorrectly. Refer to the Provisioning deployment guide for more information on enabling the provisioning of phone books.

Presence status services are not enabled

▸ Verify that the Presence server configuration is set on the user in TMS.

▸ Verify by looking at Audit.log that the client sends and receives information regarding presence. (See the ladder diagrams in [Expected communication]).

▸ In TMS, go to **Administrative Tools > TMS Agent Diagnostics** and run these diagnoses:

  • **Verify that SIP SIMPLE Presence Server is enabled on the VCS Control.**

  • **Verify that SIP SIMPLE Presence User Agent is enabled on the VCS Control.**

Status publication failed

Your presence status will not be available to other users
This may be a brief, temporary problem. If the error persists, there is likely an issue with the Cisco VCS presence service.

Unable to connect to server

Could not find network
Does the user's computer have network connectivity?

DNS server is unreachable
This error may occur if the user's computer is connected to, for example, a hotel network that blocks this service until the user has paid for it. Can you reach public web sites with a browser?

Advanced settings are missing
The **Advanced** information on the Movi client has been detected as missing.

▸ Confirm this by looking at Audit.log, where missing settings will be noted as *<empty>.*

▸ Then make sure the **Internal VCS**, **External VCS**, **Domain** and **Transport** field are all specified correctly.

Make sure no firewalls are blocking communication
Movi failed to connect to the IP address provided.

▸ Check that no firewalls are blocking communication.

▸ Make sure the **Internal VCS**, **External VCS**, **Domain** and **Transport** field are all specified correctly.

"@" is not allowed as part of the username
Signin was attempted using a full SIP/e-mail address, which is not allowed. The username is usually identical to the part of a SIP address that comes *before* the @.

If the problem persists, contact IT support
Can other users with similar Movi configurations log in? If not:

▸ In TMS, go to **Administrative Tools > TMS Agent Diagnostics** and verify connectivity of the Cisco VCS the user is trying to connect to.

Disconnected from server

Your internet connection may have been lost.
Does the user's computer have network connectivity? This message is typically displayed if your computer changes networks, for example from wireless to LAN, or one wireless network to another.

This error will not be displayed if **Sign in automatically** is enabled, as Movi will reconnect and sign in automatically.

Phone books not available

Check provisioning
1. Go to **Systems > Provisioning > Directory**.
2. Make sure that Phone Book Uri is specified in the format phonebook@sipdomain.

Check access control
If provisioning otherwise works as expected, but a user or user group is not seeing any phone books, access to phone books may not be configured in Cisco TMS, or it is configured incorrectly.

1. In Cisco TMS, go to **Phone books > Manage phone books**.
2. Click on/open a phone book that should be available to the user.
3. Click on the **Access Control** tab.
4. Verify that the check box for the user's group is selected.
5. Repeat steps 2 to 4 for each phone book that the user group needs access to.

E20 troubleshooting

Error messages

Provisioning failed. Check your settings—press any key

▶ Make sure that the username, password, domain, and Cisco VCS address entered in the configuration wizard (**Settings > Configure your TANDBERG E20**) are correct.

▶ In Cisco TMS, go to **Systems > Provisioning > Directory** and verify that the user exists and has been provided with the correct username and password.

▶ In Cisco TMS, go to **Administrative Tools > TMS Agent Diagnostics** and verify that replication between the Cisco TMS and Cisco VCS works by running **Verifies that users created on the Local TMS Agent replicates to all the TMS Agent LDAP databases in the cluster.**

▶ If connecting through a Cisco VCS Expressway:

  • Go to **VCS configuration > Registration > Deny List** and check whether the Deny list is enabled.

  • If so, go to **VCS configuration > Registration > Allow List** and verify that the user has been added to the Allow list.

▶ Check whether the Cisco VCS is in maintenance mode, which will mean that new calls and registrations are disallowed and existing registrations are allowed to expire.

▶ DNS records for E20 provisioning must be set up as described in the [Provisioning deployment guide](). Use the `nslookup` command line tool to verify that the required DNS records are present and functional. For more information on how to use nslookup, see the Microsoft knowledge base article [Using Nslookup.exe]().
An example query for an SRV record for an encrypted TCP connection:
`nslookup –querytype=srv _sips._tcp.example.com.`

System upgrade failed
The downloaded file may be corrupt, or the download was terminated before completion. Either:

▶ Try downloading again.

▶ Use the E20 web server's **Upgrade** tab to upload the upgrade to the endpoint.

You access the E20 web server by opening its IP address in a web browser (**Error! Hyperlink reference not valid.**>).
To find your E20's IP:

1. On the E20, go to **Settings > System information**.
2. Under **NETWORK**, you will find the endpoint's **IP address**.

Phone books not available

Check provisioning
1. Go to **Systems > Provisioning > Directory**.
2. Make sure that **Phone Book Server 1 URL** is specified in the format `phonebook@sipdomain`.

Check access control

If provisioning otherwise works as expected, but a user or user group is not seeing any phone books, access to phone books may not be configured in Cisco TMS, or it is configured incorrectly.

1. In TMS, go to **Phone books > Manage phone books**.

2. Click on/open a phone book that should be available to the user.

3. Click on the **Access Control** tab.

4. Verify that the check box for the user's group is selected.

5. Repeat steps 2 to 4 for each phone book that the user group needs access to.

Refresh connection to TMS Agent

If no phone books are visible, E20 may also have lost connection with the Cisco TMS Agent. This will not be immediately noticeable, as phone calls can still be made and received. If you suspect this is the problem, either:

▸ Disconnect and reconnect the endpoint.

▸ You can also go to **Settings > Advanced > Advanced configuration > Provisioning > ExternalManager**, and set Mode to *Off*. Then set it back to Cisco VCS.

References and related documents

The following table lists documents and websites referenced in this document.

All Cisco TelePresence documentation can be found on the support website.

For advice from the technical support team on all Cisco TelePresence products, see articles in the knowledge base.

Name	Document reference
Cisco TelePresence Provisioning Deployment Guide	D1436804
Cisco TelePresence Administrator Guide (X5.1)	D14049.07
Cisco TelePresence Deployment Guide--Creating a Cluster of VCS peers (X5)	D14367.04
Cisco TelePresence Movi administrator guide	D1441006
Cisco E20 IP Video Phone administrator guide	D14410.06
Cisco TelePresence Video Communication Server Administrator Guide	D14049.08

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