General Troubleshooting Procedures

This chapter contains the following information:

Common Problems

This section provides information on resolving common problems seen by both end customers and developers.

Customers

Verify the following initial-setup information for your application programming interface (API):

- TAPI—Postinstallation Checklist, page 12.
- JTAPI—Postinstallation Checklist, page 22.
- XML—Troubleshooting Checklist, page 31
- AXL—Postinstallation Checklist, page 36
- Skinny—Troubleshooting Tools, page 46
- CCME/SRST—PostInstallation Checklist for TAPILite, page 54

If the problem persists, open a TAC case (see "Opening a Developer Support Case" on page 6).

Developers

See the complete listing of FAQs for your API. Follow the "Product FAQs" link. (Go to Supported Products and select the interface from the dropdown menus). Also, see the Developer Services FAQ Central page at http://www.cisco.com/cgi-bin/front.x/cse/DSFC/DSFCHome.pl. If your problem is still not fixed, open a Developer Support case from the link at http://www.cisco.com/cgi-bin/front.x/case_tools/caseOpen.pl. (See "Opening a Developer Support Case" on page 6.)

Reporting Problems

If you have simple questions that do not require more than 15 minutes to resolve, send those to the appropriate Developer Support alias:

- TAPI and JTAPI—tapi_jtapi-sdp@cisco.com
- AXL—axl-api-sdp@cisco.com
- Skinny—endpoints-sdp@cisco.com
- Cisco CallManager Express/SRST—ccme-srst-api-sdp@cisco.com

For issues involving the integration or deployment of your application with Cisco CallManager, collect all the recommended traces (see the "Error Reporting" section in the appropriate Troubleshooting chapter) in addition to the CTI, SDL, and CCM traces before opening a Developer Support case. For instructions on opening a Developer Support case, see "Opening a Developer Support Case" on page 6.

Use the Trace Collection Tool, a client-side plugin, to collect and zip various Cisco CallManager service traces and/or other Cisco CallManager log files in the form of a single/multiple zip file(s). For more information on using this tool, see the "Trace Configuration Tool" section in the *Cisco CallManager Serviceability System Guide*.

To determine the appropriate reporting steps, check the following sections:

Reporting Problems for Cisco CallManager Release 3.3 or Older

The steps to collect these traces are as follows:

Step 1 Make sure the SDL (SDLxxx_100_xxxxxx files) trace settings are set appropriately. Under Service->Service Parameters, select the IP address of the server. Then select the Cisco CallManager (CM) service from the list of services. Check or set the following CM service parameters from the CM administration:

✎ **Note** When changing parameters, do not forget to click the **update** button to save any changes.

- **SdlTraceDataFlags**—Set to 0x00000110.
- **SdlTraceFlag**—Set to T.
- **SdlTraceMaxLines**—Set to between 10000 and 20000.
- **SdlTraceTotalNumFiles**—Set to at least 100. If you are running high traffic, this number should be increased significantly. The best thing to do is after running for a while, see how much time is being captured by looking at the date/time of the SDL files. If the files are being overwritten before you would be able to save it off, increase the SdlTraceTotalNumFiles appropriately.
- **SdlTraceTypeFlags**—Set to 0x8000EB15.

Step 2 Make sure the SDL (SDLxxx_200_xxxxxx files) trace settings are set appropriately. Under *Service->Service Parameters*, select the IP address of the server. Then select the Cisco CTIManager service from the list of services. Check or set the following Cisco CTIManager service parameters from the CM administration:

> **Note** When changing parameters, do not forget to click the **update** button to save any changes.

- **SdlTraceDataFlags**—Set to 0x00000110.
- **SdlTraceFlag**—Set to T.
- **SdlTraceMaxLines**—Set to between 10000 and 20000.
- **SdlTraceTotalNumFiles**—Set to at least 100. If you are running high traffic, this number should be increased significantly. The best thing to do is, after running for awhile, see how much time is being captured by looking at the date/time of the SDL files. If the files are being overwritten before you are able to save them off, increase the SdlTraceTotalNumFiles appropriately.
- **SdlTraceTypeFlags**—Set to 0x0000CB15.

Step 3 Make sure the Cisco CallManager serviceability (ccmxxxxxxxx files) trace settings are set up for the Cisco CallManager service. In the CM administration under Application->Cisco CallManager Serviceability, select **Trace->Configuration**. Select the IP address of the server from the list of servers. Select **Cisco CallManager** from the list of Configured Services. The **Trace On** check box should be checked.

- Under Trace Filter Settings:
  - The Debug Trace Level should be set to **Detailed**.
  - Under Cisco CallManager Trace Fields, make sure the check boxes for the trace related to the problem are checked. For example, if the problem has to do with a call made through a DT-24+ gateway, check the check box labeled **Enable DT-24+/DE-30+ Trace**.
- Under Trace Output Settings:
  - The **Enable File Trace Log** check box should be checked.
  - The Filename edit box should contain a valid path and filename.
  - The default for Maximum No. of Files is 250.
  - The default for Maximum No. of Lines per File is 10000.
  - The default for Maximum No. of Minutes per File is 1440.
- As with the SDL traces, after the test has been running a while, check to see if the Cisco CallManager trace files are being overwritten too soon (before they can be copied). If they are, increase the Maximum No. of Files parameter appropriately.

Step 4 Make sure the Cisco CTIManager serviceability (ccmxxxxxxxx files) trace settings are setup for the Cisco CTIManager service. In the CM administration under Application->Cisco CallManager Serviceability, select **Trace->Configuration**. Select the IP address of the server from the list of servers. Select **Cisco CTIManager** from the list of Configured Services. The **Trace On** check box should be checked.

- Under Trace Filter Settings:
  - The Debug Trace Level should be set to **Detailed**.
  - The **Cisco CTIManager Trace Fields** check box should be checked.
  - The **Enable All Trace** check box should be checked.
- Under Trace Output Settings:
  - The **Enable File Trace Log** check box should be checked.
  - The Filename edit box should contain a valid path and filename.

- The default for Maximum No. of Files is 250.

- The default for Maximum No. of Lines per File is 10000.

- The default for Maximum No. of Minutes per File is 1440.

- As with the SDL traces, after the test has been running awhile, check to see if the Cisco CallManager trace files are being overwritten too soon (before they can be copied). If they are, increase the Maximum No. of Files parameter appropriately.

Step 5 If settings were changed for Cisco CTIManager, you must restart the service for the settings to take effect.

Step 6 When a Cisco CallManager problem happens, save off the SDL, CCM, and other related trace files (JTAPI, app traces, etc.).

Reporting Problems for Cisco CallManager Release 4.0

Use the following steps to trace the problem:

Make Sure the SDL (SDLxxx_100_xxxxxx files) Trace Settings are Set Appropriately

1. Under Service->Service Parameters, select the IP address of the server.

2. Select the **Cisco CallManager (CM) service** from the list of services.

3. Check or set the following CM service parameters from the SDL Trace section:

Note When changing parameters, do not forget to click the **update** button to save any changes.

- **SdlTraceDataFlags**—Set to 0x00000110.
- **SdlTraceFlag**—Set to True.
- **SdlTraceTypeFlags**—Set to 0x8000EB15.

4. In the CM administration under Application->Cisco CallManager Serviceability, select Trace->Configuration.

5. Select the IP address of the server from the list of servers.

6. Select **Cisco CallManager** from the list of Configured Services.

7. Click the SDL Configuration link. Scroll down to the Trace Output Settings section. Update the following service parameters as given below:

- **Trace Directory Path**—Set the path where you want the log files to be created.
- **SdlTraceMaxLines**—Set to between 10000 and 20000.
- **SdlTraceTotalNumFiles**—Set it to at least 100. If you are running high traffic, this number should be increased significantly. The best thing to do is after running for a while, see how much time is being captured by looking at the date/time of the SDL files. If the files are being overwritten before you would be able to save it off, increase the SdlTraceTotalNumFiles appropriately.

Make Sure the SDL (SDLxxx_200_xxxxxx files) Trace Settings are Set Appropriately.

1. Under *Service->Service Parameters*, select the IP address of the server.

2. Select the **Cisco CTIManager service** from the list of services.

3. Click on the **Advanced** button and scroll down to the SDL Trace Parameters group. Update the following values :

> **Note** When changing parameters, don't forget to click the **update** button to save any changes.

- **SdlTraceDataFlags**—Set to 0x00000110.
- **SdlTraceFlag**—Set to True.
- **SdlTraceTypeFlags**—Change the default setting of 0x00D0CB15 to 0x00F0CB15.

4. In the CM administration under Application->Cisco CallManager Serviceability, select Trace->Configuration.

5. Select the IP address of the server from the list of servers.

6. Select **Cisco CTIManager** from the list of Configured Services.

7. Click **SDL Configuration** link. Scroll down to the Trace Output Settings section. Update the following service parameters as given below.

> **Note** The following service parameters are read-only on the SDL Trace Parameters page. These values can be set on the Cisco CallManager Serviceability page.

- **Trace Directory Path**—Set the path where you want the log files to be created.
- **SdlTraceMaxLines**—Set to between 10000 and 20000.
- **SdlTraceTotalNumFiles**—Set to at least 100. If you are running high traffic, this number should be increased significantly. The best thing to do is, after running for awhile, see how much time is being captured by looking at the date/time of the SDL files. If the files are being overwritten before you are able to save them off, increase the SdlTraceTotalNumFiles appropriately.

Make Sure the Cisco CallManager Serviceability (ccmxxxxxxxx files) Trace Settings are Set Up for the Cisco CallManager Service.

1. In the CM administration under Application->Cisco CallManager Serviceability, select **Trace->Configuration**.

2. Select the IP address of the server from the list of servers.

3. Select **Cisco CallManager** from the list of Configured Services. The **Trace On** check box should be checked.

   - Under Trace Filter Settings:
     - The Debug Trace Level should be set to **Detailed**.
     - Under Cisco CallManager Trace Fields, make sure the check boxes for the trace related to the problem are checked. For example, if the problem has to do with a call made through a DT-24+ gateway, check the check box labeled **Enable DT-24+/DE-30+ Trace**.
   - Under Trace Output Settings:
     - The **Enable File Trace Log** check box should be checked.
     - The Filename edit box should contain a valid path and filename.
     - The default for Maximum No. of Files is 250.

- – The default for Maximum No. of Lines per File is 10000.

- – The default for Maximum No. of Minutes per File is 1440.

- • As with the SDL traces, after the test has been running a while, check to see if the Cisco CallManager trace files are being overwritten too soon (before they can be copied). If they are, increase the Maximum No. of Files parameter appropriately.

4. Make sure the Cisco CTIManager serviceability (ccmxxxxxxxx files) trace settings are setup for the Cisco CTIManager service.

5. In the CM administration under *Application->Cisco CallManager Serviceability*, select **Trace->Configuration**.

6. Select the IP address of the server from the list of servers.

7. Select **Cisco CTIManager** from the list of Configured Services. The **Trace On** check box should be checked.

- • Under Trace Filter Settings:

  - – The Debug Trace Level should be set to **Detailed**.

  - – The **Cisco CTIManager Trace Fields** check box should be checked.

  - – The **Enable All Trace** check box should be checked.

- • Under Trace Output Settings:

  - – The **Enable File Trace Log** check box should be checked.

  - – The Filename edit box should contain a valid path and filename.

  - – The default for Maximum No. of Files is 250.

  - – The default f*or* Maximum No. of Lines per File is 10000.

  - – The default for Maximum No. of Minutes per File is 1440.

- • As with the SDL traces, after the test has been running a while, check to see if the Cisco CallManager trace files are being overwritten too soon (before they can be copied). If they are, increase the Maximum No. of Files parameter appropriately.

8. If settings were changed for Cisco CTIManager, you must restart the service for the settings to take effect.

Note If a Cisco CallManager problem happens, save off the SDL, CCM, and other related trace files (JTAPI, app traces, etc.).

Opening a Developer Support Case

Follow these instructions to open a Cisco Developer Support Case:

Developer Support Web Page

1. Enter your Developer Support Contract Number from the cover e-mail:_____

> ✎
> **Note** Each development team member must register on Cisco.com with this contract ID before they can open a support case.
>
> If you already have a Cisco.com profile, send an e-mail to cco-team@cisco.com and request to have this contract number added to your user id profile. Allow 24 hours for the new information to be populated.

2. Register by using the following procedure:

    a. From www.cisco.com, click "Register" on the top menu bar.

    b. Select "1a - Cisco Service Contract Owner." Do not select any additional privileges for this contract.

    c. Enter your contract number. No verification key is required—leave blank.

    d. Complete the registration form *with your company information* and create your userid and password associated with this contract number.

>   ✎
>   **Note** You will receive a confirmation e-mail.

3. Open a Support Case

    a. Login to www.cisco.com with the user id and password you created.

> ✎
> **Note** If you cannot remember your userid and/or password, contact the Cisco Customer Response Center (see below).

    b. Under the **Service and Support** section, select **Technical Support Help—Cisco TAC**.

    c. Select **Contact TAC/Check Status**.

    d. Under *Manage a TAC Case*, select **Open a TAC Case**.

    e. Verify that the *Contract* field contains your Developer Support contract number.

    f. In *Technology* field 1, select **Other**.

    g. In *Technology* field 2, select **Developer Support Program**.

    h. Under *Problem Summary*, select the appropriate product.

    i. Enter a complete problem description and attach any documentation to support your case. No other fields need to be completed.

    j. Click **Submit**. Your case is automatically opened and an e-mail confirmation is sent to you.

Call Response Center

If you are having problems opening a Case on Cisco.com, call the Cisco Customer Response Center (CRC) at 1 877 841-3971 (408 525-4810) and provide your Contract Number. You will be asked for the required information to open a case, then the case will be directed to the proper support team.

> ✎
> **Note** The CRC staff are not technical support personnel so cannot address problems themselves. They will route your call based on the information you provide them.

Lost Contract Numbers: If you lose or misplace your unique identification number, contact the Cisco Customer Response Center and identify yourself as a member of the Cisco Developer Support Program.

Table 1 provides a general guideline for case response times. Case response times are based on standard business hours where the support team is located.

Table 1   Case Response Guideline

	Priority 1	Priority 2	Priority 3	Priority 4
Initial Response	4 Hours	1 Day	1.5 Days	2 days