Troubleshooting Issues

If a problem occurs with your system, the Health Summary page displays a red X next to the real-time status category and a link that you can click that displays information about how to resolve the issue. The following status messages may display when there is a system issue:

- A critical internal software component is down and the system must be restarted
- The conference bridge is experiencing an issue
- The system has reached maximum capacity for multiparty conferencing
- A large number of devices (phones) are unable to register with the system, possibly indicating a problem with the internal network or network services
- The gateway is experiencing an issue
- One or more gateway ports are unable to communicate with the telephone network
- The system is unable to communicate with the telephone network through the SIP trunk
- Problems have been detected with the gateways connecting the system to the telephone network
- The system is unable to offload call detail records
- The maximum storage capacity for call detail records has been exceeded
- The DNS service is incorrectly configured or unreachable
- A required service failed
- A problem has been detected with the system hardware
- A firmware update is required for MCS 7890
- An MCS 7890 is experiencing hardware issues
- An MCS 7890 requires a BIOS recovery
- The system is experiencing sustained high CPU usage
- The system is nearing maximum memory capacity
- The system is nearing maximum processing capacity
- The system has reached maximum capacity for calls going through the telephone network
- The system is nearing maximum call capacity
- The system has experienced an internal software error and must be restarted
- A phone failed to register
- PSTN calls are not established due to the value of the Called Party type number
- Product licensing is out of compliance

- The system has overheated and must be powered off and then restarted
- The system fan is not operating properly and the system must be powered off and then restarted
- The system CPU voltage is too high and the system must be powered off and then restarted
- The system has experienced an error with voicemail and auto attendant services and must be restarted
- The system has reached capacity for voicemail and auto attendant calls. Voicemail and auto attendant services are unreachable
- Voicemail and auto attendant capacity is reduced due to an unresponsive connection
- Due to an internal problem, the system is running very low on hard disk space
- A VM/AA service is utilizing a large amount of CPU resources
- How do I Enable or disable T1/E1 and ECAN Statistics Logging?

The following issues do not display in the Health Summary page:

- How do I Enable or disable T1/E1 and ECAN Statistics Logging?
- The phone has one-way audio
- A phone call cannot be established
- Operator Assisted and Transit Network Dialing does not always work
- A gateway is not listed in the Site Gateway Usage list
- When you choose Local Gateways, a remote gateway is listed in the Local Gateway list
- Local gateway is not listed in the Local Gateway list
- Gateways from a deleted site are no longer used
- Problems reported with the SPA8800
- Order of the PSTN Gateways used to route calls changes
- Upgrade of the Cisco Unified Communications Manager Business Edition 3000 software failed
- Text displays in English, not in my chosen locale
- The restore of data failed
- Cannot delete SPA8800 phone/connection
- Unable to make calls to local mobile phone numbers
- Outgoing PSTN calls take a long time to get established
- Upgrade of Connection Pack fails during installation

A critical internal software component is down and the system must be restarted

Description

A critical service, which is needed to support the operation of the system, is not operational.

Resolution

Restart the system to recover the service. If this problem persists, contact your technical support team; for example, contact your Value Added Reseller (VAR), or if you are the Value Added Reseller, contact the Cisco Technical Assistance Center (TAC).

The conference bridge is experiencing an issue

Description

A conference device is no longer registered to the system. The conference service is unavailable until the device re-registers.

Resolution

Perform any of the following actions:

- Check to see if the conference bridge hardware is powered down (this could be the ISR router, such as the Cisco 2901) and, if so, restore power.

- Check if a network issue has occurred by using the ICMP ping command to ping the gateway and the Cisco Unified Communications Manager Business Edition 3000 server.

    Note   When using the ping command, ensure that the PC is on the same subnet.

- Verify that the Ethernet connection is secure to the gateway and the Cisco Unified Communications Manager Business Edition 3000 server.

- Verify that the gateway configuration (the CLI commands generated by Cisco Unified Communications Manager Business Edition 3000) is correct and has not changed.

The system has reached maximum capacity for multiparty conferencing

Description

All available conference bridge resources are being used (for example, too many conferences are active simultaneously).

Resolution

Perform any of the following actions:

- Wait until conference resources become available.

- Review the conference usage information on the Call Detail Reports page (**Monitoring > Call Detail Reports**) to better understand the resource needs.

- Upgrade to a telephony appliance system that provides more conference resources; for example, perform a configuration export and import your data to Cisco Unified Communications Manager Business Edition 5000.

A large number of devices (phones) are unable to register with the system, possibly indicating a problem with the internal network or network services

Description

Cisco Unified Communications Manager Business Edition 3000 detected a large number of unregistered devices.

Resolution

Check for the following items:

- The switch or other network devices (such as the router) is powered down, inoperable, or not properly connected
- Phones are not physically deployed
- Phones are not properly configured
- DNS service is not properly configured
- DHCP service is not properly configured

The gateway is experiencing an issue

External Gateway

Description

An external gateway is no longer registered to the system. This service is unavailable until the device re-registers.

Resolution

Perform any of the following actions:

- Check to see if the gateway is powered down (this could be the ISR router, such as the Cisco 2901) and, if so, restore power.
- Check if a network issue has occurred by using the ICMP ping command to ping the gateway and the Cisco Unified Communications Manager Business Edition 3000 server.

> ✎
> **Note**   When using the ping command, ensure that the PC is on the same subnet.

- Verify that the Ethernet connection is secure to the gateway and the Cisco Unified Communications Manager Business Edition 3000 server.
- Verify that the gateway configuration (the CLI commands generated by Cisco Unified Communications Manager Business Edition 3000) is correct and has not changed.
- Verify connectivity from your telephony service provider to the gateway (for example, check that layer 1 and 2 are established by observing the LEDs on the gateway).

Internal Gateway

Description

The internal gateway is no longer registered to the system. This service is unavailable until the device re-registers.

Resolution

Reboot the system. If this problem persists, contact your technical support team; for example, contact your Value Added Reseller (VAR), or if you are the Value Added Reseller, contact the Cisco Technical Assistance Center (TAC).

One or more gateway ports are unable to communicate with the telephone network

Description

The gateway is registered but not functioning (layer 3 of the OSI Model/D channel is inoperable).

Resolution

Perform any of the following actions:

- Verify that the gateway configuration (the CLI commands generated by the Cisco Unified Communications Manager Business Edition 3000) is correct and has not changed.
- Check the gateway status (for example, verify that it is powered on and correctly deployed).
- Verify connectivity from your telephony service provider to the gateway (for example, check that layer 1 and 2 are established by observing the LEDs on the gateway).
- Restart the gateway.
- Restart the Cisco Unified Communications Manager Business Edition 3000 server. (Select **Maintenance > Restart/Shutdown**.)

Note   If you cannot resolve the issue by taking the previous actions, generate a log file by navigating to **Monitoring > Diagnostics**; download the log file, and send it to your technical support team; for example, contact your Value Added Reseller (VAR), or if you are the Value Added Reseller, contact the Cisco Technical Assistance Center (TAC).

The system is unable to communicate with the telephone network through the SIP trunk

Description

The system is unable to communicate with the telephone network through the SIP trunk.

Resolution

Perform the following actions:

- Check to see if the session border element is powered down and, if so, restore power.

- Check if a network issue has occurred by using the ping command to ping the session border element and the Cisco Unified Communications Manager Business Edition 3000 server.

✎

Note   When using the ping command, ensure that the PC is on the same subnet.

- Check if the Options Ping is enabled for the SIP trunk connection. In the **PSTN Connections > Edit** (corresponding SIP trunk connection) page, select the checkbox **Enable Options Ping** to enable the Options ping.

✎

Note   The **Options Ping** is enabled by default if the session border element is Cisco Unified Border Element (Cisco ISR8xx Series).

- By default, the service provider port for the SIP trunk connection is in the range 1025 to 65535. When a service provider port is configured on a port beyond the range, the PSTN connection will be established successfully. However, the system will not be able to communicate with the telephone network. An error displays on **Monitoring > Health Summary > Telephony Network Gateways** section on the Cisco Unified Communications Manager Business Edition 3000 Administrative Interface.

Procedure

a. In the Cisco Unified Communications Manager Business Edition 3000 Administrative Interface, go to **Connections > PSTN Connections** page.

b. Select the appropriate SIP trunk PSTN connection and click **Edit**.

c. In the Connection Settings area, update the Provider Port with the appropriate port value in the range 1025 to 65535.

✎

Note   Do not configure the provider port to 5061.

d. Click **Save** to save the changes made to the SIP trunk settings.

- Check to see if the session border element is powered down and, if so, restore power.
- Check if a network issue has occurred by using the ping command to ping the session border element and the Cisco Unified Communications Manager Business Edition 3000 server.

✎

Note   When using the ping command, ensure that the PC is on the same subnet.

- Check if the Options Ping is enabled for the SIP trunk connection. In the **PSTN Connections > Edit** (corresponding SIP trunk connection) page, check the check box **Enable Options Ping** to enable the Options ping.

✎

Note   If CUBE on Cisco ISR 8xx Series is used as the session border element, the Options Ping is enabled by default and is not visible on the Cisco Unified Communications Manager Business Edition 3000 Administrative Interface.

Problems have been detected with the gateways connecting the system to the telephone network

Description

Connection has been lost between the Cisco Unified Communication Manager Business Edition 3000 and the SPA8800.

Resolution

Perform the following actions:

a. Verify that all information has been entered correctly (example: MAC address, IP address, and so on) and that all information is consistent.

b. Ensure that there is connectivity between the SPA8800 and Cisco Unified Communication Manager Business Edition 3000—that routers, firewalls, switches, and so forth, are configured and operating correctly.

c. Once the information has been verified, reboot the SPA8800.

The system is unable to offload call detail records

Description

Delivery of the Call Details Report files to the Remote Server failed to offload after three unsuccessful attempts.

Resolution

Perform the following actions:

• Use the Test Connection button to ensure the access information to the server is correct and that the directory is reachable.

• Ensure that the information entered is correct (IP address, name, password, protocol, and path).

• Verify that the protocol server is operating correctly.

• Ensure that the user has appropriate access rights and that the remote location is not full.

The maximum storage capacity for call detail records has been exceeded

Description

The CDR files disk usage exceeded maximum disk allocation. Some undelivered files may have been deleted to bring disk usage down. Call detail records within the last 30 days are being deleted, starting with the oldest records.

Resolution

Perform the following actions:

—

- Ensure that there is not a hardware disk problem on the local server.

- Determine if too many undelivered CDR files have accumulated.

- Use the Test Connection button to ensure the access information to the server is correct and that the directory is reachable.

- Ensure that the information entered is correct (IP address, name, password, protocol, and path).

- Verify that the protocol server is operating correctly.

- Ensure that the user has appropriate access rights.

The DNS service is incorrectly configured or unreachable

Description

The DNS service for the Cisco Unified Communications Manager Business Edition 3000 server was expecting one DNS name but saw another name.

Resolution

Check the DNS service to verify that the DNS name matches the IP address that you added for the Cisco Unified Communications Manager Business Edition 3000 server or gateway.

A required service failed

Description

A required service that is needed to support the Cisco Unified Communications Manager Business Edition 3000 server failed.

Resolution

Perform any of the following actions:

- Restart the server. (Select **Maintenance > Restart/Shutdown**.)

- If the issue persists, generate a log file by navigating to **Monitoring > Diagnostics**; then, download the log file to your PC and send it to the technical support team; for example, contact your Value Added Reseller (VAR), or if you are the Value Added Reseller, contact the Cisco Technical Assistance Center (TAC).

A problem has been detected with the system hardware

Description

A hardware failure, such as a problem with the fan, hard drive, or memory, occurred.

Resolution

- Restart the server. (Select **Maintenance > Restart/Shutdown**.)

- If the issue persists, contact your technical support team; for example, contact your Value Added Reseller (VAR), or if you are the Value Added Reseller, contact the Cisco Technical Assistance Center (TAC).

A firmware update is required for MCS 7890

In the event a critical firmware update is required for the MCS 7890 platform, this upgrade will be made available to customers in the form of an offline bootable tool called the Cisco Firmware Update CD (FWUCD). Customers can search Cisco.com for the latest FWUCD releases that are applicable to MCS 7890 server.

Note   Customers are advised to monitor Cisco.com for any new FWUCD releases, and apply FWUCD releases as soon as possible to mitigate any critical problems. Additional details concerning contents, critical fix information, and firmware will be made available along with each FWCD release.

The release of FWUCD is independent of MCS 7890 and Cisco Unified Communications Manager releases. It follows an independent release cycle based on new critical firmware fixes, and is made available as and when it is needed. As a result, FWUCD media is not provided at the time of purchase.

Warning   To prevent firmware corruption, which can result in a catastrophic failure of the MCS 7890, use of a UPS is highly recommended. The time to complete a firmware update is generally less than 30 minutes.

An MCS 7890 is experiencing hardware issues

For hardware issues, contact your Cisco-certified partner.

An MCS 7890 requires a BIOS recovery

Note   Use the supplied USB key for recovery operations.

If using a different USB key than the one provide with the MCS 7890, the USB key must be set up as non-bootable. Use the following procedures, for both Windows 7 and Linux, to ensure that the USB key is non-bootable:

Windows 7

Procedure

Step 1   From the cmd prompt in Windows 7 enter **DISKPART**.

Step 2   Enter "LIST DISK" to view a table containing a list of available disks.

Step 3   Enter "SELECT DISK=" followed by the disk number for the USB key.

Step 4   Enter "CLEAN ALL" to remove all contents from USB key.

Step 5   Enter "CREATE PARTITION PRIMARY" to create a primary partition on the USB key.

Step 6 Enter "SELECT PARTITION 1" to select that partition.

Step 7 Enter "INACTIVE" to ensure that the partition is marked as inactive.

Step 8 Enter "FORMAT FS=FAT32" to complete the formatting of the USB key.

Step 9 Enter "EXIT" to exit DISKPART.

Step 10 The USB key is now formatted as non-bootable.

Linux

Note Set up of USB key using Linux requires root privileges.

Procedure

Step 1 Plug the USB key into the server. From the command line, enter dmesg | tail. This displays the detection information and device location for the USB key. On a single disk system it will most likely be sdb, but it may also be sdc, sdd, etc. Confirm the USB key's device location before proceeding.

Step 2 Enter "fdisk" using the device path found in step 1 (for example: "fdisk /dev/sdb"). The command prompt appears. Enter the print command by typing "p" to see details about the device

Step 3 If the partition is marked bootable by the "*" under the boot column, toggle the bootable attribute using the "a" command and enter "1" to select the first partition. Print the data again and you will see it is no longer bootable.

Step 4 Write changes to the disk using the "w" command, which also results in an exit from fdisk. Wait a few seconds for the write to complete, and then remove the USB key.

MCS 7890 should now not wait on a prompt of invalid boot media when the USB key is booted with the USB plugged in.

Warning **To prevent firmware corruption, which can result in a catastrophic failure of the MCS 7890, use of a UPS is highly recommended. The time to complete a BIOS upgrade is approximately 30 minutes.**

BIOS recovery works in two different modes:

1. Automatic mode
2. Manual mode

Automatic Mode

If the BIOS is found to be corrupt during the system boot process, plug in a USB key with a valid rom file and then reboot the server. The rom file name must use the format "recovery.rom" and will be provided by your VAR or Cisco-certified partner.

Manual Mode

Manual mode requires forcing the system into the recovery mode even if the BIOS is not corrupted. To do this requires a jumper (not supplied) across two open pins on the motherboard, as shown in Figure 47-1. The jumper is located just inside the point where the power supply and SATA cables plug into the motherboard.

Note   Use of normal electrostatic discharge precautions is advised.

Figure 47-1   Jumper
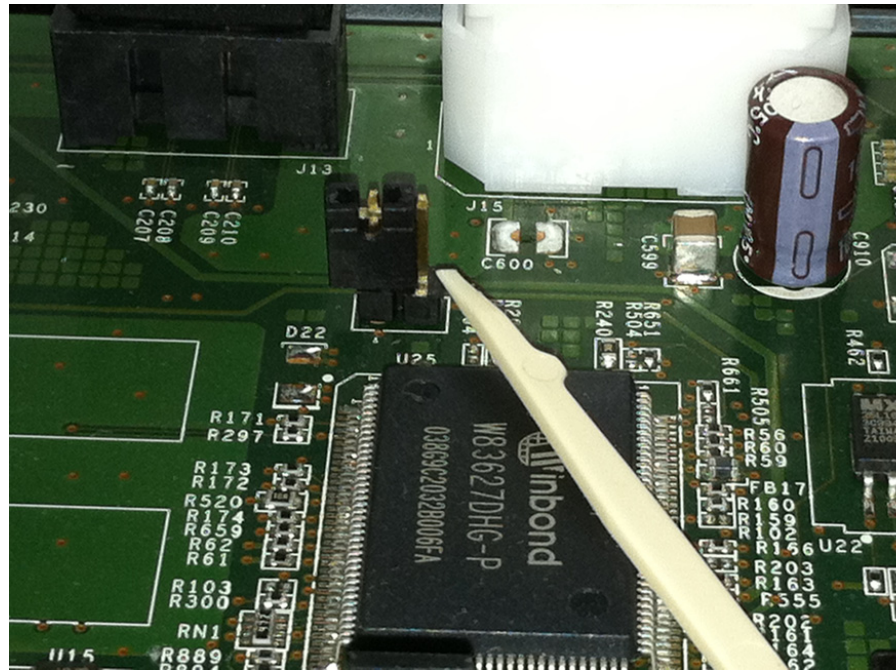
If the jumper is properly placed, the system will sound two short chirps during system power on. If a compatible rom file is found on a USB key, the system will go into recovery mode and prompt the user to continue with BIOS flash.

The system is experiencing sustained high CPU usage

Description

Services are consuming a large percentage of the CPU resources (for example, high call volume is occurring for a sustained period of time).

Resolution

Perform any of the following actions:

- Monitor the system for issues and restart the system if issues occur. (Select **Maintenance > Restart/Shutdown**.)

- If high usage persists, generate a log file by navigating to **Monitoring > Diagnostics**; download the log file, and then send it to technical support team; for example, contact your Value Added Reseller (VAR), or if you are the Value Added Reseller, contact the Cisco Technical Assistance Center (TAC).

Note   If no system issues occur but the CPU usage remains high, restart the system during the next available maintenance window.

The system is nearing maximum memory capacity

Description

A large number of memory resources are being consumed.

Resolution

Perform any of the following actions:

- Restart the server. (Select **Maintenance > Restart/Shutdown**.)
- If the issue persists, generate a log file by navigating to **Monitoring > Diagnostics**; then, download the log file to your PC and send it to your technical support team; for example, contact your Value Added Reseller (VAR), or if you are the Value Added Reseller, contact the Cisco Technical Assistance Center (TAC).

The system is nearing maximum processing capacity

Description

A large amount of system resources is being consumed, which may include processes, threads, handles, and so on.

Resolution:

Perform any of the following actions:

- Restart the server. (Select **Maintenance > Restart/Shutdown**.)
- If the issue persists, generate a log file by navigating to **Monitoring > Diagnostics**; then, download the log file to your PC and send it to the technical support team; for example, contact your Value Added Reseller (VAR), or if you are the Value Added Reseller, contact the Cisco Technical Assistance Center (TAC).

The system has reached maximum capacity for calls going through the telephone network

Description

Too many inbound/outbound calls have caused the external call resources to be low.

Resolution

Perform any of the following actions:

- Verify that a loop call is not being generated.

- Investigate system usage for high volume by reviewing the reports on the Call Detail Reports page (**Monitoring > Call Detail Reports**).

- If only one PRI interface is provisioned, purchase and provision another.

Note   An error message displays on the Health Summary page if the system reaches the maximum capacity for the PSTN calls. This error message continues to display on the Health Summary page for the next 60 minutes after the issue is resolved.

The system is nearing maximum call capacity

Description

The amount of resources that are being utilized is nearing capacity, which could cause system issues.

Resolution

Perform any of the following actions:

- Review the reports for high call volume on the Call Detail Reports page (**Monitoring > Call Detail Reports**).

- If call volume is not high, monitor the system to verify that dial tone is not impaired. (Dial tone is impaired if it is noticeably delayed after picking up a handset.) If dial tone is impaired, restart the server.

- If the issue occurs again, perform the following tasks:

    – Enable tracing on the Diagnostics page (**Monitoring > Diagnostics**).

    – Attempt to reproduce the issue.

    – Generate a log file on the Diagnostics page, and download the log file to your PC.

    – Send the log file to the technical support team; for example, contact your Value Added Reseller (VAR), or if you are the Value Added Reseller, contact the Cisco Technical Assistance Center (TAC).

The system has experienced an internal software error and must be restarted

Description

A critical internal issue occurred.

Resolution

Perform any of the following actions:

- Restart the server. (Select **Maintenance > Restart/Shutdown**.)

- If the issue occurs again in a week, perform the following tasks:

  – Enable tracing on the Diagnostics page (Select **Monitoring > Diagnostics**).

  – Attempt to reproduce the issue.

  – Generate a log file on the Diagnostics page, and download the log file to your PC.

  – Send the log file to the technical support team; for example, contact your Value Added Reseller (VAR), or if you are the Value Added Reseller, contact the Cisco Technical Assistance Center (TAC).

A phone failed to register

Description

A phone may fail to register for different reasons, such as a phone name on the Phones page (**Users/Phones > Phones**) contains a typographical error or a phone may exist but be unknown on the network.

Resolution

Perform any of the following actions:

- Check the name of the unregistered phone for possible typographical errors. (Select **Users/Phones > Phones**.)

- Investigate all unregistered phones. The Phone page in the Cisco Unified Communications Manager Business Edition 3000 Administrative Interface (**Users/Phones > Phones**) displays the registration status of the phone.

- Verify that the network is running properly.

- If you are using DHCP, verify that the DHCP server is configured appropriately. Verify that the phone is obtaining an IP address from the DHCP server.

- Review any status messages that display on the phone. Verify that the TFTP Server menu option on the phone contains the IP address of the Cisco Unified Communications Manager Business Edition 3000 server. For information on status messages and the TFTP Server option, refer to the phone administration documentation that supports your phone model.

PSTN calls are not established due to the value of the Called Party type number

Description

When you route PSTN calls using T1/E1 PRI or T1 CAS connections, the Cisco Unified Communications Manager Business Edition 3000 communicates the 'type of number' for the Called Party to the service provider. The type of the number depends on whether the called number is local, long distance, or an international number.

If the number format is not valid, the service provider returns an error with a cause code of 28 (Invalid Number Format), and the PSTN calls will not be established.

Resolution

Select **Connections > PSTN Connections > Edit PSTN Connection > Connection Settings > Show Advanced Settings/Hide Advanced Settings.** Set the 'Called Party IE number' to Unknown. The type of number will be designated as a unknown number type and the PSTN calls will not fail from the service provider with cause code of 28.

Product licensing is out of compliance

Description

One of the following issues may have occurred:

- After you provisioned something that requires the use of a license, for example, you provisioned a a phone, a feature, and so on, licenses were consumed by the system. More licenses were consumed by the system than are available (installed).

- After an upgrade to a major release of the software, the system identified that you need to install additional licenses.

Resolution

Perform any of the following tasks:

- Determine which license types are oversubscribed. (Select **Maintenance > Manage Licenses**.) Purchase licenses and install them on the Manage License page.

- Delete any phones in the system that are not being used. When you delete the phone, the system automatically credits you with licenses.

The system has overheated and must be powered off and then restarted

Description

The system has overheated.

Resolution

Restart the server. (Select **Maintenance > Restart/Shutdown**.)

The system fan is not operating properly and the system must be powered off and then restarted

Description

The system fan is not operating properly.

Resolution

Restart the server. (Select **Maintenance > Restart/Shutdown**.)

The system CPU voltage is too high and the system must be powered off and then restarted

Description

The system CPU voltage is very high.

Resolution

Restart the server. (Select **Maintenance > Restart/Shutdown**.)

The system has experienced an error with voicemail and auto attendant services and must be restarted

Description

A required voicemail or auto attendant service is not running.

Resolution

Take the following actions:

- Restart the server. (Select **Maintenance > Restart/Shutdown**.)

- If the issue persists, generate a log file by navigating to **Monitoring > Diagnostics**; then, download the log file to your PC and send it to the technical support team; for example, contact your Value Added Reseller (VAR), or if you are the Value Added Reseller, contact the Cisco Technical Assistance Center (TAC).

The system has experienced an error with voicemail and auto attendant services and must be restarted

Description

The voicemail database is not working. The system cannot access the database, the user experienced an issue with voicemail, or the voice-mail message was not delivered to voicemail.

Resolution

Take the following actions:

- Restart the server. (Select **Maintenance > Restart/Shutdown**.)

- If the issue persists, generate a log file by navigating to **Monitoring > Diagnostics**; then, download the log file to your PC and send it to the technical support team; for example, contact your Value Added Reseller (VAR), or if you are the Value Added Reseller, contact the Cisco Technical Assistance Center (TAC).

Chapter 47   Troubleshooting Issues

The system has reached capacity for voicemail and auto attendant calls. Voicemail and auto attendant services are

The system has reached capacity for voicemail and auto attendant calls. Voicemail and auto attendant services are unreachable

Description

All voicemail and auto attendant ports are being used, or a system issue is occurring. Callers cannot leave voice-mail messages.

Resolution
- Wait to see if the issue resolves itself.
- Restart the server. (Select **Maintenance > Restart/Shutdown**.)
- If the issue persists, generate a log file by navigating to **Monitoring > Diagnostics**; then, download the log file to your PC and send it to the technical support team; for example, contact your Value Added Reseller (VAR), or if you are the Value Added Reseller, contact the Cisco Technical Assistance Center (TAC).
- Discuss with your technical support team whether you need to purchase and use Cisco Unified Communications Manager Business Edition 5000. (Configuration export is required.)

Voicemail and auto attendant capacity is reduced due to an unresponsive connection

Description

The port is connected longer than expected, so a caller cannot leave a voice-mail message.

Resolution
- Wait to see if the issue resolves itself.
- Restart the server. (Select **Maintenance > Restart/Shutdown**.)
- If the issue persists, generate a log file by navigating to **Monitoring > Diagnostics**; then, download the log file to your PC and send it to the technical support team; for example, contact your Value Added Reseller (VAR), or if you are the Value Added Reseller, contact the Cisco Technical Assistance Center (TAC).

The system has experienced an error with voicemail and auto attendant services and must be restarted

Description

A voicemail or auto attendant service was not able to register with the telephony service. Callers cannot leave voicemail messages.

Resolution
- Restart the server. (Select **Maintenance > Restart/Shutdown**.)

- If the issue persists, generate a log file by navigating to **Monitoring > Diagnostics**; then, download the log file to your PC and send it to the technical support team; for example, contact your Value Added Reseller (VAR), or if you are the Value Added Reseller, contact the Cisco Technical Assistance Center (TAC).

Due to an internal problem, the system is running very low on hard disk space

Description

The disk space for voice is almost at 100%, so callers cannot leave voice-mail messages.

Resolution

- Ask your users to delete old voice-mail messages.

A VM/AA service is utilizing a large amount of CPU resources

Description

A voicemail or auto attendant component is using a large amount of CPU resources.

Resolution

- Restart the server. (Select **Maintenance > Restart/Shutdown**.)

- If the issue persists, generate a log file by navigating to **Monitoring > Diagnostics**; then, download the log file to your PC and send it to the technical support team; for example, contact your Value Added Reseller (VAR), or if you are the Value Added Reseller, contact the Cisco Technical Assistance Center (TAC).

The system has experienced an error with voicemail and auto attendant services and must be restarted

Description

When the caller attempted to use voicemail, an error occurred.

Resolution

- Ask the caller to try again.

- If the issue occurs again, perform the following tasks:

  – Enable tracing on the Diagnostics page (**Monitoring > Diagnostics**).

  – Attempt to reproduce the issue.

  – Generate a log file on the Diagnostics page, and download the log file to your PC.

  – Send the log file to the technical support team; for example, contact your Value Added Reseller (VAR), or if you are the Value Added Reseller, contact the Cisco Technical Assistance Center (TAC).

Chapter 47   Troubleshooting Issues

How do I Enable or disable T1/E1 and ECAN Statistics Logging?

How do I Enable or disable T1/E1 and ECAN Statistics Logging?

Description

When I Enable or disable the T1/E1 and ECAN statistics logging in the Administrative Interface, if the alarm is activated, the T1/E1 status does not increase.

The T1/E1 and ECAN statistics is activated based on the following:

- Enable logging on the Administrative Interface
- When the error count related to T1/E1 increases, the T1/E1 statistics is logged for every 30 seconds in FGASyslog.
- When there is no error count related to T1/E1, the T1/E1 statistics is logged for every 2 minutes FGASyslog.
- ECAN is collected for every 1 minute and it is collected on all active channels only.
- The ECAN Logging Stops if FGA resets.

Resolution

- To Enable T1/E1 and ECAN statistics perform the following steps:
  - Click **Enable Logging** on the Diagnostics page (**Monitoring > Diagnostics**). The T1/E1 and ECAN statistics logging is also enabled.
  - Click the **Generate Log File** on the Diagnostics page, and download the file to your PC to view the FGASyslog file, which contains the T1/E1 and ECAN statistics logs.
- To Disable T1/E1 and ECAN statistics click **Disable Logging** on the Diagnostics page (**Monitoring > Diagnostics**). The T1/E1 and ECAN statistics logging is also disabled.

The phone is registered but automatically resets

Description

If users report that their phones are resetting during calls or while idle on their desks, investigate the cause. If the network connection and Cisco Unified Communications Manager Business Edition 3000 connection are stable, a phone should not reset on its own. Typically, a phone resets if it has problems connecting to the Ethernet network or to the Cisco Unified Communications Manager Business Edition 3000 server.

The phone resets when it loses contact with the Cisco Unified Communications Manager Business Edition 3000 software. This lost connection can be due to any network connectivity disruption, including cable breaks, switch outages, and switch reboots.

Resolution

Perform any of the following tasks:

- Verify that the Ethernet connection to which the phone is connected is up. For example, check whether the particular port or switch to which the phone is connected is down and that the switch is not rebooting. Also make sure that there are no cable breaks.

- Intermittent network outages affect data and voice traffic differently. Your network might have been experiencing intermittent outages without detection. If so, data traffic can resend lost packets and verify that packets are received and transmitted. However, voice traffic cannot recapture lost packets. Rather than retransmitting a lost network connection, the phone resets and attempts to reconnect its network connection. If you are experiencing problems with the voice network, you should investigate whether an existing problem is simply being exposed.

- If you are using DHCP, verify whether the DHCP server is set up appropriately. Verify whether the phone is obtaining an IP address from the DHCP server.

- If the phone uses a static IP address, verify that you entered the IP address correctly on the phone.

The phone has one-way audio

Description

When at least one person in a call does not receive audio, IP connectivity between phones is not established.

Resolution

Check the configurations in routers and switches to ensure that IP connectivity is properly configured.

A phone call cannot be established

Description

The phone does not have an IP address from the DHCP, or for some reason, it is unable to register to Cisco Unified Communications Manager Business Edition 3000.

Resolution

Perform any of the following tasks:

- Verify that the Ethernet cable is attached.

- Verify whether a critical service has failed to start. The Health Summary page identifies when a critical service is down.

- Verify that both phones are registered. (Select **Users/Phones > Phones**, or locate the phone and view the status messages.)

Operator Assisted and Transit Network Dialing does not always work

Description

When calls are routed through gateway of another site, operator assisted and transit network dialing will not always work. If there is more than one site in your system and all the local gateways are in use, calls are routed through a gateway in another site if both the following conditions are satisfied.

- One or more gateways are in different sites

- Gateway usage option is set to All Gateways or Custom so that nonlocal gateways can be used for routing your calls

Resolution

Set gateway usage for the site hosting the calling phone to **Local Gateways**. This will restrict you from using gateway of the other site for placing the calls.

A gateway is not listed in the Site Gateway Usage list

Description

If you set the gateway usage option to All Gateways or Local Gateways and click the link "Show Local Gateways" or "Show All Gateways", the expected gateways are not displayed.

Resolution:

Ensure that you add correct subnet corresponding to the gateway IP address to one of the configured sites, as required. After the gateway is associated to a site correctly, the correct gateways are displayed.

When you choose Local Gateways, a remote gateway is listed in the Local Gateway list

Description

If you set the gateway usage option to Local Gateways, when you click the link **Show Local Gateways**, a few gateways from a different site are listed.

Resolution

Ensure that the subnet corresponding to that gateway IP address is removed from the current site and added to the appropriate site. After the PSTN gateway is associated to a site correctly, the correct gateways are displayed.

Local gateway is not listed in the Local Gateway list

Description

After you add a new IP address or a subnet mask to one of your sites, a few gateways listed as local to the current site are not displayed when you click **Show Local Gateways** in the PSTN Access section.

Resolution

The subnet mask assigned to another site may be a closer match to the gateway IP address than that assigned to your current site. The gateway loses association to the current site and is treated as associated to the other site. Ensure that you assign subnets based on IP address of your gateway, depending on the physical location and association to a site in your system.

Gateways from a deleted site are no longer used

Description

After you delete a site, the gateways associated with that site are not used even when other sites are configured to use All Gateways in the PSTN Access section.

Resolution

Currently, these gateways are considered to be in the Unknown location. Ensure that you add appropriate subnets to sites depending on the physical location of the gateways and their IP address. Ensure that the gateways and their IP address are associated to the correct site in your system.

Problems reported with the SPA8800

Description

Problems are found with the SPA8800 (for example: hardware issues, impedances not available, voice quality after parameter adjustment, and so forth).

Resolution

If problems are found with the SPA8800, contact:

- TAC, who will identify the issue. If they determine that the problem relates directly to the SPA8800, they will transfer to SBTG TAC
- SBTG TAC, in cases where the SPA8800 is clearly the problem. SBTG TAC may request running configurations to troubleshoot.

To run configurations from Cisco Unified Communications Manager Business Edition 3000:

1. Ensure that the connection is between the remote computer and Cisco Unified Communications Manager Business Edition 3000 over the standard TFTP port, UDP port 69.

2. Retrieve the following: tftp://{CUCMBE 3000 IP}/spa{MAC of SPA8800}.cnf.xml.

   For example, for a SPA8800 with the MAC address 0123456789AB and a CUCMBE 3000 with an IP address of 10.89.1.2, the address would be: tftp://10.89.1.2/spa0123456789AB.cnf.xml.

To run configurations from the SPA8800 web admin GUI:

1. Access the SPA8800 web GUI via http://{IP of SPA8800}/admin/voice/advanced

2. On the web browser, select File > Save As > HTML.

3. Configuration will be stored in the HTML file as embedded tags.

To ensure that SPA8800 provisioning is synched correctly:

1. Access the SPA8800 web GUI via http://{IP of SPA8800}/admin/voice/advanced

2. Check configuration and registration status.

Note   Line 1 or the trunk must be active.

For more information, refer to the Cisco Small Business Support Community:

https://supportforums.cisco.com/community/netpro/small-business

Order of the PSTN Gateways used to route calls changes

Description

If you set the gateway usage option to Local Gateways or All Gateways, calls are routed through selected gateways (as indicated by Show Gateways Accessed from this site on **Add Site > Call Settings > PSTN Access** page) in a particular order. If you change the name of your site or change the name or description of the PSTN connection corresponding to these gateways, the order in which the gateways are used to route the calls changes.

Resolution

The gateway usage selection allows you to add appropriate gateways to a route group that is used to route calls. The ordering of gateways within the route group is based on the following:

1. Site name

2. Gateway name

3. Connection the gateway

The distribution algorithm used for the route group is top-down. The gateways added to the route group are checked for availability in a Top Down order and the first available gateway is used for routing.

If the option chosen is "All Gateways," the local site gateways are added to the route group first. Gateways associated with other sites in the system are added after local gateways and these follow the same ordering as described above.

If you prefer to change the order of the gateway usage in the route group, select "Custom" and reorder the gateways using the arrows.

Upgrade of the Cisco Unified Communications Manager Business Edition 3000 software failed

Description

One of the following issues may have occurred:

- You are upgrading from a release that is not compatible or supported.

- There is not enough disk space on the server.

- The SFTP server does not contain the entire upgrade file.

Resolution

Perform any of the following tasks:

- Verify that you can upgrade from the release that you are currently running.

- If necessary, switch to the inactive version that was running on the system. (Select **Maintenance > Restart/Shutdown**.)

- Perform the upgrade again.

- Verify that the entire file copied over to the SFTP server.

- If the upgrade fails again, generate a log file by navigating to **Monitoring > Diagnostics**; then, download the log file to your PC and send it to the technical support team; for example, contact your Value Added Reseller (VAR), or if you are the Value Added Reseller, contact the Cisco Technical Assistance Center (TAC).

Text displays in English, not in my chosen locale

Description

One of the following issues may have occurred:

- You selected English_United States for the locale in the Cisco Unified Communications Manager Business Edition 3000 First Time Setup Wizard. (You cannot change the locale after you set it in the Cisco Unified Communications Manager Business Edition 3000 First Time Setup Wizard.)

- Your browser is set to display English.

- You are running a release of the Cisco Unified Communications Manager Business Edition 3000 software, for example, a software patch, and new text is not localized in the version that you are running.

Resolution

Perform any of the following tasks:

- Set your browser to the locale that you are using with the system. (To determine your locale, select **System Settings > Date/Time**.)

- After the new text is localized, upgrade to a version of the software that contains the localized text.

The restore of data failed

Description

One of the following issues may have occurred:

- The software version that was running during the backup was not the exact same software version that was running during the restore.

- After the backup, you changed the hostname of the server before you ran the restore.

- A problem occurred with the SFTP server.

Resolution

Perform any of the following tasks:

- Verify that the software version that is running during the restore exactly matches the software version that was running when you ran the backup.

- Verify that the hostname of the server was not changed before you ran the restore. The restore fails if the hostname that is included in the backup tar file does not match the hostname that is configured on the server.

- If you used a SFTP server, verify that the network connection is good. Verify that you entered the user credentials correctly on the Restore page. Verify that you have space on the SFTP server. Verify that you have access to the folder on the SFTP server where the backup tar file is stored.

Cannot delete SPA8800 phone/connection

Description

Cannot delete SPA8800 phone/connection. Either the Phone 1 or the Line 1 port must be configured on SPA8800 devices.

Resolution

Perform any of the following tasks:

- Delete SPA8800 connections from the PSTN Connections page:
  - Choose Delete for that connection from the PSTN Connection table.

Note   A warning appears for Connections configured for Emergency Calls Only, indicating that the DID used for the connection will no longer be used as an ELIN.

  - The delete will not occur for Line 1 if Phone 1 is not configured on the device, as the SPA8800 requires that Line 1 or Phone 1 be configured. In such a case, Line 1 can only be deleted if the SPA8800 device is deleted. In all other cases the device reset dialog will appear notifying the user that the SPA8800 device will be reset and all calls of the associated phones and PSTN connections will be disconnected.
  - The connection is removed from the PSTN Connections list.

Note   An associated device is not deleted as a result of removing the connection. A device can only be deleted from the Devices page.

- Delete the SPA8800 analog phone from the Phones page:
  - Choose Delete for that phone in the Phones table.
  - The delete will not occur for Phone 1 if Line 1 is not configured on the device, as the SPA8800 requires that Phone 1 or Line 1 be configured. In such a case, Phone 1 can only be deleted if the SPA8800 device is deleted. In all other cases the device reset dialog will appear notifying the user that the SPA8800 device will be reset and all calls of the associated phones and PSTN connections will be disconnected
  - The phone is removed from the Phones page.

Unable to make calls to local mobile phone numbers

Description

Users with local privileges are unable to dial calls to local mobile phone numbers when Cisco Unified Communications Manager Business Edition 3000 is deployed in some countries such as India, China, and so on.

Resolution

Ensure that you specify the local mobile phone prefixes for the site where the calls to local mobile phone numbers are failing.

Outgoing PSTN calls take a long time to get established

Description

PSTN users experience a delay prior to the system completing an outgoing call

Resolution

Select **System Settings > Dial Plan > Advanced Settings > Interdigit Timeout**. Decrease the Interdigit Timeout value to route the calls faster.

Upgrade of Connection Pack fails during installation

Description

One of the following issues may have occurred:

- An invalid provider XML file.
- The MD5 checksum validation failed.

Resolution

Perform any of the following tasks:

1. When connection pack installation fails, try re-installing the connection pack with a valid XML provider file.
2. Verify that you have entered the correct MD5 checksum value.
3. If the Connection Pack installation or upgrade fails again, generate a log file by navigating to **Monitoring > Diagnostics**; then, download the log file to your PC and send it to the technical support team; for example, contact your Value Added Reseller (VAR), or if you are the Value Added Reseller, contact the Cisco Technical Assistance Center (TAC).