C H A P T E R **5**

# Configuration Troubleshooting

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## Introduction

This chapter provides the information needed for monitoring and troubleshooting configuration events and alarms. This chapter is divided into the following sections:

- Configuration Events and Alarms—Provides a brief overview of each configuration event and alarm.
- Monitoring Configuration Events—Provides the information needed for monitoring and correcting the configuration events.
- Troubleshooting Configuration Alarms—Provides the information needed for troubleshooting and correcting the configuration alarms.

## Configuration Events and Alarms

This section provides a brief overview of the configuration events and alarms for the Cisco BTS 10200 Softswitch; the event and alarms are arranged in numerical order. Table 5-1 lists all of the configuration events and alarms by severity.

> **Note** Refer to the "Obtaining Documentation and Submitting a Service Request" section on page 1 for detailed instructions on contacting Cisco TAC and opening a service request.

> **Note** Click the configuration message number in Table 5-1 to display information about the event.

*Table 5-1 Configuration Events and Alarms by Severity*

| Critical | Major | Minor | Warning | Information | Not Used |
|---|---|---|---|---|---|
| Configuration (4) | Configuration (3) | Configuration (5) | Configuration (6) | Configuration (1) | |
| | | | Configuration (7) | Configuration (2) | |
| | | | Configuration (8) | | |

# Configuration (1)

Table 5-2 lists the details of the Configuration (1) informational event. For additional information, refer to the "Test Report—Configuration (1)" section on page 5-6.

*Table 5-2      Configuration (1) Details*

| Description | Test Report |
| --- | --- |
| Severity | Information |
| Threshold | 10000 |
| Throttle | 0 |

# Configuration (2)

Table 5-3 lists the details of the Configuration (2) informational event. For additional information, refer to the "Signaling Media Gateway Adapter Wrongly Configured Domain Name—Configuration (2)" section on page 5-6.

*Table 5-3      Configuration (2) Details*

| Description | Signaling Media Gateway Adapter Wrongly Configured Domain Name (Signaling MGA Wrongly Configured Domain Name) |
| --- | --- |
| Severity | Information |
| Threshold | 1 |
| Throttle | 1 |
| Datawords | Configured Domain Na—STRING [256] Cause—STRING [128] |
| Primary Cause | The domain name is invalid. |
| Primary Action | Check the domain name system (DNS) server and correct the domain name. |
| Secondary Cause | At least half of the local machine address does not match the Media Gateway Control Protocol (MGCP) domain name. |
| Secondary Action | Check the DNS server for the domain name to ensure that the Internet Protocol (IP) address is correct. |

# Configuration (3)

Table 5-4 lists the details of the Configuration (3) major alarm. To troubleshoot and correct the cause of the alarm, refer to the "Mate Configuration Error—Configuration (3)" section on page 5-8.

*Table 5-4    Configuration (3) Details*

| Description | Keep Alive Module: Mate Configuration Error (KAM: Mate Configuration Error) |
|---|---|
| Severity | Major |
| Threshold | 100 |
| Throttle | 0 |
| Datawords | Reason—STRING [80] |
| Primary Cause | The mate and the local are configured as the same side. |
| Primary Action | Configure one side of the platform to come up opposite of its mate. |
| Secondary Cause | The mate is configured with wrong mate red DNS name. |
| Secondary Action | Configure the mate DNS name properly for mate. |
| Ternary Cause | Mate read and DNS entries are changed. |

# Configuration (4)

Table 5-5 lists the details of the Configuration (4) critical alarm. To troubleshoot and correct the cause of the alarm, refer to the "Configuration Error—Configuration (4)" section on page 5-8.

*Table 5-5    Configuration (4) Details*

| Description | Configuration Error |
|---|---|
| Severity | Critical |
| Threshold | 100 |
| Throttle | 0 |
| Datawords | Reason—STRING [80] |
| Primary Cause | The wrong configuration is in the platform.cfg file. |
| Primary Action | Correct the appropriate parameters in the platform.cfg file. |

# Configuration (5)

Table 5-6 lists the details of the Configuration (5) minor alarm. To troubleshoot and correct the cause of the alarm, refer to the "Feature Server Database and Command Line Host Mismatch—Configuration (5)" section on page 5-8.

*Table 5-6        Configuration (5) Details*

| Description | Feature Server Database and Command Line Host Mismatch (Feature—Server DB and Command Line Host Mismatch) |
|---|---|
| Severity | Minor |
| Threshold | 100 |
| Throttle | 0 |
| Datawords | Command Line DN—STRING [128]<br>Feature Server DN—STRING [128]<br>Platform Name—STRING [32] |
| Primary Cause | The feature server table is mis-configured. |
| Primary Action | Reconfigure the feature server table to match command line –host and –port. |

# Configuration (6)

Table 5-7 lists the details of the Configuration (6) warning event. To monitor and correct the cause of the event, refer to the "FIMXML Parse Error—Configuration (6)" section on page 5-7.

*Table 5-7        Configuration (6) Details*

| Description | FIMXML Parse Error (Flexible Feature Interaction Manager Through Extensible Markup Language Parse Error) |
|---|---|
| Severity | Warning |
| Threshold | 100 |
| Throttle | 0 |
| Primary Cause | The Cisco BTS 10200 software is released with a file named FIMXMLRules.xml. This file is only read during system initialization. It defines how to handle certain features provided on an external application server. The file might be missing. |
| Primary Action | Install the FIMXMLRules.xml file in the appropriate directory. |
| Secondary Cause | The FIMXMLRules.xml file has been incorrectly modified. |
| Secondary Action | Install a valid FIMXML file. |

# Configuration (7)

Table 5-8 lists the details of the Configuration (7) warning event. To monitor and correct the cause of the event, refer to the "Application Server Provisioning Error—Configuration (7)" section on page 5-7.

***Table 5-8    Configuration (7) Details***

| Description | Application Server Provisioning Error |
|---|---|
| Severity | Warning |
| Threshold | 100 |
| Throttle | 0 |
| Primary Cause | The external application server has returned a SIP response code that indicates a subscriber is not provisioned on the AS. |
| Primary Action | Provision the application server to handle all subscribers which are provisioned on the Cisco BTS 10200 to use the applications on that server. |

# Configuration (8)

Table 5-9 lists the details of the Configuration (8) warning event. To monitor and correct the cause of the event, refer to the "Cisco BTS 10200 Provisioning for External Applications Is Not Complete—Configuration (8)" section on page 5-7.

***Table 5-9    Configuration (8) Details***

| Description | Cisco BTS 10200 Provisioning for External Applications is Not Complete |
|---|---|
| Severity | Warning |
| Threshold | 100 |
| Throttle | 0 |
| Primary Cause | The Cisco BTS 10200 call agent is provisioned to send a trigger to the feature server for the offhook delay trigger (OHD) feature or the terminating attempt trigger (TAT) feature. The subscriber is not provisioned to define the sip-trigger-profile ID. |
| Primary Action | Provision the sip-trigger-profile ID for each subscriber that has OHD or TAT provisioned. |

# Monitoring Configuration Events

This section provides the information you need for monitoring and correcting configuration events. Table 5-10 lists all of the configuration events in numerical order and provides cross-references to each subsection.

**Note**    Refer to the "Obtaining Documentation and Submitting a Service Request" section on page 1 for detailed instructions on contacting Cisco TAC and opening a service request.

*Table 5-10    Cisco BTS 10200 Configuration Events*

| Event Type | Event Name | Event Severity |
|---|---|---|
| Configuration (1) | Test Report—Configuration (1) | Information |
| Configuration (2) | Signaling Media Gateway Adapter Wrongly Configured Domain Name—Configuration (2) | Information |
| Configuration (3) | Mate Configuration Error—Configuration (3) | Major |
| Configuration (4) | Configuration Error—Configuration (4) | Critical |
| Configuration (5) | Feature Server Database and Command Line Host Mismatch—Configuration (5) | Minor |
| Configuration (6) | FIMXML Parse Error—Configuration (6) | Warning |
| Configuration (7) | Application Server Provisioning Error—Configuration (7) | Warning |
| Configuration (8) | Cisco BTS 10200 Provisioning for External Applications Is Not Complete—Configuration (8) | Warning |

## Test Report—Configuration (1)

The Test Report event is used for testing the configuration event category. The event is informational and no further action is required.

## Signaling Media Gateway Adapter Wrongly Configured Domain Name—Configuration (2)

The Signaling Media Gateway Adapter Wrongly Configured Domain Name event functions as an informational alert that the signaling media gateway adapter (MGA) is configured with the wrong domain name. The primary cause of the event is that the domain name is invalid. To correct the primary cause of the event, check DNS server and correct domain name. The secondary cause of the event is that at least half of the local machine address does not match the MGCP domain name. To correct secondary cause of the event, check the DNS server for the domain name to ensure that the IP address is correct.

# Mate Configuration Error—Configuration (3)

The Mate Configuration Error alarm (major) indicates that the mate configuration is incorrect. To troubleshoot and correct the cause of the Mate Configuration Error alarm, refer to the "Mate Configuration Error—Configuration (3)" section on page 5-8.

# Configuration Error—Configuration (4)

The Configuration Error alarm (critical) indicates that a critical configuration error has occurred. To troubleshoot and correct the cause of the Configuration Error alarm, refer to the "Configuration Error—Configuration (4)" section on page 5-8.

# Feature Server Database and Command Line Host Mismatch—Configuration (5)

The Feature Server Database and Command Line Host Mismatch alarm (minor) indicates that a feature-server database (DB) and host command line mismatch configuration error has occurred. To troubleshoot and correct the cause of the Feature Server Database and Command Line Host Mismatch alarm, refer to the "Feature Server Database and Command Line Host Mismatch—Configuration (5)" section on page 5-8.

# FIMXML Parse Error—Configuration (6)

The FIMXML Parse Error event serves as warning that the FIMXMLRules.xml file is missing or has been incorrectly modified. The Cisco BTS 10200 software is released with a file named FIMXMLRules.xml. This file is only read during system initialization. It defines how to handle certain features provided on an external application server. The file might be missing, or it might have been incorrectly modified. To correct the primary cause of the FIMXML Parse Error event, install the FIMXMLRules.xml file in the appropriate directory. A secondary cause of the event is that an invalid FIMXMLRules.xml file is installed. To correct the secondary cause of the event, install a valid FIMXMLRules.xml file.

# Application Server Provisioning Error—Configuration (7)

The Application Server Provisioning Error event serves as a warning that the external application server has returned a SIP response code that indicates a subscriber is not provisioned on the AS. To correct the cause of the Application Server Provisioning Error event, provision the application server to handle all subscribers who are provisioned on the Cisco BTS 10200 to use applications on that server.

# Cisco BTS 10200 Provisioning for External Applications Is Not Complete—Configuration (8)

The Cisco BTS 10200 Provisioning for External Applications Is Not Complete event serves as warning that the Cisco BTS 10200 call agent is provisioned to send a trigger to the Feature Server for OHD or TAT feature. The subscriber is not provisioned to define the sip-trigger-profile ID. To correct the cause of the Cisco BTS 10200 Provisioning for External Applications is not Complete event, provision the sip-trigger-profile ID for each subscriber who has OHD or TAT provisioned.

# Troubleshooting Configuration Alarms

This section provides the information needed to monitor and correct configuration alarms. Table 5-11 lists all of the configuration alarms in numerical order and provides cross-references to each subsection.

**Note**    Refer to the "Obtaining Documentation and Submitting a Service Request" section on page 1 for detailed instructions on contacting Cisco TAC and opening a service request.

*Table 5-11    Cisco BTS 10200 Configuration Alarms*

| Alarm Type | Alarm Name | Alarm Severity |
|---|---|---|
| Configuration (3) | Mate Configuration Error—Configuration (3) | Major |
| Configuration (4) | Configuration Error—Configuration (4) | Critical |
| Configuration (5) | Feature Server Database and Command Line Host Mismatch—Configuration (5) | Minor |

## Mate Configuration Error—Configuration (3)

The Mate Configuration Error alarm (major) indicates that the mate configuration is incorrect. The primary cause of the alarm is that the mate side and the local side are configured to be the same side. To correct the primary cause of the alarm, configure the side of the platform coming up to be the opposite of its mate. The secondary cause of the alarm is that the mate is configured with the wrong mate DNS name or the mate DNS name entries have been changed. To correct the secondary cause of the alarm, properly configure the mate DNS name.

## Configuration Error—Configuration (4)

The Configuration Error alarm (critical) indicates that a critical configuration error has occurred. The primary cause of the alarm is that there is incorrect configuration information in the platform.cfg file. To correct the primary cause of the alarm, check and, if necessary, correct the configuration parameters in the platform.cfg file.

## Feature Server Database and Command Line Host Mismatch—Configuration (5)

The Feature Server Database and Command Line Host Mismatch alarm (minor) indicates that a feature-server DB and host command line mismatch configuration error has occurred. The primary cause of the alarm is that the Feature Server Table is mis-configured. To correct the primary cause of the alarm, reconfigure the Feature Server table to match command line –host and –port.