

# **Viewing Faults and Logs**

This chapter includes the following sections:

- Faults Summary, on page 1
- Fault History, on page 3
- Cisco IMC Log, on page 5
- System Event Log, on page 7
- Logging Controls, on page 9

## **Faults Summary**

### **Viewing the Fault Summary**

#### **Procedure**

- **Step 1** In the **Navigation** pane, click the **Chassis** menu.
- Step 2 In the Chassis menu, click Faults and Logs.
- **Step 3** In the **Faults Summary** tab, review the following information:

#### Table 1: Actions Area

Name	Description
Total	Displays the total number of rows in the Fault Entries table.
Column drop-down list	Allows you to choose the columns you wish to be displayed.

Name	Description
Show drop-down list	Customize the way you want to view fault entries using filters. These can be:
	• Quick Filter - Default view.
	• Advanced Filter - Filter options to display the fault entries based on one or more criteria. Using the matching rule, you can view entries matching all the rules or any one combination of rules you specified in the Filter fields.
	Click <b>Go</b> to view the entries matching the filter criteria that you set.
	Click the <b>Save</b> icon to save the filter criteria that you set. This becomes a user-defined filter which you can use later.
	Note The user-defined filter appears in the Manage Preset Filters dialog box.
	• All - Displays all entries
	Manage Preset Filters - Displays user-defined filters. You can edit or remove the user-defined filter from this dialog box.
	• List of pre-defined filters - Displays the system-defined filters.
	Note You can use the <b>Filter</b> icon to hide or unhide the filter fields.

#### Table 2: Fault Entries Area

Name	Description
Time	The time when the fault occurred.
Severity	This can be one of the following:  • Cleared - A fault or condition was cleared.  • Critical  • Info  • Major  • Minor  • Warning
Code	The unique identifier assigned to the fault.

Name	Description
DN	The distinguished name (DN) is a hierarchical representation of the device endpoint and its instance on the server.
Probable Cause	The unique identifier associated with the event that caused the fault.
Description	More information about the fault.  It also includes a proposed solution.

# **Fault History**

### **Viewing Faults History**

#### **Procedure**

- **Step 1** In the **Navigation** pane, click the **Chassis** menu.
- Step 2 In the Chassis menu, click Faults and Logs.
- **Step 3** In the **Faults History** tab, review the following information

#### Table 3: Actions Area

Name	Description
Total	Displays the total number of rows in the Fault History table.
Column drop-down list	Allows you to choose the columns you wish to be displayed.

Name	Description
Show drop-down list	Customize the way you want to view fault history entries using filters. These can be:
	• Quick Filter - Default view.
	• Advanced Filter - Filter options to display the entries based on one or more criteria. Using the matching rule, you can view entries matching all the rules or any one combination of rules you specified in the Filter fields.
	Click <b>Go</b> to view the entries matching the filter criteria that you set.
	Click the <b>Save</b> icon to save the filter criteria that you set. This becomes a user-defined filter which you can use later.
	Note The user-defined filter appears in the Manage Preset Filters dialog box.
	• All - Displays all entries
	• Manage Preset Filters - Displays user-defined filters. You can edit or remove the user-defined filter from this dialog box.
	• List of pre-defined filters - Displays the system-defined filters.
	Note You can use the <b>Filter</b> icon to hide or unhide the filter fields.

#### Table 4: Faults History Area

Name	Description
Time	The time when the fault occurred.

Name	Description
Severity	This can be one of the following:
	• Emergency
	• Alert
	• Critical
	• Error
	• Warning
	• Notice
	• Informational
	• Debug
Source	The software module that logged the event.
Probable Cause	The unique identifier associated with the event that caused the fault.
Description	More information about the fault.
	It also includes a proposed solution.

#### What to do next

# **Cisco IMC Log**

## **Viewing the Cisco IMC Log**

#### **Procedure**

**Step 1** In the **Navigation** pane, click the **Chassis** menu.

Step 2 In the Chassis menu, click Faults and Logs.

**Step 3** In the **Cisco IMC Log** tab, review the following information:

#### Table 5: Actions Area

Name	Description
Clear Log button	Clears all log files.
	Note This option is only available if your user ID is assigned the admin or user user role

Name	Description
Total	Displays the total number of rows in the Cisco IMC Log table.
Column drop-down list	Allows you to choose the columns you wish to be displayed.
Show drop-down list	Customize the way you want to view Cisco IMC log entries using filters. These can be:
	• Quick Filter - Default view.
	• Advanced Filter - Filter options to display the log entries based on one or more criteria. Using the matching rule, you can view entries matching all the rules or any one combination of rules you specified in the Filter fields.
	Click <b>Go</b> to view the entries matching the filter criteria that you set.
	Click the <b>Save</b> icon to save the filter criteria that you set. This becomes a user-defined filter which you can use later.
	Note The user-defined filter appears in the Manage Preset Filters dialog box.
	• All - Displays all entries
	• Manage Preset Filters - Displays user-defined filters. You can edit or remove the user-defined filter from this dialog box.
	• List of pre-defined filters - Displays the system-defined filters.
	Note You can use the <b>Filter</b> icon to hide or unhide the filter fields.

#### Table 6: Cisco IMC Log Table

Name	Description
Time column	The date and time the event occurred.

Name	Description
Severity column	The event severity. This can be one of the following:
	• Emergency
	• Alert
	• Critical
	• Error
	• Warning
	• Notice
	• Informational
	• Debug
Source column	The software module that logged the event.
<b>Description</b> column	A description of the event.

# **System Event Log**

### **Viewing System Event Logs**

#### **Procedure**

- **Step 1** In the **Navigation** pane, click the **Chassis** menu.
- Step 2 In the Chassis menu, click Faults and Logs.
- **Step 3** On the **System Event Log** tab, review the following information:

#### Table 7: Actions Area

Name	Description
Clear Log button	Clears all events from the log file.
	Note This option is only available if your user ID is assigned the admin or user user role.
Chassis drop-down list	Select a chassis or a server to view its logs.
Total	Displays the total number of rows in the System Event Log table.

Name	Description
Column drop-down list	Allows you to choose the columns you wish to be displayed.
Show drop-down list	Customize the way you want to view events using filters. These can be:
	• Quick Filter - Default view.
	• Advanced Filter - Filter options to display the events based on one or more criteria. Using the matching rule, you can view entries matching all the rules or any one combination of rules you specified in the Filter fields.
	Click <b>Go</b> to view the entries matching the filter criteria that you set.
	Click the <b>Save</b> icon to save the filter criteria that you set. This becomes a user-defined filter which you can use later.
	Note The user-defined filter appears in the Manage Preset Filters dialog box.
	• All - Displays all entries
	Manage Preset Filters - Displays user-defined filters. You can edit or remove the user-defined filter from this dialog box.
	• List of pre-defined filters - Displays the system-defined filters.
	Note You can use the <b>Filter</b> icon to hide or unhide the filter fields.

#### Table 8: System Event Log Table

Name	Description
Time column	The date and time the event occurred.
Severity column	The severity field includes both text and a color-coded icon. For the icon, green indicates normal operation, yellow is informational, and warning, critical, and non-recoverable errors are shown in shades of red.
<b>Description</b> column	A description of the event.

# **Logging Controls**

## **Viewing Logging Controls**

#### **Procedure**

**Step 1** In the **Navigation** pane, click the **Chassis** menu.

Step 2 In the Chassis menu, click Faults and Logs.

**Step 3** In the **Logging Controls** tab, review the following information:

#### **Remote Logging**

Name	Description
Enabled check box	If checked, the Cisco IMC sends log messages to the Syslog server named in the <b>IP Address</b> field.
Host Name/IP Address field	The address of the Syslog server on which the Cisco IMC log should be stored. You can set an IPv4 or IPv6 address or a domain name as the remote system address.
Port field	Enter a destination port number of the Syslog server within the range 1 to 65535. The default port number is 514.
Protocol field	The transport layer protocol for transmission of syslog messages. You can select one of the following:  • TCP
	• UDP
Minimum Severity to Report field	Specify the lowest level of messages that will be included in the remote logs. You can select one of the following:
	• Emergency
	• Alert
	• Critical
	• Error
	• Warning
	• Notice
	• Informational
	• Debug

Note

The Cisco IMC does not remotely log any messages with a severity below the selected severity. For example, if you select **Error**, then the Cisco IMC remote log contains all messages with the severity **Emergency**, **Alert**, **Critical**, or **Error**. It does not show **Warning**, **Notice**, **Informational**, or **Debug** messages.

#### **Local Logging**

This area displays only the **Minimum Severity to Report** drop-down list as shown in the table above. You can specify the lowest level of messages to be included in the local log

### Sending the Cisco IMC Log to a Remote Server

You can configure profiles for one or two remote syslog servers to receive Cisco IMC log entries.

#### Before you begin

- The remote syslog server must be configured to receive logs from a remote host.
- The remote syslog server must be configured to receive all types of logs, including authentication-related logs.
- The remote syslog server's firewall must be configured to allow syslog messages to reach the syslog server.

#### **Procedure**

- **Step 1** In the **Navigation** pane, click the **Chassis** menu.
- Step 2 In the Chassis menu, click Faults and Logs.
- **Step 3** In either of the **Remote Syslog Server** areas, complete the following fields:

Name	Description
Enabled check box	If checked, the Cisco IMC sends log messages to the Syslog server named in the <b>IP Address</b> field.
Host Name/IP Address field	The address of the Syslog server on which the Cisco IMC log should be stored. You can set an IPv4 or IPv6 address or a domain name as the remote system address.
Port field	Enter a destination port number of the Syslog server within the range 1 to 65535. The default port number is 514.

**Step 4** (Optional) In the **Minimum Severity to Report** drop-down list, specify the lowest level of messages that will be included in the remote logs.

You can select one of the following, in decreasing order of severity:

- Emergency
- Alert

- Critical
- Error
- Warning
- Notice
- Informational
- Debug

Note

Cisco IMC does not remotely log any messages with a severity below the selected severity. For example, if you select **Error**, then the Cisco IMC remote log will contain all messages with the severity Emergency, Alert, Critical, or Error. It will not show Warning, Notice, Informational, or Debug messages.

Step 5 Click Save Changes.

### **Configuring the Cisco IMC Log Threshold**

#### Before you begin

#### **Procedure**

- **Step 1** In the **Navigation** pane, click the **Chassis** menu.
- Step 2 In the Chassis menu, click Faults and Logs.
- **Step 3** Required: In the **Local Logging** area, use the **Minimum Severity to Report** drop-down list to specify the lowest level of messages that will be included in the Cisco IMC log.

You can select one of the following, in decreasing order of severity:

- Emergency
- Alert
- Critical
- Error
- Warning
- Notice
- Informational
- Debug

#### Note

Cisco IMC does not log any messages with a severity below the selected severity. For example, if you select **Error**, then the Cisco IMC log will contain all messages with the severity Emergency, Alert, Critical, or Error. It will not show Warning, Notice, Informational, or Debug messages.

### **Sending a Test Cisco IMC Log to a Remote Server**

#### Before you begin

- The remote syslog server must be configured to receive logs from a remote host.
- The remote syslog server must be configured to receive all types of logs, including authentication-related logs.
- The remote syslog server's firewall must be configured to allow syslog messages to reach the syslog server.

#### **Procedure**

- **Step 1** In the **Navigation** pane, click the **Chassis** menu.
- Step 2 In the Chassis menu, click Faults and Logs.
- Step 3 In the Faults and Logs pane, click the Logging Controls tab.
- **Step 4** In the **Action** area, click **Send Test Syslog**.

A test Cisco IMC log is sent to the configured remote servers.