



## INTELLIGENT EVENT MODULE BASICS

The Cisco Catalyst 4000/4500 Intelligent Event Module (IEM) enables you to automate real-time monitoring of the Cisco® Catalyst® 4000 and 4500 series of switches and capture the critical information you need for effective enterprise management.

The Cisco Catalyst 4000/4500 IEM provides ConsoleWorks® with a watch-list of text messages, including error codes, system warnings, and status alerts, produced by the Cisco switches. ConsoleWorks watches for these messages, called Events, in the data streams of your managed devices.

### Events

When ConsoleWorks detects an Event, it alerts you to the Event as it is happening, records the circumstances surrounding the Event, and automatically performs the default or customer-configured responses associated with that Event.

### Scans

IEMs come with Events pre-arranged in logical groupings, called Scans™. Working with a Scan—or a combination of Scans—instead of hundreds of individual Events simplifies managing Events across your enterprise.

## CISCO CATALYST 4000/4500 IEM AT A GLANCE

Events:	603
Scans:	1 Master 8 Event Severity
Filename:	<code>cw_iem-cisco_cat4k-0002.bin</code>
License Required:	<code>CONWRKS-DB-CISCO.lic</code>
Connector Required:	Syslog

## USING THE CISCO CATALYST 4000/4500 IEM

To use this IEM, complete the following tasks:

1. Download the IEM from the TDi web site.
2. Import the IEM into ConsoleWorks.
3. Associate the Scans from the IEM with the switches you want to manage.

### To Download the IEM

1. Install the license for the Cisco Catalyst 4000/4500 IEM. To obtain this license, contact your TDi Solutions Team Manager ([sales@tditx.com](mailto:sales@tditx.com)).
2. Move to the TDi web site ([www.tditx.com/support\\_iemdownloads.asp](http://www.tditx.com/support_iemdownloads.asp)).
3. On the Product Downloads page, locate and click **Cisco 4000/4500**.
4. In the Connect to support2.tditx.com dialog box, enter your User name and Password, and click **OK**. To obtain a User name and Password, contact TDi Support ([support@tditx.com](mailto:support@tditx.com)).
5. Save the file (`cw_iem-cisco_cat4k-0002.bin`) to a directory accessible from your client workstation.

### To Import the IEM

1. On the ConsoleWorks main menu, click **Admin > Database > Import IEM**.
2. On the Import IEM page, click **Browse**.
3. On the Choose file dialog box, locate and double-click `cw_iem-cisco_cat4k-0002.bin`.
4. On the Import IEM page, click **Import IEM**, and wait for the **IEM import completed** message to appear on the page before associating the IEM's Scans.

### To Associate the Scans

Associate the Scans with the Cisco switches you want ConsoleWorks to monitor. When you associate Scans with a switch, you are specifying that ConsoleWorks scan the data streams of that switch for the Events contained in the Scans.

#### Example: To associate C4K\_EMERGENCY Scan

1. On the ConsoleWorks main menu, click **Manage > Scans > Show Scans**.
2. On the Show Scans page, in the Scans column, click **C4K\_EMERGENCY**.
3. On the Scan: C4K\_EMERGENCY page, in the Unassociated Consoles column, select the check boxes next to the names of the managed switches you want to associate with the Scan.
4. Click **Update Scan**.

For detailed instructions on associating Scans, please refer to the ConsoleWorks user's guide.



## SCANS AVAILABLE IN THE CISCO CATALYST 4000/4500 IEM

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The Cisco Catalyst 4000/4500 IEM contains a Master Scan and eight Event Severity Scans.

### Master Scan

The Master Scan, **C4K**, is the top-level Scan. It references all the other Scans in the IEM. When you associate the Master Scan with a switch, you are specifying that ConsoleWorks scan the data stream of that switch for any of the IEM's 603 Events.

### Event Severity Scans

The Cisco Catalyst 4000/4500 IEM contains eight Event Severity Scans. Use one or more of these Scans to monitor Cisco switches for messages based on the Severity levels of Events.

The IEM provides the following Event Severity Scans:

- |                     |            |
|---------------------|------------|
| • C4K_EMERGENCY     | 2 Events   |
| • C4K_ALERT         | 1 Event    |
| • C4K_CRITICAL      | 55 Events  |
| • C4K_ERROR         | 195 Events |
| • C4K_WARNING       | 202 Events |
| • C4K_NOTIFICATION  | 79 Events  |
| • C4K_INFORMATIONAL | 46 Events  |
| • C4K_DEBUGGING     | 23 Events  |

## SAMPLE CISCO CATALYST 4000/4500 IEM EVENTS

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The Cisco Catalyst 4000/4500 IEM provides you with names, message texts, Severity ratings, explanations, and recommended responses for Events produced by Catalyst 4000/4500 switches.

The following section displays samples of the information you receive for each Event in the Cisco Catalyst 4000/4500 IEM.

### Sample Event 1

- Name:** C4K\_CHA\_OVERHEATINGSHTUTDOWN
- Message:** %C4K\_CHASSIS-2-OVERHEATINGSHTUTDOWN :
- Severity:** CRITICAL
- Explanation:** The switch is now warmer than its maximum allowable operating temperature. Software will reset modules to reduce heat generation.
- Response:** Verify that the switch is in the proper operating environment and that the fans are functioning properly.

### Sample Event 2

- Name:** C4K\_ISM\_INLINEPOWEROVERCRITIC
- Message:** %C4K\_IOSMODPORTMAN-2-INLINEPOWEROVERCRITICAL :
- Severity:** CRITICAL
- Explanation:** This message indicates that the measured PoE is at least 50 W higher than the module's physical limit. The switch is either misconfigured or an unauthorized powered device is causing this situation that can crash the system.
- Response:** You can use the show power detail command and keyword or the show module command to compare the administrative (configured) power (measured) consumption to the operating power consumption. Verify that PoE is set correctly and that no unauthorized powered devices are connected to the switch.

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