



## INTELLIGENT EVENT MODULE BASICS

The HP StorageWorks HSx Intelligent Event Module™ (IEM) enables you to automate real-time monitoring of the StorageWorks™ HSx series of RAID array controllers and capture the critical information you need for effective enterprise management.

The HP StorageWorks HSx IEM provides *ConsoleWorks*® with a watch-list of text messages, including error codes, component warnings, and status alerts, produced by StorageWorks HSx controllers. *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.

## HP STORAGEWORKS HSx IEM AT A GLANCE

Events:	1246
Scans:	1 Master 4 Event Severity
Filename:	<code>cw_iem-hp_hsx-0002.bin</code>
License Required:	<code>CONWRKS-DB-HSX.lic</code>
Connector Required:	Serial or Telnet

## USING THE HP STORAGEWORKS HSx 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 devices you want to manage.

### Download the IEM

1. Obtain a license for the HP StorageWorks HSx 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 **HP (StorageWorks) HSx**.
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-hp_hsx-0002.bin`) to a directory accessible from your client workstation.

### 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-hp_hsx-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 attempting to associate Scans.

### Associate the Scans

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

*ConsoleWorks* provides you with three options for associating Scans:

- Associate individual Scans with one or more devices.
- Associate groups of Scans with one or more devices.
- Create a Scan containing only the Events you want monitored and associate this customized Scan with one or more devices.

**Note:** While you can associate any Scan with any application, system, or device, only associate a Scan with the application, system, or device appropriate for that Scan. For instance, associate only Cisco Scans with Cisco devices and HP Scans with HP controllers.



### Example: To associate Scan HSX\_IMMEDIATE

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

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

### SCANS AVAILABLE IN THE HP STORAGEWORKS HSx IEM

The HP StorageWorks HSx IEM contains a Master Scan and four Event Severity Scans.

#### Master Scan

The Master Scan, **HSX**, is the top-level Scan. It references all the other Scans in the IEM. When you associate the Master Scan with a device, you are specifying that ConsoleWorks scan the data stream of that device for all 1,246 Events.

#### Event Severity Scans

The HP StorageWorks HSx IEM contains four Event Severity Scans. Use these Scans to monitor HSx controllers for messages based on the Severity levels of Events.

The IEM provides the following Event Severity Scans:

- HSX\_IMMEDIATE 862 Events
- HSX\_HARD 194 Events
- HSX\_SOFT 109 Events
- HSX\_INFORMATIONAL 81 Events

### SAMPLE HP STORAGEWORKS HSx IEM EVENTS

The HP StorageWorks HSx IEM provides you with names, message texts, Severity ratings, explanations, and responses for Events produced by HSx controllers.

The following section displays samples of the information you receive for each Event in the HP StorageWorks HSx IEM.

#### Sample Event 1

- Name:** HSX-01032002
- Message:** — Instance code: 01010302
- Severity:** HARD
- Explanation:** Nonvolatile parameter memory component error detection code (EDC) check failed; content of the component reset to default settings.
- Response:** Replace the controller module.

#### Sample Event 2

- Name:** HSX-02072201
- Message:** — Instance code: 02072201
- Severity:** IMMEDIATE
- Explanation:** The CACHEA0 Memory Controller failed testing performed by the Cache Diagnostics. The Memory Address field contains the starting physical address of the CACHEA0 memory.
- Response:** Replace the indicated cache module or the appropriate memory DIMMs on the indicated cache module.

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