



## INTELLIGENT EVENT MODULE BASICS

The VERITAS Volume Manager 4.0 Intelligent Event Module (IEM) enables you to automate real-time monitoring of the VERITAS Volume Manager application from Symantec™ and capture the critical information you need for effective enterprise Storage Area Network (SAN) management.

The VERITAS Volume Manager 4.0 IEM provides ConsoleWorks® with a watch-list of text messages, including error codes, system warnings, and status alerts, produced by Volume Manager 4.0. ConsoleWorks watches for these messages, called Events, in the data streams of your managed hardware 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.

## VERITAS VOLUME MANAGER 4.0 IEM AT A GLANCE

Events:	136
Scans:	1 Master 4 Event Severity
Filename:	<code>cw_iem-symantec_volmgr-0004.bin</code>
License Required:	<code>CONWRKS-DB-VOLMGR.lic</code>
Connector Required:	Syslog

## USING THE VERITAS VOLUME MANAGER 4.0 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 VERITAS Volume Manager 4.0 IEM. To obtain this license, contact TDI ([sales@tditx.com](mailto:sales@tditx.com)).
2. Connect 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 **Symantec (VERITAS) Volume Manager 4.0**.
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-symantec_volmgr-0004.bin`) to a directory accessible from your client workstation.

## Import the IEM

1. On the main menu:
  - (*ConsoleWorks 3.x*) click **Admin > Database > Import IEM**.
  - (*ConsoleWorks 4.0*) click **Events > IEMs**.
2. On the Import IEM page, click **Browse**.
3. On the Choose file dialog box, locate and double-click `cw_iem-symantec_volmgr-0004.bin`.
4. On the Import IEM page, click **Import IEM**, and wait for the **IEM Import Completed** or the **Import Successful** message to appear before attempting to associate Scans.

## Associate the Scan

Associate the Scans with the SAN devices you want monitored. 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.

### Example: To associate Scan VOLMGR\_FATAL\_ERROR (ConsoleWorks 3.x)


1. On the ConsoleWorks main menu, click **Manage > Scans > Show Scans**.
2. On the Show Scans page, in the Scans column, click **VOLMGR\_FATAL\_ERROR**.
3. On the Scan: VOLMGR\_FATAL\_ERROR 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**.

**Example: To associate Scan VOLMGR\_FATAL\_ERROR (ConsoleWorks 4.0)**

1. On the main menu, click **Events > Scans > Edit**.  
*The Edit Scan page appears.*
2. On the Name drop-down list, click **VOLMGR\_FATAL\_ERROR**.
3. Click , then click **Add**.  
*The Add Consoles selector appears.*
4. Select the Consoles you want associated with the Scan, review your choices in the Selected Consoles window, and click **OK**.
5. Click **Save**.

## SCANS AVAILABLE IN THE VERITAS VOLUME MANAGER 4.0 IEM

The VERITAS Volume Manager 4.0 IEM contains a Master Scan and four Event Severity Scans.

### Master Scan

The Master Scan, **VOLMGR**, 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 streams of that device for any of the IEM's 136 Events.

### Event Severity Scans

The VERITAS Volume Manager 4.0 IEM contains four Event Severity Scans. Use one or more of these Scans to monitor devices for Events based on their Severity level.

The IEM provides the following Event Severity Scans:

- VOLMGR\_FATAL\_ERROR 2 Events
- VOLMGR\_ERROR 76 Events
- VOLMGR\_WARNING 38 Events
- VOLMGR\_NOTICE 20 Events

## SAMPLE VERITAS VOLUME MANAGER 4.0 IEM EVENTS

The VERITAS Volume Manager 4.0 IEM provides you with names, message texts, Severity ratings, explanations, causes, and recommended responses for Events produced by Volume Manager.

This section displays samples of the information you receive for each Event in the VERITAS Volume Manager 4.0 IEM.

### Sample Event 1

- Name:** VOLMGR\_V-5-1-946
- Message:** V-5-1-946
- Severity:** FATAL ERROR
- Explanation:** bootdg cannot be imported during boot.
- Cause:** Usually means that multipathing is misconfigured.
- Response:** See "V-5-1-5929" on page 114 of the VERITAS Volume Manager 4.0 Troubleshooting Guide for possible causes and solutions.

### Sample Event 2

- Name:** VOLMGR\_V-5-1-134
- Message:** V-5-1-134
- Severity:** ERROR
- Explanation:** Memory allocation failure.
- Cause:** This implies that there is insufficient memory to start VxVM and to get the volumes for the **root** and **/usr** file systems running.
- Response:** This error should not normally occur, unless your system has very small amounts of memory. Adding swap space will probably not help because this error is most likely to occur early in the boot sequence, before swap areas have been added.

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