



## INTELLIGENT EVENT MODULE BASICS

The Network Appliance Intelligent Event Module (IEM) enables you to automate real-time monitoring of NetApp® filer systems (series F700/F800/F900) and capture the critical information you need for effective enterprise storage management.

The Network Appliance IEM provides *ConsoleWorks*® with a watch-list of text messages, including error codes, system warnings, and status alerts, produced by NetApp filer systems. *ConsoleWorks* watches for these messages, called Events, in the data streams of your managed systems.

### 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.

## NETWORK APPLIANCE IEM AT A GLANCE

Events:	66
Scans:	1
Filename:	<code>cw_iem-netapp_netapp-0001.bin</code>
License Required:	<code>CONWRKS-DB-NETAPP.lic</code>
Connector Required:	Telnet

## USING THE NETWORK APPLIANCE 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 IEM's Scan with the systems you want to manage.

### To Download the IEM

1. Install the license for the Network Appliance 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 **Network Appliance (NetApp)**.
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-netapp_netapp-0001.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-netapp_netapp-0001.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 Scan.

### To Associate the Scan

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

### Example: To associate the NetApp Scan (NAP)

1. On the *ConsoleWorks* main menu, click **Manage > Scans > Show Scans**.
2. On the Show Scans page, in the Scans column, click **NAP**.
3. On the Scan: NAP page, in the Unassociated Consoles column, select the check boxes next to the names of the managed systems 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 NETWORK APPLIANCE IEM

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The Network Appliance IEM contains a single scan: **NAP**. Use this Scan to monitor the data streams of NetApp series F700/F800/F900 filer systems.

## SAMPLE NETWORK APPLIANCE IEM EVENTS

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The Network Appliance IEM provides you with names, message texts, Severity ratings, explanations, and recommended responses for the 66 Events produced by NetApp systems.

This section displays samples of the information you receive for each Event in the Network Appliance IEM.

### Sample Event 1

**Name:** NAP-DISK\_REMOVED  
**Message:** [raid\_disk\_admin:Critical]:  
Spare  
**Severity:** CRITICAL  
**Explanation:** The spare disk has been removed from the system. Since automatic rebuilding cannot occur without the spare disk, this is a critical notice.  
**Response:** Replace the disk as soon as possible.

### Sample Event 2

**Name:** NAP-DISK\_MISSING  
**Message:** [raid\_stripe\_owner:notice]:  
One  
**Severity:** NOTICE  
**Explanation:** A disk is missing from the volume. If a hot spare is available, the missing disk will be reconstructed to that volume.  
**Response:** Check the disk status to determine if one has failed and replace as soon as possible.

### Sample Event 3

**Name:** NAP-DEGRADED  
**Message:** [mgr.boot.degraded:warning]  
**Severity:** WARNING  
**Explanation:** A disk is missing from one or more RAID groups. System is starting in degraded mode.  
**Response:** Replace the disk as soon as possible.

### Sample Event 4

**Name:** NAP-DISK\_RECONSTRUCTION  
**Message:** [consumer:notice]:  
Reconstruction of parity disk  
in volume  
**Severity:** INFORMATIONAL  
**Explanation:** The system is reconstructing the parity disk.  
**Response:** No user action required.

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