

EMC Ionix Notification Manager

Part of Ionix IT Operations Intelligence Family

Extending the power of EMC Ionix (formerly Smarts) to graphically automate the analysis of unmanaged alarms and raw alerts from any source

The Big Picture

- Converts unmanaged notifications into meaningful information
- Automates identification of root-cause problems, analyzes notifications for potential impacts, and monitors raw events and notifications—consistently, in one centralized, intuitive interface
- Eliminates the need for manual event scripting and rules writing
- Improves event processing significantly
- Tracks event policy changes automatically
- Allows for easy, modular distribution of new event-handling policies
- Adapts to a wide variety of event sources
- Supports high volumes of alarms and alerts

Today's network infrastructures are the backbone over which business value gets delivered. Whether it's a series of business-focused network services for users in a large enterprise or the primary online banking access for a financial services provider, the underlying network is what allows these organizations to successfully deliver and apply these services. That means the network—and the end-to-end information infrastructure on which it depends—must be maintained on an ongoing basis at a level of availability and quality that ensures delivery of IT services to users.

Numerous factors can affect the complex interdependencies that exist among the various physical, logical, and virtual elements in the information infrastructure—the understanding and management of which are critical for delivering and maintaining desired levels of network availability and quality. Rarely are these interdependencies static: Networks are dynamic in nature, constantly changing and adapting to support growth, new services, and shifting customer, market, and business needs.

Shifting the burden into the management system

This mix of complex interdependencies and constant change compels many network operations staffs to seek help in maintaining and ensuring service availability and quality. Furthermore, this mix has rendered ineffective any network management approaches that either rely on manual rule and script writing, or cannot correlate how events from one source affect other dependent devices or services. Today more than ever, IT operations cannot justify the resources or investment in writing and maintaining rules and scripts in the hope of gaining additional intelligence from normally unmanaged event streams. The burden of analyzing how events impact the end-to-end network, and the services that depend on it, must shift out of the minds of the network operations staff and into the management system itself.

However, IT operations sometimes needs to analyze raw events or notifications from a variety of sources—including unmanaged elements in the network. In addition, non-service-impacting events may need to be tracked or correlated with other sources. Potentially, some sympathetic alarms—that is, events created by one IT element as a result of a root-cause problem on another IT element—may subsequently become root-cause problems themselves, making their monitoring useful for correlation of other potential impacts.

IT operations needs an easy-to-use, streamlined approach that allows it to graphically define what sources of raw events and notifications should be managed, as well as what event conditions or relationships should be monitored. By leveraging the powerful topology sources and event management capabilities of EMC[®] Ionix™ (formerly EMC Smarts[®]), this information can be correlated with the advanced analysis capabilities of EMC Ionix to further improve service availability and operational effectiveness.

EMC Ionix Notification Manager

EMC Ionix Notification Manager is a powerful and efficient solution for implementing event management for notifications or raw events that are either unmanaged or external to the automated event analysis provided by EMC Ionix. By coupling the powerful topology discovery, event monitoring, and analysis capabilities of EMC Ionix with an easily configurable graphical interface, Notification Manager augments a need in almost every managed IT environment: Consistent and extensive notification handling for the most commonly encountered—but not actively managed—raw events and notifications.

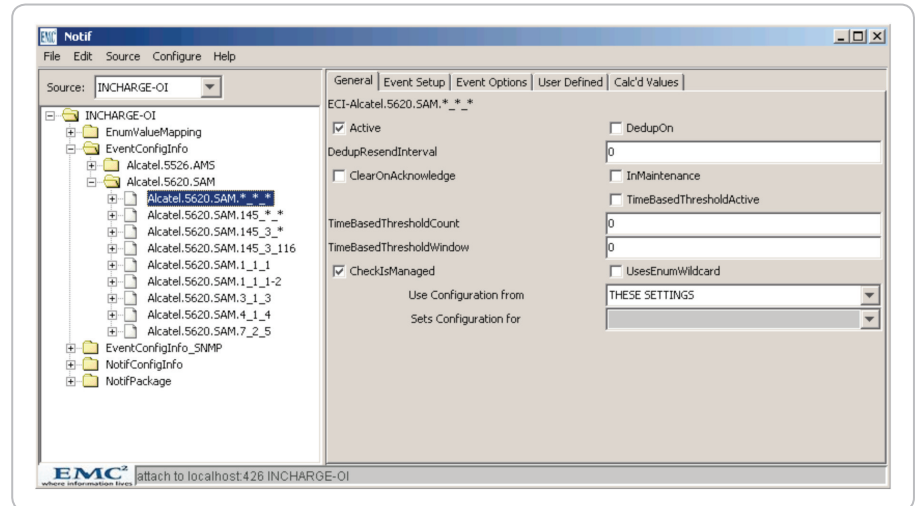


Figure 1: The Graphical User Interface in EMC Ionix Notification Manager

Notification Manager eliminates the need for application-specific coding and provides network operations staff with configuration access, maintenance, and reporting capabilities without requiring complete understanding of the underlying products. In addition, Notification Manager provides several layers of event processing:

- Common low-level filtering
- Variable substitution from raw event data
- Value enumeration
- Calculations on raw input values
- Multithreaded Java/ASL scripts
- Event “windowing”
- “Clears-for” multiple other events
- Aggregate support
- Causes/caused-by processing

Notification Manager mediates standard configuration sources, such as ASN.1.MIB files or trap_mgr.conf files. Since Notification Manager uses standard object representations within an EMC Ionix repository, customers can also create their own translations from local event configuration products into Notification Manager.

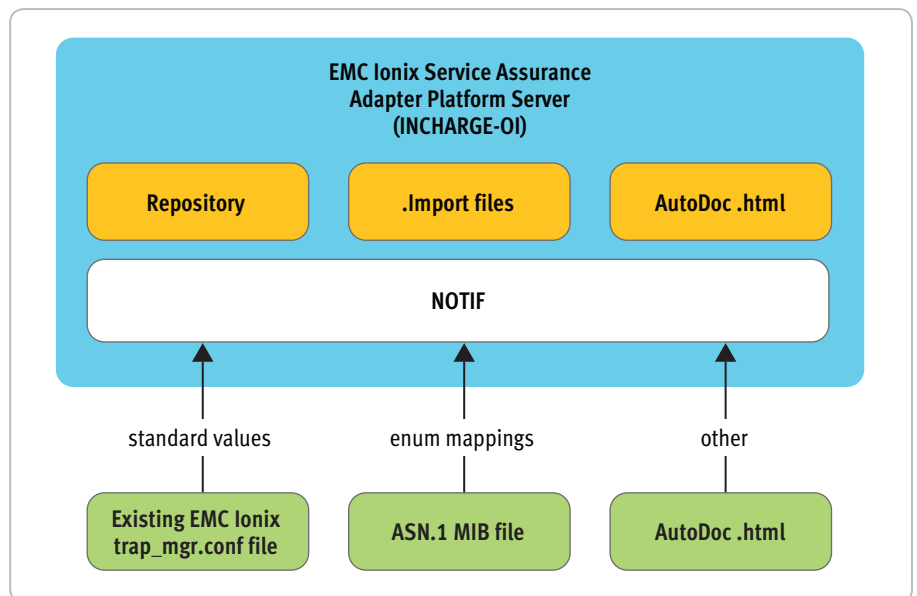


Figure 2. Event Interfaces

Notification Manager's architecture

Notification Manager has two main parts:

- The realtime component, which processes raw events from any data source tied into Notification Manager (such as SNMP traps, TL-1, or JMS) according to configuration settings, that is, event configuration information (ECI) objects
- Notification processing configured by notification configuration information (NCI) objects, which relate or extend processing of notifications

Separating raw event processing from notification processing allows Notification Manager to operate in various architectures. Both of these configuration object types use a graphical interface to change configuration settings.

How Notification Manager provides value

Notification Manager delivers value to its users by:

- Integrating intelligently the raw events that are unmanaged but critical to the operation of the information infrastructure
- Associating event sources, event groups, or specific events with analysis conditions and desired behavior
- Using a simple, flexible, and user-friendly graphical interface
- Delivering a consistent, extensive notification-handling solution that doesn't require any knowledge of complex scripting
- Exploiting the powerful topology, discovery, and event-monitoring capabilities of EMC Ionix
- Complementing the look and feel of EMC Ionix by providing tight integration and a familiar interface
- Simplifying the need for ongoing change or event-processing maintenance by automatically generating documentation for all configured event-processing policies
- Correlating source events with EMC Ionix analysis notifications
- Accepting any source of events and notifications

Operating system and software requirements

Notification Manager is supported on Sun Microsystems Solaris v9 and v10; and Microsoft Windows 2003 Enterprise Edition, and requires the installation of EMC Ionix Service Assurance Management suite, version 7.1 or higher.

About EMC

EMC Corporation is the world's leading developer and provider of information infrastructure technology and solutions that enable organizations of all sizes to transform the way they compete and create value from their information. Information about EMC's products and services can be found at www.EMC.com.



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To learn more about how EMC Ionix Notification Manager and other EMC IT management solutions can positively impact your business and IT operations, contact your local EMC or EMC Resource Management sales representative, or visit our website at www.EMC.com.