

## The Industry Standard in IT Infrastructure Management

### Purpose

This document describes how to integrate Nagios XI events with Nagios Incident Manager (Nagios IM).

### Target Audience

This document is intended for use by Administrators who wish to automatically create and manage Nagios XI incidents in Nagios Incident Manager. This document assumes the reader has both Nagios XI and Nagios IM installations already completed.

### Overview

The **Nagios IM Integration Component** forwards events for **Hard** state changes for hosts and services that are in problem states, and can be customized to allow for selected events to be forwarded to Nagios IM as new incidents. This component also allows Nagios IM to respond back to Nagios XI with Acknowledgments and Comments for incidents that receive updates in Nagios IM.

### Setting Up Incident Manager

Nagios Incident Manager requires both a **user account** and an **incident type** to be specified in order to successfully integrate with Nagios XI. Let's start by creating a new account specifically for Nagios XI in the Incident Manager.

After logging into Nagios IM, access the **Administration->Manage Users** page, and click the **New User** button.

For demonstration purposes, we'll create a username *nagiosxi*, and this user needs to be assigned the Role: **Administrator**. The actual username can vary, but it is recommended to keep this account separate from normal user accounts for security purposes. Set the user account as **Active** and click the **Save User** button.

#### Add User

Once the user is created, click on the user's hyperlink to access the user's details, and scroll down to locate the user's **API Key**. This key will be the authentication token that Nagios XI and Nagios IM use to communicate with each other, and this value will be needed to configure the Nagios XI component.

Next we'll create a new **Incident Type** by accessing the **Administration->Manage Incident Types** page. Click the **New Type** button. Use whatever name seems appropriate for your environment, and click **Save Type**. Once your incident type is created, make note of the **Alias** for the incident type, as this will be needed by the Nagios XI component.

#### Incident Types

Type	Alias
host	host
Xi Incident	xi-incident

## Setting Up the Nagios XI Component

The **Nagios IM Integration Component** component can be downloaded from the following URL, and installed through Nagios XI's **Admin->Manage Components** page.

<http://assets.nagios.com/downloads/nagiosxi/components/nagiosim.zip>

Once the component is installed, access the **Nagios IM** component listing and click the **Edit Settings** icon.

<b>Nagios Core Configuration Manager</b> Provides core configuration UI integration. Author: Nagios Enterprises, LLC	Core	-
<b>Nagios IM</b> This component integrates Nagios Incident Manager with Nagios XI events. Version: 1.0 Date: 07/24/2012 Author: Mike Guthrie, Nagios Enterprises, LLC	User	

## Component Configuration

The Nagios IM Component has several configuration options to allow for flexibility in how new incidents are created. However, there are also multiple configuration options that are required for the component to work properly. Lets example the required settings first.

- **Incident Manager Public URL:** This is the external URL for Nagios IM that XI will use to access the API. This address must be accessible by the Nagios XI server.
- **User API Key:** This is the user-specific API key that was created with the Nagios IM user account created earlier in this documentation
- **Incident Type:** This is the **Alias** of the incident type that we created in Nagios IM earlier in this documentation.
- **Callback Registration Status:** Once the public URL and the API Key are saved in XI, Nagios XI will attempt to register a new Callback function that will forward incident changes back to Nagios XI as acknowledgments or comments.
- **Max Age:** Nagios XI will store any **open** incidents in a local cache until this threshold is exceeded. This value prevents Nagios from sending multiple new incidents per day for the same host or service if several hard stage changes are detected. **Note:** Any incident that is marked as **Closed** or **Resolved** in the Incident Manager will be removed from XI's cache as well, which allows for a new incident to be created by Nagios XI.
- *(continued on next page)...*

### Nagios Incident Manager Settings

Enabled Nagios IM Sender	<input checked="" type="checkbox"/> Enable the Nagios IM event handler.
*Nagios Incident Manager Public URL:	<input type="text" value="http://192.168.5.165/nagiosim"/> http://<serveraddress>/
*User API Key	<input type="text" value="f5ba0cd2323efa374b1c7d173813a20b"/> The API key unique to each user in Nagios IM. This can be found from the Admin->Edit User recommended to create a "Nagios XI" user in the incident manager as a best practice for pe
*Incident Type	<input type="text" value="xi-incident"/> Default incident type, as defined in the Administration->Manage Incident Types page.
Callback Registration Status	Callback registered with Nagios IM Callback registration allows Nagios IM to submit comm for related incidents.
*Max Age	<input type="text" value="1"/> days The amount of time in days Nagios XI will store an incident. If an incident is stored in Nagio: IM. This is used to prevent multiple incidents from being created by a single host or service

- Forwarding Threshold (optional):** This optional allows a delay to be specified after a hard state change. If a value greater than 0 is entered here, Nagios XI will wait X amount of minutes, recheck the host or service state, and then forward the incident if the problem still persists.
- Incident Title and Incident Message:** This is the format for the incident title and message that will be created in Nagios IM. Acceptable macros are:
  - %type%:** "host" or "service"
  - %event\_time%:** A formatted date string
  - %host%:** Host name
  - %service%:** Service Description
  - %status%:** The host or service state
  - %output%:** Plugin output from the Nagios check, truncated to 255 characters.
  - %xiserverurl%:** Nagios XI's external URL
- IM Users (optional):** A comma delineated list of Nagios IM usernames to automatically assign incidents to.
- IM Teams (optional):** A comma delineated list of Nagios IM teams to automatically assign incidents to.
- Use Proxy (optional):** This is an **experimental** feature of this component, and can be used for users who need to forward http requests through a proxy in order to communicate with the Nagios IM server. **Requires the Proxy Component for Nagios XI.**
- Hostgroups and Servicegroups Filtering (optional):** Filtering can be enabled to allow only events from selected hostgroups or servicegroups to be forwarded to Nagios IM. **Note:** If any hostgroups **OR** servicegroups are selected, Nagios XI will only forward events for selected groups. Group filtering is considered to be either "on" or "off."

Forwarding Threshold (optional)	10 mn <small>The amount of time in minutes Nagios XI will wait before forwarding a hard state change remains in a problem state after the threshold has been exceeded. Enter "0" if to bypass.</small>
*Incident Title	%host% : %service% %status% <small>The title format to be used for new incidents.</small>
*Incident Message	****Nagios XI Incident**** Type: %type% Time: %event_time% Host: %host% Service: %service% <small>Ignore host and service problems that are acknowledged or in scheduled downtime.</small>
IM Users (optional)	thedude <small>A comma delineated list of Nagios IM users to automatically assign this incident to.</small>
IM Teams (optional)	 <small>A comma delineated list of Nagios IM teams to automatically assign this incident to.</small>
Use Proxy (optional)	<input type="checkbox"/> (**experimental) Requires the proxy component. Utilize a proxy if the proxy comp
<b>Filtering: If hostgroups OR servicegroups are selected, Nagios XI will only forward events for selected groups.</b>	
Hostgroups (optional)	BPI Demo Hostgroup linux-servers newGroup <small>(optional) By default this component will forward all hard state changes. Select hostg</small>
Servicegroups (optional)	all_dell_openmanage_servers BenchmarkBox Loads <small>(optional) By default this component will forward all hard state changes. Select servic</small>

## Nagios IM Callback Registration

If callback registration is successful, Nagios IM should automatically update hosts and services in Nagios XI with comments and acknowledgments. For an **acknowledgment** to be submitted to Nagios XI, an incident must either be **Closed**, **Resolved**, or **Acknowledged**. If an incident is either **Confirmed** or the incident details are updated, Nagios IM will submit a **Comment** for that host or service.

To update, remove, or modify the Nagios IM callback function, access the **Administration->Manage API Callbacks** page in Nagios IM.

### Manage Callbacks

Callbacks occur when an incident is created or closed, or when the incident's status is updated.

Name	Created	Enabled	Last Result	URL
XI Component Callback	August 2nd, 2012	Yes	SUCCESS (200)	http://192.168.5.59/nagiosxi/...

### Edit Callback

Enable this callback

Name \* XI Component Callback

Request Method \* GET

Callback URL \* http://192.168.5.59/nagiosxi/includes/components,

Extra GET/POST Parameters E.g. arg1=val1&arg2=val2

Save or Cancel