



# AlarmPoint for BMC Performance Manager Portal

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# 1. Introduction

This document describes how to install and configure the AlarmPoint® for BMC® Performance Manager Portal integration. The intended audience for this document is experienced BMC consultants and other system administrators.

## 1.1 Summary

This integration supports Event notifications (from BMC PMP to AlarmPoint) through BMC PMP notification rules. You will need to modify this configuration to suit your particular business requirements and adjust it to suit your expected loads. This example features extensive logging in AlarmPoint; in a high-volume production system, this can significantly affect performance. Consider your expected volume of alerts and server capacity when designing your own integration with AlarmPoint.

### 1.1.1 Overview

The basic steps of the integration process are as follows:

1. Install the AlarmPoint Java Client on the BMC PMP system.
2. Configure the integration between AlarmPoint and BMC PMP:
  - Configure the Portal system to send events to AlarmPoint.
  - Configure the Portal system to send user notifications to AlarmPoint.
  - Configure the Portal system to send enterprise-wide notifications to AlarmPoint.
3. Configure AlarmPoint for the BMC PMP Event Domain.
4. Validate the integration by triggering a notification and returning a response.

## 1.2 Benefits

With the AlarmPoint integration, the appropriate technician can be notified directly via voice, email, pager, BlackBerry, or other device, and information about the event is presented to the recipient.

The benefit is that this process is immediate – significantly faster than the time required for operations staff to notice the failures or malfunctions, determine who is on call, and manually notify the right person. During the process, every notification, response, and action is logged in AlarmPoint.

The AlarmPoint product features a self-service web user interface to allow accurate assignment of responsible personnel for each job. AlarmPoint also includes an enhanced Subscription panel that allows both managed and self subscription to BMC PMP events.

## 1.3 System Requirements

The following products are used in this integration:

- BMC Performance Manager Portal 2.5.00
- AlarmPoint 3.2.1 (patch 004 or later)
- AlarmPoint Java Client 3.2.1

## 1.3.1 Supported Operating Systems

This integration supports the following operating systems:

- Microsoft® Windows 2003 (validated)
- HP-UX
- Solaris 10 (SunOS 5.10 validated)
- AIX
- Linux

## 1.4 Conventions & Terminology

### 1.4.1 Conventions

Some instructions appear in the following format: **MENU > OPTION**; for example, **File > Open** means click the **File** menu, and then click the **Open** menu option.

Words in **bold** typically reference text that appears on the screen.

Words in monospace font represent the following:

- text that must be typed into the computer
- directory and file names

The directory in which you install the AlarmPoint application is referred to as <APHOME>. On Windows, the default location of <APHOME> is C:\Program Files\AlarmPointSystems\AlarmPoint. On Unix, the default installation folder is /opt/alarmpointsystems/alarmpoint.

The directory in which you install the AlarmPoint Java Client is referred to as <APJC>. On Windows, the default location of <APJC> is C:\APAgent. On Unix, the default installation folder is /opt/alarmpointsystems/apagent.

---

**Note:** *Except where explicitly stated, the directory paths in this document are listed in Windows format. Unix users must substitute the given paths with the Unix equivalents.*

---

### 1.4.2 Terminology

With respect to this integration, the following definitions apply:

Term	Meaning
<b>Notification Rule</b>	Item of interest detected by BMC Performance Manager Portal
<b>Event</b>	One or more items associated with an alarm

With respect to the AlarmPoint System, the following definitions apply:

Term	Meaning
<b>AlarmPoint Admin</b>	Administrative tool to control AlarmPoint Agent

<b>Term</b>	<b>Meaning</b>
<b>AlarmPoint Agent</b>	Communication layer between third-party applications (e.g., a Management System) and AlarmPoint Server
<b>AlarmPoint Client</b>	The Management System uses this to communicate with the AlarmPoint Agent
<b>AlarmPoint Application Server Node</b>	The core AlarmPoint application, consisting of various components that process events and perform notifications.
<b>AlarmPoint Java Client</b>	Umbrella term for the AlarmPoint Admin, AlarmPoint Agent, and the AlarmPoint Client (both Java and native versions)
<b>AlarmPoint Notification Server Node</b>	Delivers notifications to a user in a variety of ways (pager, phone, e-mail, etc.)
<b>AlarmPoint System</b>	Umbrella term for all AlarmPoint software components
<b>AlarmPoint Web User Interface</b>	Browser-accessible interface for controlling AlarmPoint components and information.
<b>Management System</b>	A synonym for BMC Performance Manager Portal

---

## 2. Installation

This chapter provides information about installing the AlarmPoint for BMC Performance Manager Portal integration.

### 2.1 Installing the AlarmPoint System

This integration requires the following AlarmPoint applications:

- AlarmPoint
- AlarmPoint Java Client

#### 2.1.1 AlarmPoint

Consult the *AlarmPoint Installation and Administration Guide* for details.

#### 2.1.2 AlarmPoint Java Client

Install the AlarmPoint Java Client on the BMC Performance Manager Portal system. During installation, set the address of the AlarmPoint server.

For complete installation instructions, refer to the *AlarmPoint Java Client Guide*.

### 2.2 Installing BMC Performance Manager Portal

Consult the BMC Performance Manager Portal user guides for installation details.

### 2.3 Installing the Integration

This section covers the installation steps required for the integration components.

#### 2.3.1 Extracting the Executable

Extract the `AP-BMC-PerformanceManagerPortal` archive to access the integration files. The following shows the notable files and folders (bold) in the archive:

```
.
|--components
| |--alarmpoint
| | |--scripts
| | | '-- AP-BMC-PMP.aps
| | |--sub_panel
| | | '-- BMCMPMSubscriptionForm.jsp
| | |--vox
| | | '--english
|--documentation
| |--SampleRequest.xml
| '-- AP-BMC-PMP.pdf
-- release-notes.txt
-- version.properties
```

---

## 3. Configuration

Before using the integration, you must configure the following components:

- BMC Performance Manager Portal
- AlarmPoint Java Client
- AlarmPoint

This section explains the configuration processes required.

### 3.1 Configuring BMC Performance Manager Portal

To configure BMC PMP, you must configure Portal to send events, user notifications, and enterprise-wide notifications to AlarmPoint.

#### 3.1.1 Configuring Portal to send events to AlarmPoint

1. Log on to BMC Performance Manager Portal as the Portal administrator (superadmin).
2. Click the **Portal** tab.
3. On the Global Properties page, under AlarmPoint Settings, specify the following configuration properties:
  - **AlarmPoint Host:** host name for the APAgent.
  - **Port:** port for the APAgent (usually 2010).
  - **Client ID:** bmc\_pmp
4. Click **Next** until the Finished page is displayed, and then click **Finish**.

#### 3.1.2 Configuring Portal to send user notifications to AlarmPoint

1. Log on as a user (or, from the Accounts tab, impersonate a user), and select the Configure tab.
2. Under Tasks, click **Notifications**, and then click **Manage Rules**.
3. Click **Add**.
4. On the Properties page, type the notification rule name in **Rule name**, select **Status Change Violations**, and then click **Next**.
5. On the Send page, select the notifications to send to the AlarmPoint server, and click **Next**.

---

**Note:** For AlarmPoint notifications, Portal does not send a notification when the status of an object returns to OK.

---

6. Select a notification type, and then click **Next**.
7. On the Notify Objects page, select the objects to which the notification options apply, and then click **Next**.
8. On the Notify Options page, select the time to wait after an event before sending notification.
9. Under Notify on Object Type Using, select **AlarmPoint**, then click **Next**.
10. On the AlarmPoint page, specify the following AlarmPoint settings, and then click **Next**:
  - **Action Script Set:** BMC\_PMP

- **Person or Group ID:** AlarmPoint User ID or Group ID to notify. (This entry must correspond to an existing User ID or Group ID in AlarmPoint.)

11. On the Finish page, click **Finish** to save the notification rule and return to the Notification Rules page

### 3.1.3 Configuring Portal to send enterprise-wide notifications to AlarmPoint

1. While logged on as an administrator, click the **Provider** tab.
2. Under Tasks, click **Notifications**, and then click **Manage Rules**.
3. On the Notification Rules page, click **Add**.
4. On the Notification Properties page, type the notification rule name in **Rule name**, select **Status Change Violations**, and then click **Next**.
5. On the Send page, select the notifications to send to the AlarmPoint server, and then click **Next**.

---

**Note:** For AlarmPoint notifications, Portal does not send a notification when the status of an object returns to OK.

---

6. On the Notify Options page, select the time to wait after an event before sending notification.
7. Under Notify on Object Type Using, select **AlarmPoint**, and then click **Next**.
8. On the AlarmPoint page, specify the following AlarmPoint settings, and click **Next**:
  - **Action Script Set:** BMC\_PMP
  - **Person or Group ID:** AlarmPoint Person ID or Group ID to notify. (This entry must correspond to an existing Person ID or Group ID in AlarmPoint.)
9. On the Finish page, click **Finish** to save the notification rule and return to the Notification Rules page.

## 3.2 Configuring the AlarmPoint Java Client

To configure the AlarmPoint Java Client, you must modify the `APAgent.xml` file to listen for requests on the IP address where the APAgent is installed. In the following instructions, `<APJC>` refers to the location in which you installed the AlarmPoint Java Client.

#### To edit the APAgent.xml file:

1. On the server where the AlarmPoint Java client is installed, locate the following file:

```
<APJC>\etc\APAgent.xml
```

2. In the `APAgent.xml` file, locate the following line:

```
<http port="2010" \>
```

3. Edit the line as follows, replacing `$IP_Address$` with the IP address of the machine where the Java Client is installed:

```
<http port="2010">
  <socket-listener host="$IPAddress$" />
</http>
```

4. Save the file, and then restart the AlarmPoint Java Client.

## 3.3 Configuring AlarmPoint

Configuring AlarmPoint requires the following steps:

- Import the AlarmPoint script package.
- Install the voice files.
- Define an Event Domain.
- Configure the default recipient (set up a target Group which contains a User with a text phone).
- Configure the Subscription Panel and create a fail-safe Group (optional)

### 3.3.1 Import the AlarmPoint script package

This step requires the AlarmPoint Developer IDE.

#### To import the AlarmPoint Script Package:

1. Launch the IDE, and configure the database connection (refer to the AlarmPoint Developer IDE Help or the *AlarmPoint Developer's Guide & Scripting Reference* for details)
2. Click **Workspace > Import**.
3. Select the `AP-BMC-PMP.apr` file extracted from the integration archive file at:  
`..\components\alarmpoint\scripts\`
4. In the File dialog box, click **Open**, and then click **OK**.
5. Right-click the **BMC Performance Manager Portal (Business)** folder, and then click **Validate**.
6. Click **Close**.
7. Right-click the **BMC Performance Manager Portal (Business)** folder, and then click **Check In**.
8. In the Check In dialog box, click **Create**.
9. In the Script Package dialog box, click **Close**.
10. Close the IDE.

### 3.3.2 Install Voice Files

These files must be installed into an AlarmPoint deployment running a Voice Device Engine. For more information, refer to the *AlarmPoint Installation and Administration Guide*.

#### To install the voice files:

1. Copy all of the files in the `\components\alarmpoint\vox\english` folder from the extracted integration archive to the following node installs folder:  
`..\node\phone-engine\Datastore\domains\common\recordings\english\phrases`

---

**Note:** *This integration provides only English voice files.*

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### 3.3.3 Define an Event Domain

By default, this integration is set up to use the Event Domain, "bmc\_pmp"; it is strongly recommended that you use this Event Domain.

For the integration to be successful, the Event Domain must match the Client ID of the AlarmPoint Java Client.

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**Note:** *The AlarmPoint Webservice must be running to perform this portion of the integration.*

---

**To define an Event Domain:**

1. Login to AlarmPoint as a Company Administrator, and click the **Developer** tab.
2. On the Event Domains page, click **Add New**.
3. Enter the following information into the form:
  - **Name:** bmc\_pmp
  - **Description:** BMC Performance Manager Portal
  - **Script Package:** BMC Performance Manager Portal
4. Click **Save**.

### 3.3.4 Configure the default recipient

The integration is configured to directly target recipients as defined by the message group of the injected BMC Performance Manager Portal notification rule. To configure directly targeted notifications for injected notification rules, you must create an AlarmPoint User or Group associated with the targeted recipient.

To configure the default recipient, confirm that the Operations Group exists in AlarmPoint, and that it has a single Team member: the default demonstration User, “bsmith”. Follow the steps below to ensure the User exists, is assigned to the “Operations Group”, and has a virtual text phone Device.

**To set up a two-way Device:**

1. In the AlarmPoint Web User Interface, click the **Users** tab.
2. On the Find Users page, click **S**.
3. In the list of returned Users, click **Smith, Bob**.
4. On the Details for Bob Smith page, in the Common Tasks pane, click **User Devices**.
5. Verify that a virtual text phone Device exists.
6. Click **Reorder**, and set the virtual phone to be the first Device in the list.
7. Click **Save**.
8. Click the **Details for Bob Smith** link at the top of the page.
9. In the Common Tasks pane, click **Groups User Belongs To**.
10. Confirm that Bob Smith is assigned to the Operations Group.
11. Log out of AlarmPoint.

---

**Note:** *If this user is missing, or is not assigned to the Operations Group, create a user with a User ID of “bsmith”, assign him to the Operations Group, and add a virtual text phone Device to the User. For more information and instructions on how to perform these tasks, refer to the AlarmPoint User Guide.*

---

### 3.3.5 Configure the Subscription Panel

To allow Users to subscribe to specific criteria on injected Events, you must configure the Subscription panel. (Note that in the following steps, <APHOME> refers to the location in which you installed the AlarmPoint application.)

#### To configure the Subscription Panel:

1. Copy all of the files in the `components\alarmpoint\sub_panel` folder from the extracted integration archive to the following folder:

```
<APHOME>\webserver\webapps\cocoon\alarmpoint\jsp\subscription\bmc-pmp
```

---

**Note:** *It is recommended that you restart the AlarmPoint Webserver daemon after copying the files.*

---

2. Log in to AlarmPoint as an Administrator and click the **Developer** tab.
3. On the Event Domains page, click the **bmc\_pmp** Event Domain.
4. Add the following predicates to the Event Domain:

Predicate	Type	Important	Values
<b>metropolis_managed_object_status</b>	List	Yes	<ul style="list-style-type: none"> <li>• Blackout</li> <li>• Critical</li> <li>• Offline</li> <li>• OK</li> <li>• Unknown</li> <li>• Warning</li> </ul>
<b>metropolis_managed_object_name</b>	Text		
<b>metropolis_managed_object_type</b>	Text		
<b>metropolis_originating_cause_description_concise</b>	Text		

5. After you have added and saved the predicates, click **Subscription Domains** in the menu on the left side of the screen.
6. On the Subscription Domains page, click **Add New**, and then select **bmc\_pmp** in the **Event Domain** drop-down list and click **Continue**.
7. On the Subscription Domain details page, create a Subscription Domain named **BMC PMP**, and enter the following path for the **Custom Panel URL**:
 

```
jsp\subscription\bmc-pmp\BMCPMPSubscriptionForm.jsp
```
8. Use the following guidelines for the remainder of the Subscription domain settings:
  - For the **Type of Management**, select **Both**. This will allow you to assign the Subscription to Users, and to create a self-managed Subscription.
  - On the Select Appropriate Predicates page, add all of the predicates listed above.
  - When configuring Subscription response choices, note the default response choices included in the integration package. For more information, see “Response Choices” on page 17.

### 3.3.6 Creating a Subscription

You can now use the Custom Subscription Panel to subscribe to BMC Performance Manager Portal notification rules of specific severities, or that match any specified criteria.

**To create a Subscription:**

1. On the Alerts tab of the AlarmPoint Web User Interface, click **Assign Alerts**.
2. In the **Subscription type** drop-down list, select **BMC PMP**.
3. Click the **Add New** link.
4. On the Subscription Details page, specify a name for the Subscription, and set the Subscription criteria using the Managed Object, Preferences, and Assign tabs.
  - The Managed Object tab (Ctrl-click to select more than one node):

The screenshot shows the 'Managed Object' tab of the configuration interface. At the top, there are four tabs: 'Summary', 'Managed Object' (which is active), 'Preferences', and 'Assign'. Below the tabs, there is a 'Managed Object Status' dropdown menu with options: '-- ANY --', 'Blackout', 'Critical', 'Offline', and 'OK'. Below this is a table with three columns: 'Name', 'Operator', and 'Value'. The table contains four rows of criteria:

Name	Operator	Value
metropolis_account_locale	CONTAINS	
Managed Object Name	CONTAINS	
Managed Object Type	CONTAINS	
Originating Cause Description Consize	CONTAINS	

At the bottom left of the form area, there is a 'Save' button.

- The Preferences tab:

The screenshot shows the 'Preferences' tab of the configuration interface. At the top, there are four tabs: 'Summary', 'Managed Object', 'Preferences' (which is active), and 'Assign'. Below the tabs, the 'Timeframe' section includes a 'Start Time' field set to '03:00', a '24' hour field, and a '0' minute field. Below this, it says 'Timeframe ending the next day at 03:00.' and 'On the following days:' with checkboxes for 'Sun', 'Mon', 'Tue', 'Wed', 'Thu', 'Fri', and 'Sat', all of which are checked. A 'Time Zone' dropdown is set to 'US/Eastern'. Below the timeframe section is the 'Overrides' section, which includes several options: 'Device Types' with checkboxes for 'All Devices' (checked), 'Email', 'Instant Message', 'Text Devices', and 'Voice Devices'; 'Group Escalation' with an empty text field; 'Override User Device' with an unchecked checkbox; 'Ignore Device Delays' with an unchecked checkbox; 'Override Device Severities and Use All:' with an unchecked checkbox; and 'Notification Delay' set to '0' minutes.

At the bottom left of the form area, there is a 'Save' button.

- The Assign tab:

Summary Managed Object Preferences **Assign**

Recipients

[Add Users](#) [Add Groups](#) [Add Devices](#) [Add Dynamic Teams](#)

<input type="checkbox"/>	Name	Type
<input type="checkbox"/>	Smith, Bob (bsmith)	Person

Remove Selected Refresh

Save

5. When you are satisfied with the criteria, click **Save** to create the Subscription.

- You can review the Subscription details at any time on the Summary tab:

Summary Managed Object Preferences **Assign**

Matching Any Event Where

- Managed Object Name *CONTAINS* (Ping)
- AND
- Managed Object Status *MATCHES* (Critical)

**Available:** Sun Mon Tue Wed Thu Fri Sat 03:00 - 03:00  
**Using:** All Devices  
**Targeting:** Smith, Bob (bsmith)

Save

### 3.3.6.1 Testing the Subscription Panel

To test the Subscription Panel, create a User in AlarmPoint and assign them a Subscription that matches the parameters injected from the BMC Performance Manager Portal when executing the Test Integration section. You can use the following criteria to match against:

- **metropolis\_managed\_object\_status:** Critical
- **metropolis\_managed\_object\_name:** AlarmPoint Test
- **metropolis\_managed\_object\_type:** Test

If the parameters of an injected message match the Subscription criteria, AlarmPoint sends a Subscription notification to the configured User.

---

**Note:** *Ensure that Subscriptions are enabled within the Action Script Package. For more information, see “FYI and Subscription Notification Variables” on page 19.*

---

### 3.3.6.2 Create a Fail-Safe Group

If a notification is submitted to AlarmPoint when the fail-safe functionality is enabled, and if it matches the necessary circumstances, AlarmPoint sends the notification to the fail-safe recipient. The fail-safe recipient is typically a Group, but can be configured as a User.

**To create a fail-safe Group:**

1. Login to AlarmPoint as a Company Administrator, and click the **Groups** tab.
2. Create a new Group named **BMC-PMP-Failsafe**, with at least one User as a Team member to receive notifications.

For more information about creating Groups and Teams, see the *AlarmPoint User Guide*.

---

**Note:** *If you want to use a pre-existing group or a different group name, modify the value for the `$fail_safe_group` variable defined in the Initial Business script in the AlarmPoint Action Scripts.*

---

## 4. Software Component Integration

It is recommended that you start the applications in the following order:

1. BMC Performance Manager Portal
2. AlarmPoint Application and Notification Servers
3. AlarmPoint Agent

Consult the respective user manuals for details on starting these applications.

### 4.1 Trigger a Notification

This section describes how to inject a test notification into AlarmPoint using the JavaClient's web user interface:

1. Using a web browser, navigate to `http://<Java Client Host>:2010`
2. In the menu, select **HTTP API Demo**.
3. In the extracted integration archive, open the `documentation/SampleRequest.xml` file, and copy its contents into the **HTTP Post Message** field.
4. Click **Do Post**.
5. The default user (bsmith) should receive a notification (and, if configured, the Subscription should be triggered).

### 4.2 Responding to a Notification

This section describes how to respond to a notification using the default User's virtual BlackBerry:

1. When a message arrives for the default User, the virtual BlackBerry appears and indicates the waiting notification:



2. Select the message to view its details:



3. Scroll down using the arrow buttons to view the entire message and the list of possible replies:



4. Select **Acknowledge** and send the reply:



- The response is sent to AlarmPoint, which stops notifications to other Devices, and prevents further escalation to other Users:



## 5. Optimizing and Extending the Integration

This section describes some of the available methods you can use to optimize or extend the AlarmPoint for BMC Performance Manager Portal integration.

### 5.1 Adding Extra Parameters To Notification Content

By default, all of the BMC PMP notification parameters are injected into the AlarmPoint event. The following steps explain how to add the `metropolis_managed_object_previous_status` parameter to email notifications; adding content for other Device types is similar and requires the presentation script to be modified for the specific Devices.

#### To add extra parameters to email notification content:

1. Open the AlarmPoint Developer IDE and checkout the BMC Performance Manger Portal (BUSINESS) Script Package.
2. In the Presentation Action Script, add the following line to the email content creation section:

```
$content.message = $content.message & "Previous State:" &
$event.metropolis_managed_object_previous_status & "\n"
```

3. You can also add a check in the Initial script to confirm that the custom parameter was injected properly and therefore exists within the Action Scripts:

```
IF ( ! EXISTS( $event.metropolis_managed_object_previous_status ) )
    $event.metropolis_managed_object_previous_status = $undefined_default
    IF ( $main.debug )
        @script::log( $main.log_prepend & "Optional token '
metropolis_managed_object_previous_status' not found, defaulting to '" &
$event.metropolis_managed_object_previous_status & "' )
    ENDIF
ENDIF
```

Your custom parameter should now be injected to AlarmPoint with every BMC PM Portal message and appear in your notification content for Email.

---

**Note:** *This example affects only the content of normal notifications. To display this content in Subscription Notifications, update the `subscriptionPresentation` script accordingly.*

---

#### 5.1.1 Using Custom Parameters for FYI Notifications

FYI notifications are informational only; they are delivered to recipients with no expectation that the recipients will act upon the notification. Regular, or non-FYI, notifications are delivered to recipients with an expectation that the recipients will act upon the event.

There are several ways to control FYI notifications; different types of notifications can be treated as FYI by using flags in the AlarmPoint Action Script. The following three types of flags control this type of FYI notification:

- **\$force\_fyi:** This flag can force notifications to be FYI (“on”), force them not to be FYI despite other settings (“off”), or it can be set to have no effect on whether notifications are FYI (“disable”). The default setting is *disable*.
- **\$subscription\_fyi:** This flag makes subscriptions be delivered as FYI notifications, so long as this flag is not overridden by the `$force_fyi` setting. Default setting is *true*.
- **\$fail\_safe\_fyi:** This flag makes notifications sent to the fail safe group by FYI only. Default is *true*.

Using flags in the Action Scripts, you can also control which devices are used for FYI notifications. For more information, see “Configuration Variable Reference” on page 19.

You can also configure BMC PM Portal so that only certain types of messages are sent FYI.

To generate FYI notifications from AlarmPoint that are specific to a particular type of message in BMC PM Portal, a custom parameter must be added to a message template to instruct the integration to deliver the notifications as FYI. Add a custom parameter called “fyi” with a value of “true” to the template that you want to be delivered as FYI.

## 5.2 Response Choices

The AlarmPoint Integration allows recipients to respond to notifications with several default choices, some of which are injected back to the Operations Manager server, updating the original event. Users notified on email devices also have the ability to respond with an extra annotation message which will be logged in the original Operations Manager event.

The following is a list of the default response choices available with the AlarmPoint Integration and their associated actions on the AlarmPoint event and the Operations Manager event:

Table 5-1. Default Response Choices

Response Choice	AlarmPoint Action	Default Device Availability
<b>Acknowledge</b>	Delinks everyone except the responding User, not allowing them to submit responses. The responder will not be notified further, but has the ability to affect the event by responding on one of their Devices or from the browser.	All non-FYI Devices. For email, BES, and browsers, the response is called Acknowledge. For other non-FYI mobile Devices an Acknowledge is represented as an Ack.
<b>Clear</b>	Delinks the responding User.	All non-FYI Devices. For email, BES, and browsers, the response is called Clear. For other non-FYI mobile Devices a Clear is represented as an Cle.
<b>Ignore</b>	The responder will not be notified further, and is not allowed to submit further responses.	All non-FYI Devices. For email, BES and browsers, the response is Ignore. For other non-FYI mobile Devices an Ignore is represented as an Ign.

### 5.2.1 Changing and Adding Response Choices

You can change the response choices available within the presentation script (Subscription Responses are configured while setting up the Subscription Domain; consult the *AlarmPoint Installation and Administration Guide* for more information). The behavior of responses can be configured in the response business script in the Action Script set.

As an example, the following code illustrates the Acknowledge response and all its components:

#### AlarmPoint Action Scripts:

- Presentation script:

```
$content.choices = "Acknowledge"
$content.choices::add( "Clear" )
```

- Response script:

```
# Handle responses
$reply = $response.reply
```

```
$reply::toLowerCase()
$acknowledge= $reply::startsWith( "acknowledge" )

IF ( $acknowledge )
  @event::delinkAllExcept( $target_id )
  @event::delivered( $target_id )

  $message_note = "Acknowledged by " & $target_name
  IF ( $main.debug )
    @script::log( $main.log_prepend & $message_note )
  ENDIF
ENDIF
```

---

**Note:** *This is only a brief overview of the required components, For more information about AlarmPoint responses and scripting, refer to the AlarmPoint Action Scripts and the AlarmPoint Developers Guide & Scripting Reference.*

---

## 6. Configuration Variable Reference

This section outlines and describes the configuration variables available in the initial Action Script.

### 6.1 Local Configuration Variables

These variables are available only in this script, and control how the script runs. For more information about the initial process script, consult the *AlarmPoint Developer's Guide & Scripting Reference*

#### 6.1.1 FYI and Subscription Notification Variables

The following variables configure the behavior of informational-only, or FYI, notifications. The value assigned to each variable is the default value within the script

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**Note:** For more information on the behavior associated with informational-only notifications, see “Using Custom Parameters for FYI Notifications” on page 16.

---

Variable	Description
<code>\$force_fyi = “disable”</code>	Forces notifications to be informational only rather than requiring responses. Possible values are: <ul style="list-style-type: none"> <li>• <b>disable:</b> nothing is forced.</li> <li>• <b>on:</b> notifications are forced to be FYI.</li> <li>• <b>off:</b> notifications are forced not to be FYI.</li> </ul>
<code>\$use_email_for_fyi = true</code>	Configure Device filters for informational-only (FYI) notifications. Setting these flags to <code>false</code> prevents that Device type from being notified with informational (FYI) messages.
<code>\$use_phone_for_fyi = false</code>	
<code>\$use_im_for_fyi = true</code>	
<code>\$use_text_phone_for_fyi = true</code>	
<code>\$use_text_pager_for_fyi = true</code>	
<code>\$use_numeric_pager_for_fyi = true</code>	
<code>\$use_bes_for_fyi = true</code>	
<code>\$use_generic_for_fyi = true</code>	
<code>\$enable_subs = true</code>	Enables Subscription functionality. If set to <code>true</code> , Users subscribed to criteria matching the event will be notified. If set to <code>false</code> , no subscribed Users will be notified even if they match the criteria of the event.

Variable	Description
<code>\$subscription_fyi = false</code>	<p>Forces Subscription notifications to be informational only; recipients of a Subscription notification will not be able to respond to the event.</p> <p><b>Note:</b> If the <code>\$use_phone_for_fyi</code> flag is set to <code>true</code>, a User can respond with “delete”, which removes the notification from the phone queue, “save”, which moves to the next notification without deleting, or “repeat”, which replays the notification.</p> <p>The <code>\$force_fyi</code> flag also forces subscriptions to be informational only. If both the <code>\$force_fyi</code> flag and the <code>\$subscription_fyi</code> flag are set to <code>false</code>, AlarmPoint will use the FYI flag submitted with the event from the Management System.</p>

## 6.1.2 Fail-safe Configuration Variables

The following variables configure the fail-safe functionality, and specify when notifications will be sent to the fail-safe recipient. The value assigned to each variable is its default value within the script.

**Note:** For instructions on how to set up a fail-safe recipient, see “Create a Fail-Safe Group” on page 11.

Variable	Description
<code>\$fail_safe = “enabled”</code>	<p>Controls whether the fail-safe recipient is notified, and under which circumstances. Possible values are:</p> <ul style="list-style-type: none"> <li>• <b>enabled:</b> notify the fail-safe Group if no Subscriptions match and there are no notifiable recipients.</li> <li>• <b>for-subscriptions:</b> notify if the Subscription functionality is enabled and no Subscriptions match.</li> <li>• <b>for-recipients:</b> notify if there are no notifiable recipients.</li> <li>• <b>disabled:</b> disable the fail-safe functionality; no notifications will be sent to the fail-safe recipient.</li> </ul>
<code>\$fail_safe_group = "BMC-PMP-Failsafe"</code>	Identifies the fail-safe recipient, which is typically a Group, but may be a User.
<code>\$fail_safe_fyi = true</code>	<p>Makes notifications to the fail-safe group informational only; recipients of a fail-safe notification will not be able to respond to the event.</p> <p>The <code>\$force_fyi</code> flag also forces fail-safe notifications to be informational only.</p>

## 6.1.3 Alert Configuration Variables

The following variables configure Alert behavior. The value assigned to each variable is its default value within the script.

Variable	Description
<code>\$override_timeframes = false</code>	Overrides any Device Timeframes that have been configured for a User for this notification.

Variable	Description
<code>\$use_emergency_devices = false</code>	Forces the use of emergency Devices as part of the Device resolution processing.
<code>\$track_delivery = true</code>	Configures the notification to run a response script when the delivery of a notification is successful. As this can limit Node performance, you can set this value to false if the custom behavior for successful delivery events is unnecessary, but you will lose any information about whether a delivery was successful.

## 6.2 Global Configuration Variables

These variables are available throughout the script package, and are parameters of the “main” object. The value assigned to each variable is its default value within the script.

Variable	Description
<code>\$main.timeout = 86400</code>	Amount of time (in seconds) the event is allowed to run before timing out. (86400 seconds = 24 hours.)
<code>\$main.debug = false</code>	Indicates whether to log informational messages for debugging purposes. Disabling this variable may improve performance, but will provide less information.
<code>\$main.use_logFile = false</code>	Specify whether to use an alternate log file for debugging messages. This variable is ignored unless <code>\$main.debug</code> is also set to true.
<code>\$main.logFile = “./logs/BMC_PMP_Script.log”</code>	Defines the file used to log debugging information (only if <code>\$main.use_logfile</code> is set to true).
<code>\$main.maxInvalidResponses = 3</code>	Specifies the maximum number of invalid responses allowed before the notification will no longer be queued. If a recipient sends an invalid response and this number has not been exceeded, they will be renotified with the same content, prefixed with a message indicating that their response was invalid.
<code>\$main.enable_HTML_Email = true</code>	Enables HTML email functionality for email clients able to support HTML emails. If a client cannot support HTML than the plain text version will be passed.
<code>\$AlarmPoint_URL = “http://localhost:8888”</code>	Identifies the AlarmPoint URL used for the HTML response form and AlarmPoint logo. If the specified URL cannot be reached, the logo will not appear, and the response links will not work.
<code>\$main.HTML_form_url = \$AlarmPoint_URL &amp; “/jsp/ProcessNotificationResponse.jsp”</code>	Specifies the URL of the AlarmPoint Web Server’s Process Notification Response JSP form, used by HTML email and BES to inject responses through the system.
<code>\$main.use_logo = true</code>	Specifies whether HTML email notifications will display the AlarmPoint (or custom) logo.
<code>\$main.logo = \$AlarmPoint_URL &amp; “/static/images/logos/alarmpoint/UNKNOWN.gif”</code>	Specifies the path to the graphic displayed on HTML (email and BES) notifications.

Variable	Description
<b>\$main.logo_alt_text = “[If the logo does not appear you may be blocking images or you may be outside a firewall. If the latter, the links will not work for responding and you should respond by replying to this email as described below.]”</b>	The alternate text to display if the HTML email logo is unavailable. <b>Note:</b> If the logo does not display, it is unlikely that the <code>HTML_form_url</code> will work.
<b>\$main.numeric_pager_number = “555-1212”</b>	The phone number to display for calling in to retrieve event information. This variable has a non-existent number as a default value; a real call-in number must be supplied, or a message indicating that an AlarmPoint event notification has occurred.
<b>\$main.bes_pushurl = “http://localhost:8888/static”</b>	Specifies the URL of the BES server. (Optional.)

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## 7. Contact Us

You can access the AlarmPoint Systems Web Site at <http://www.alarmpoint.com>. From this site you can obtain information about the Company, the Products, Support and other helpful information. You may also access the Customer Support Site from the main web page. In this protected site you will find current product releases, helpful hints, patches, release notes, a helpful product knowledge base, trouble ticket submission areas and other helpful tools provided by AlarmPoint Systems, Inc.

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