

CIM Alarm Workflow to Reprocess Exception Queue Activities to Mapped Queues Configuration Example



Document ID: 116522

Contributed by Kim Vogler, Cisco TAC Engineer.
Oct 11, 2013

Contents

Introduction

Prerequisites

- Requirements

- Components Used

Background Information

- Exception Queue Delivery Reasons

- Alarm Workflow for Notification

Configure

- Create an Alarm Workflow

Verify

Troubleshoot

Related Information

Introduction

This document describes how to create an alarm workflow in order to reprocess exception queue activities to mapped queues in Cisco Interaction Manager (CIM).

Prerequisites

Requirements

There are no specific requirements for this document.

Components Used

This document is not restricted to specific software and hardware versions.

The information in this document was created from the devices in a specific lab environment. All of the devices used in this document started with a cleared (default) configuration. If your network is live, make sure that you understand the potential impact of any command.

Background Information

When email activities that do not match the configured delivery exception criteria are sent to the exception queue, it might be necessary to recover those activities so that they can be processed. This can be done manually if a supervisor monitors the exception queue and/or receives notifications when items enter that queue, so that the items can then be selected and transferred to agents for processing. Another way to process

these activities is to set up an alarm workflow against the exception queue, and set it to run on a specific schedule or at a single, designated time. With this option, you can allow the system to process the emails through External Agent Assignment Service (EAAS) and Unified Contact Center Enterprise (UCCE) again.

Exception Queue Delivery Reasons

There are several reasons for items to be delivered to the exception queue:

- There are no active inbound workflows in the department.
- A workflow faces an error when it processes activities.
- The queue used in a workflow is made inactive. All the activities that come to the inactive queue are routed to the exception queue.
- Emails are bounced–back.
- A *NEW_TASK_FAILURE* message is returned by UCCE.

In this list, only the bounced–back emails are true delivery exceptions that are not able to be retrieved and processed. All the others are potentially able to be recovered.

Alarm Workflow for Notification

By default, an alarm workflow is created within the product, as explained in the Cisco Unified Web and E–Mail Interaction Manager Administrator's Guide to Routing and Workflows For Unified Contact Center Enterprise:

"Exception Queue Alarm Workflow: A workflow configured to send notifications when activities are routed to the exception queue because of workflow errors encountered while processing activities. This workflow is active by default and it runs every 12 hours to check if there are any activities with the substatus "Workflow–Error" in the exception queue. If any such activities are found, a notification email with the list of activity IDs is sent. The notification email is sent to the address specified in the "To address: for Notification for services" setting. This is the default configuration of the workflow; however it can be changed to meet your business needs. Although the workflow can be deleted, it is recommended that you do not delete it. If you do not wish to use the workflow, make it inactive."

Configure

Create an Alarm Workflow

This section describes how to create an alarm workflow in order to process activities from the exception queue. These steps ensure that activities that were previously directed to the exception queue are processed through integrated queues. There are two important things to remember when you attempt this:

- Which integrated (mapped) queues you want to include
- Which Alias(es) configured within the CIM environment is (are) mapped to each queue

These items are important because the alarm workflow described here uses the alias that the email was sent to originally in order to determine to which queue to redirect the activity. It redirects to the original queue to which the activity would have been directed if the routing failure had not occurred.

1. In order to create an alarm workflow, choose the **new** icon in the List pane, and create a name for the workflow.

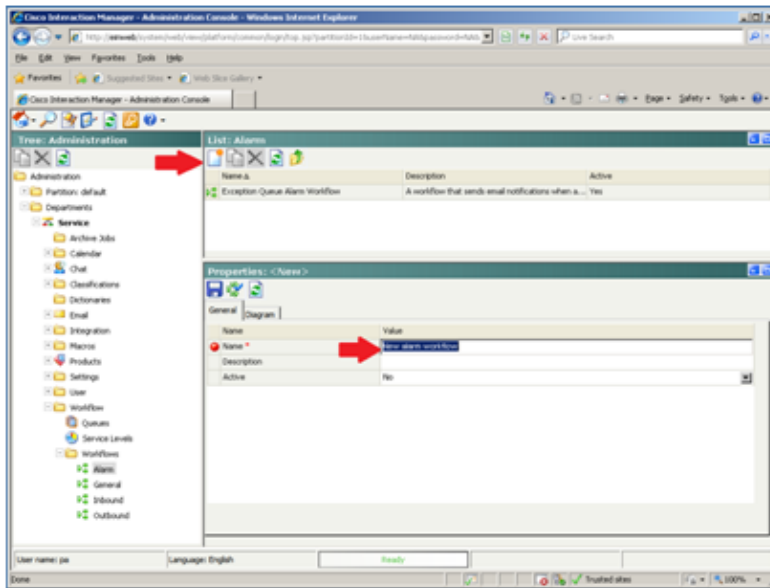


Figure 1: Create a New Workflow

2. Once the workflow is created, it appears in the List pane. In order to add instruction, click the **Diagram** tab.

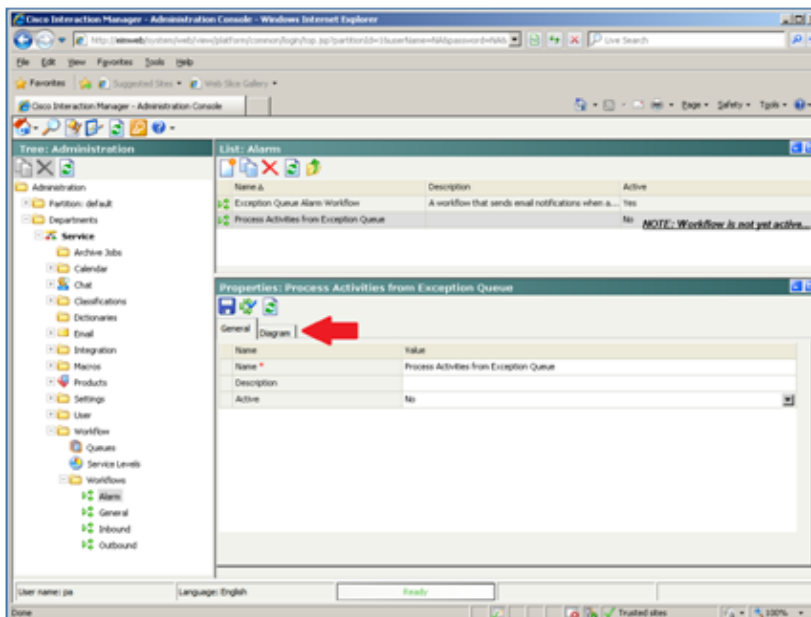


Figure 2: Create a New Workflow Diagram

3. In order to configure the workflow, place a **Start** node into the diagram. Once you place the node, the **Add Start Node** dialog box appears. For the purpose of this workflow example, choose **Exception Queue Service** or the name of your specific exception queue.

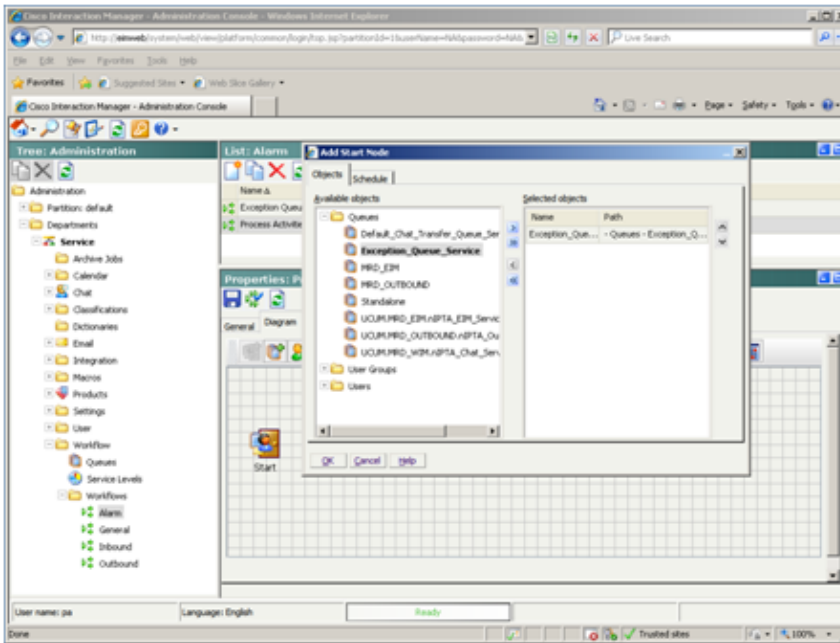


Figure 3: Start Node Configuration

- Once you select the exception queue, configure the workflow run schedule. In order to run the workflow each time it is needed, click the radio button next to the **The workflow should be run once at** option. Then, you can simply change the time you need it to run. This example shows how you would configure it if you had the workflow run once a week at approximately midnight.

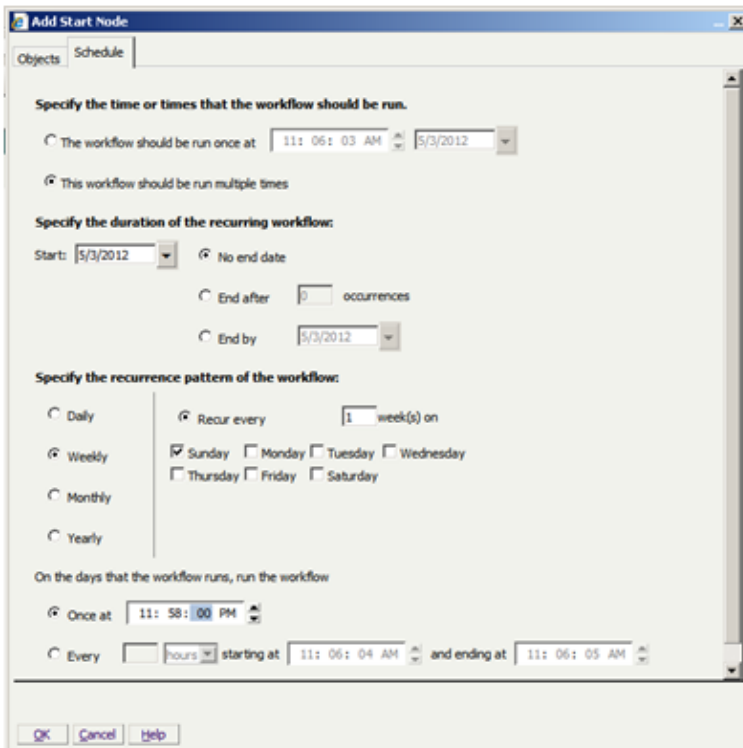


Figure 4: Configure a Start Node Schedule

- Once the start node is in place, configure an alarm node, a branch node, and queue nodes. In order to build a branch node, you first must add all the queues to which the branch node rules direct the

activities. It is helpful to create the workflow from right to left. Select the queue node, and place a node for each queue within the diagram of the workflow. Each time you enter the node option, a *Select Queue* dialog box displays that allows you to choose which queue the node represents.

Note: The example in this document shows a standalone queue. However, the screens and options are the same for integrated queues. This document is intended for processing integrated activities.

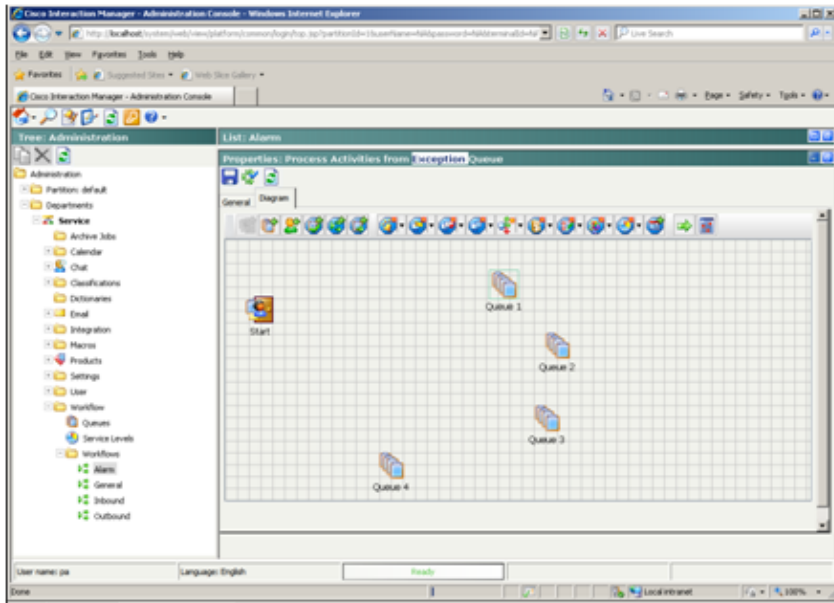


Figure 5a: Queue Nodes

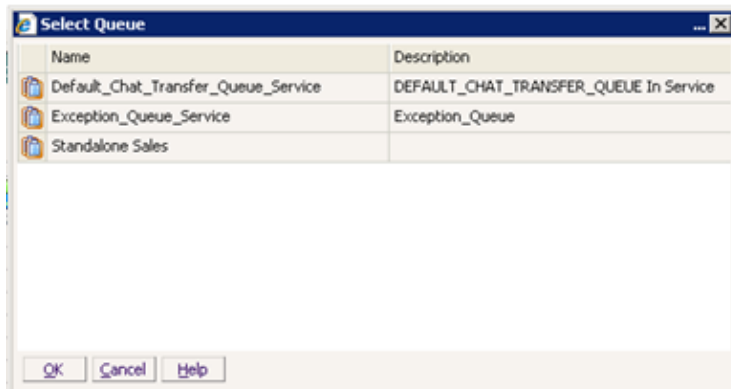


Figure 5b: Select Queue Dialog Box

6. Once the queue nodes are in place, select and place a branch node. Once the branch node is placed, the *Branch Rule Configuration* dialog box displays.

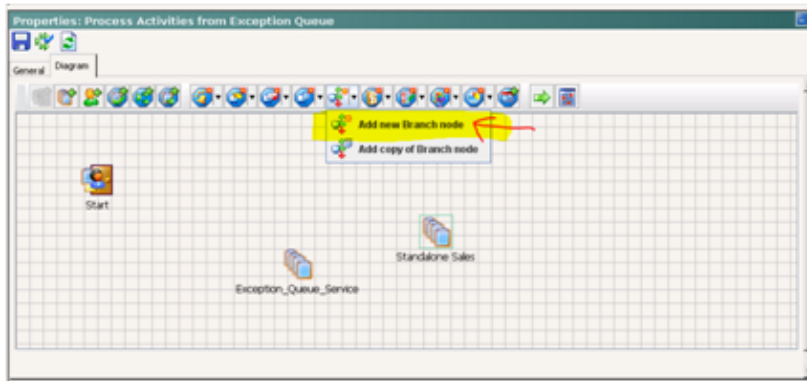


Figure 6: Select the Branch Node

- When the Branch Node configuration dialog box displays, you must configure one rule per queue (or branch) to which the node maps.

Note: A branch node can map to other items as well. For example, it can map directly to a specific user. This example maps to integrated queues.

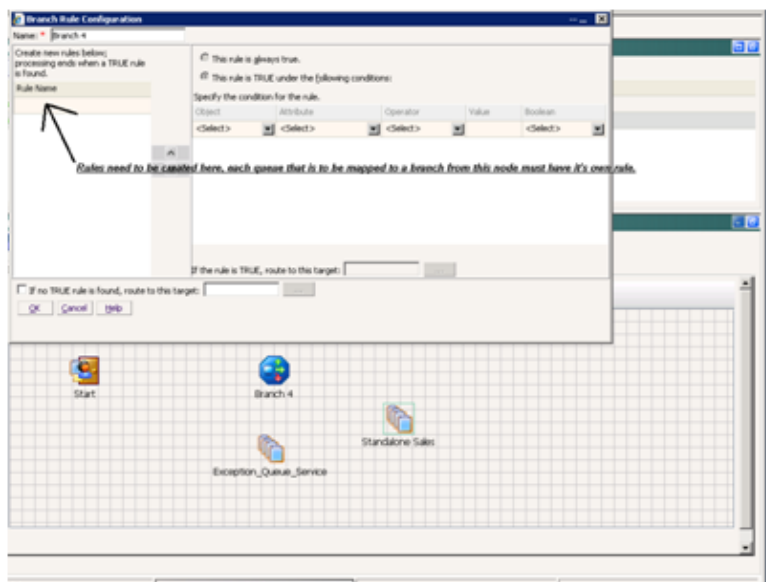


Figure 7: The Branch Rule Configuration Dialog Box

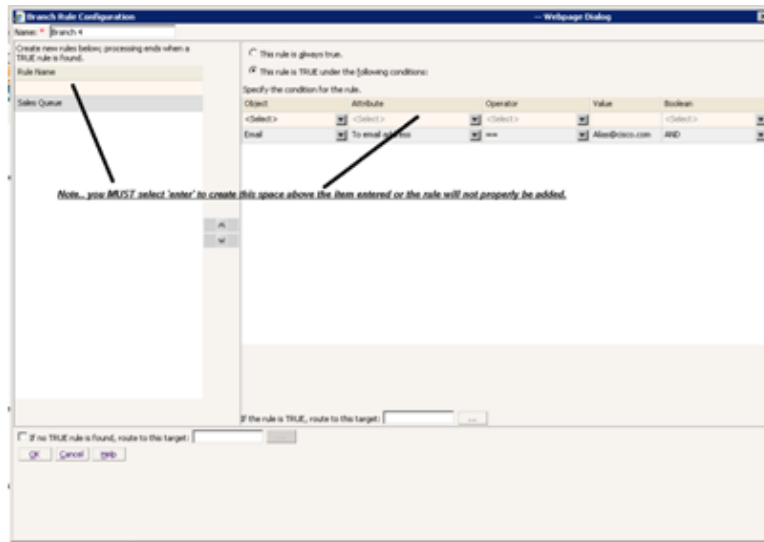
- ◆ Press **Enter** once you have named and designated the conditions of your rule.

For this type of alarm workflow, name each of your rules. Once named, highlight the rule, and configure the conditions. The conditions should be set for these items:

- ◆ **Object** : Email
- ◆ **Attribute** : To email address
- ◆ **Operator** : ==
- ◆ **Value** : <alias that the email originally was sent to>*

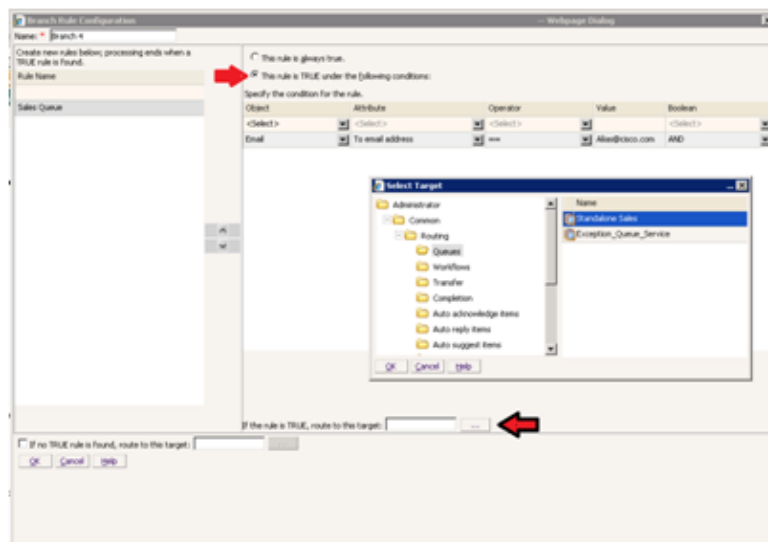
Note: If you are uncertain of the alias to which the email was originally directed, execute this query: *select recv_email_address* from egml_email where activity_id = #####*. Replace the

with the activity ID of a specific email. Note that the email alias indicated here is the one mapped to the queue(s) indicated in the previous step.



- ◆ Configure and map TRUE conditions to queues in the Branch Node Configuration.

Once you have configured the rule, indicate the branch (queue) that is used in the event that the rule is evaluated as *true*.

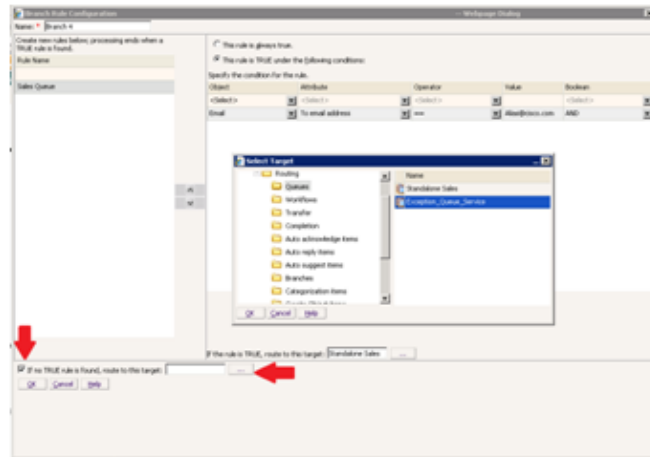


Verify that the option at the top that indicates *This rule is TRUE under the following conditions* is selected, and click the [?] button indicated in order to select a target. Once you click that button, the *Select Target* dialog box appears, which allows you to drill-down to the proper queue for this rule.

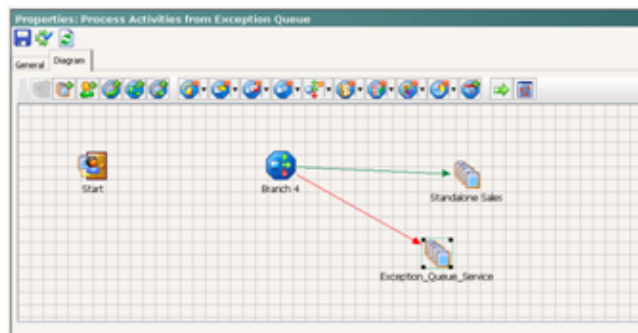
Note: If you did not first place the queue nodes in this workflow, this list would be empty. The queues indicated in the workflow determine what displays here.

- ◆ Configure and map **FALSE** conditions in the Branch Node Configuration.

Once you have set up the **TRUE** option for your rule, you then must set up a **FALSE** option. This example indicates the exception queue as this path. However, you can set it up for any other path, another integrated queue, a standalone queue, or a specific User, depending on your business and how you would like to handle these items. This option catches anything that does not match the rules in the branch node.



Repeat the rule configuration for each branch, and repeat the exception queue (or false selection) for each one. When you have configured the node completely, the lines that connect the branch node to your queues are completed automatically based on your rule configuration. Your node should look similar to this:



8. The last item you must configure within this workflow is an alarm node. Pull-down and place a new alarm node into the workflow diagram. The Alarm Node Configuration dialog box opens.

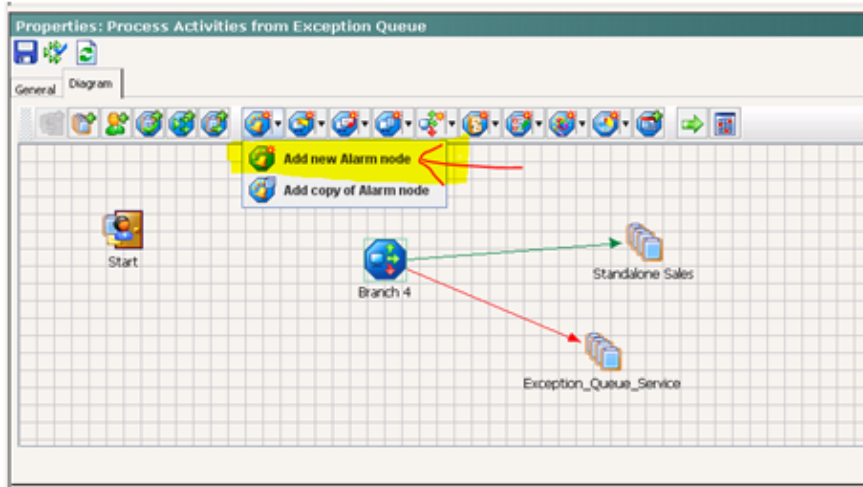


Figure 8a: Select, Place, and Configure an Alarm Node within Your Workflow Diagram

Name:

Condition:

This rule is TRUE under the following conditions:

Object	Attribute	Operator	Value	Boolean
<Select>	<Select>	<Select>		<Select>
Activity	Activity Status	==	Assignment	AND
Activity	Activity Substatus	==	Assignment-Ready for internal assignment	AND

Buttons:

Figure 8b: Configure the Condition Tab on the Alarm Rule Configuration Screen

On the Alarm Rule Configuration screen, there are two concepts (tabs) that must be configured: a **Condition** tab and a **True** tab.

On the **Condition** tab, you must identify two things: Activity_Status **AND** Activity_Sub_Status.

Note: In this case, the Boolean expression must be **AND** because you want both of these conditions to be true.

CONDITION 1	Object	Activity
	Attribute	Activity_Status
	Operator	==
	Value	Assignment
CONDITION 2	Object	Activity
	Attribute	Activity_Sub_Status
	Operator	==
	Value	Assignment-Ready for internal assignment

Figure 8c: Configure the True Option on the Basic Tab on the Alarm Rule Configuration Screen

On the **True** tab, you must complete these configurations in order to create a filter and select the objects for that filter from within the **Basic** and **Advanced** sub-tabs.

On the **Action** section in the top pane, use the pull-down in order to create a filter with **Activity** as the object that the filter is run against. When you do this, the bottom pane is then populated with the options to select the criteria for the filter. On this **Basic** tab, you must define that the subject does not contain the word **Undeliverable**. This filters any items with an Activity_Sub_Type of **4** and **5**, which are emails that are sent to the exception queue because they match a configured delivery exception.

Note: If you do not run this workflow often, or find that there are many emails in the exception queue that require processing, it is advisable to determine another filter option, such as **Created On** in order to control the number of emails that are processed back into queues. If you run this workflow often, and know that there are a minimal number of emails to process and that no failures have occurred to create large numbers of emails in the exception queue, then this might not be a concern. You need to research the numbers of emails waiting processing, and make a determination based on your environment and the agents available to process these items.

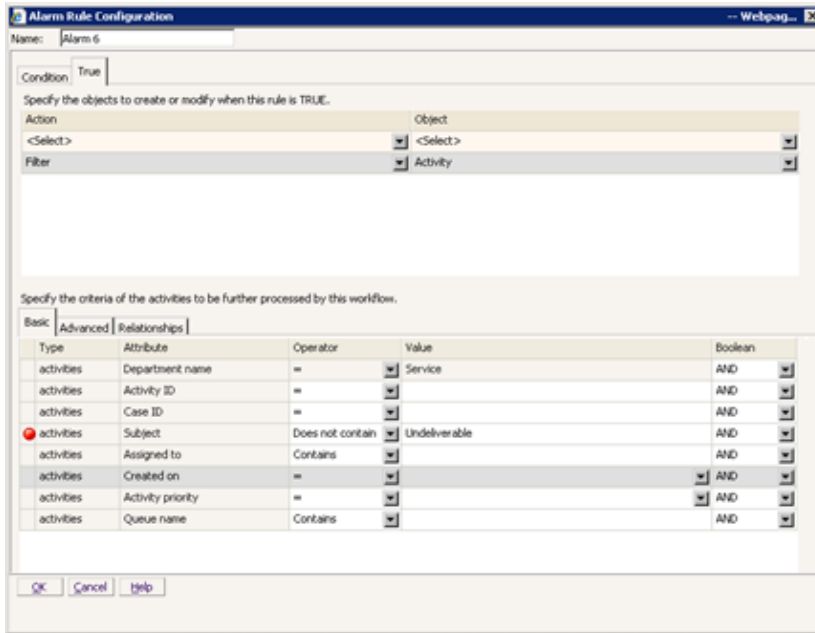
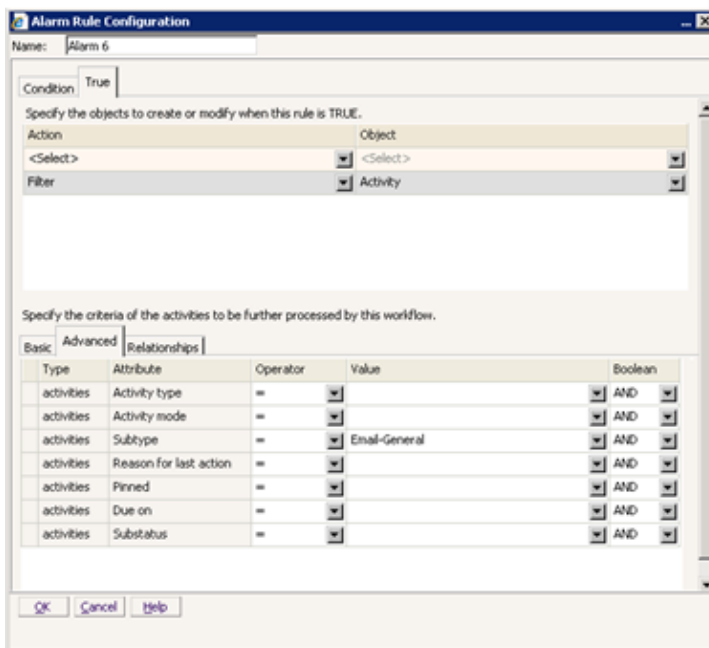


Figure 8d: Configure the True Option on the [Advanced] Tab of the Alarm Rule Configuration Screen

On the [Advanced] tab, select **Email-General** for the Activity Sub-Type in order to ensure that only items with an **Activity_Sub_Type = 1** are selected. This is a requirement due to the fact that the EAAS process ONLY sends route requests (NEW_TASK Requests) to UCCE for processing if they are of this sub-type. All other sub-types are not processed.



- Once completed, your alarm workflow looks similar to this, depending on the number of queues you have built into it. Again, the queue in this example is named standalone, but this process and document are intended for integrated (mapped) UCCE queues.

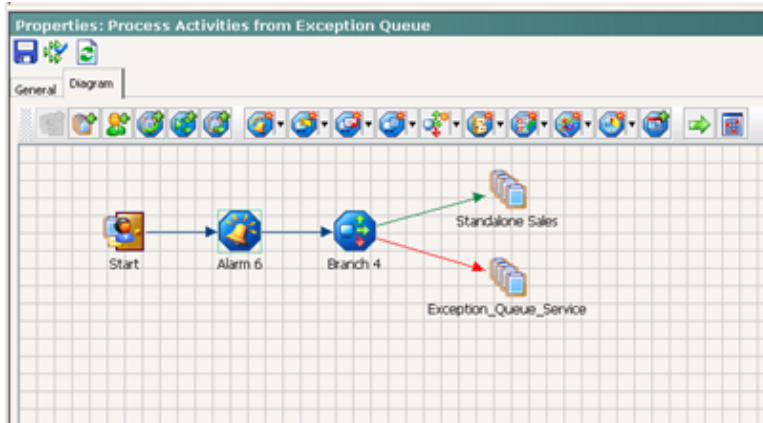
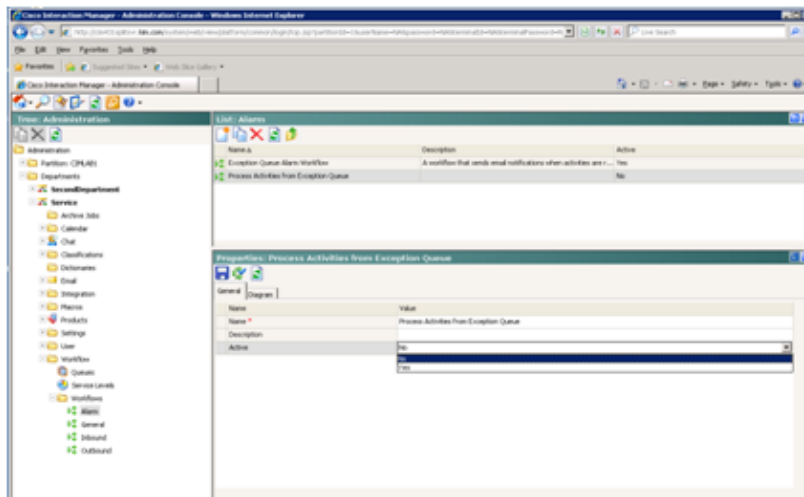


Figure 9: The Completed Alarm Workflow Diagram (Example)

The last step in this process is to make the workflow active.



Verify

There is currently no verification procedure available for this configuration.

Troubleshoot

There is currently no specific troubleshooting information available for this configuration.

Related Information

- *Cisco Unified Web and E-Mail Interaction Manager Administrator's Guide to Routing and Workflows For Unified Contact Center Enterprise*
- *Technical Support & Documentation – Cisco Systems*