

**Oracle® Communications
Performance Intelligence Center**

System Alarms Guide

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CAUTION: Use only the guide downloaded from Oracle Help Center.

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Chapter 1: About this Help Text

System Alarm Overview

The System Alarm application is designed for monitoring and managing Oracle Communications Performance Intelligence Center alarms for network elements and applications, including

- Message Switch (MSW)
- Integrated Acquisition
- Mediation
- Probed Acquisition

General Information

You can find general information about Performance Intelligence Center, such as product overview, list of other guides, workstation requirements, login and logout procedures, user preference settings, in the Quick Start Guide. This document is available from the Portal menu or can be downloaded from Oracle Help Center (OHC)

Chapter 2: System Alarm Procedures

Overview of Functionality

The System Alarm application is designed for monitoring and managing Performance Intelligence Center alarms for network elements and applications, including

- Message Switch (MSW)
- Integrated Acquisition
- Mediation
- Probed Acquisition

The System Alarm application does not monitor signaling links, linksets, signaling points and Key Performance Indicators (KPIs). Alarm Application, a separate application in the Management Application toolkit, can monitor alarms for these elements and applications.

System Alarm performs a system survey of SS7 traffic and Quality of Service (QOS) by connecting to the SS7 (E1) link via non-intrusive probes such as Probed Acquisition and Integrated Acquisition.

The Management Application core listener components listen for real-time events from the network elements and Management Application business applications. Any alarms are stored in the Management Application database.

System Alarm handles the following types of alarms:

- Alarms based on traffic supervision (Q.752)
- Alarms based on system errors (for system maintenance)

Accessing System Alarm

Note: Management Application only supports latest versions of IE and Firefox. Before using Management Application, turn off the browser pop up blocker for the Management Application site.

1. To access System Alarm, log in to Management Application using your Web browser. The Application board is displayed.
2. Click **System Alarm** in the Surveillance group. The Alarms interface is displayed.

Understanding Alarm Page

Alarm details are displayed as the default page in System alarm.

The alarm information is displayed on four tabbed pages:

- Alarms: opened screen - provides details for all alarms; filters can be set to customize the view
- Events screen - provides the details of events associated with a selected alarm record
- Comments screen - allows a user to add and edit comments applicable to a specific alarm when acknowledging or terminating the alarm
- Troubleshooting screen - allows a user with the nspManager role to add and edit troubleshooting guidelines for a specific alarm

Each type of screen is discussed in this on-line help.

Note: Do not use the Function Keys (F1 through F12) when using Management Application. Function keys work in unexpected ways. For example, the F1 key does not open Management Application help but opens the help for the browser in use. The F5 key does not refresh a specific screen, but refreshes the entire session and results in a loss of any entered information.

Alarms List

The Alarms List displays a table with information about alarms

You can perform the following actions in the Alarms list:

- View basic alarms for Managed Objects.
- View all opened alarms for Managed Objects by customizing alarm status column.
- View the details of an alarm.
- Terminate an alarm. (When the probable cause of an alarm has been rectified, the Alarm has to be cleared or terminated.)

Note: You can terminate an alarm only if you belong to group nspPowerUser.

- Acknowledge an alarm.

Note: You can acknowledge an alarm only if you belong to group nspUser.







Manage the display by setting filters, turning Automatic Refresh on and off, setting the number of rows per page, and sorting columns.

Filters in Alarms List

You can filter alarms by using any combination of the filters on the Alarms page. Each filter defaults to No Filtering (*All). The filter fields are

- **Perceived Severity** - to filter by specific severity (critical, major, minor, warning)
- **Alarm Raised Time**- to filter by time the alarm is raised Last 5 min, Last 10 min....
- **Alarm Status** - to filter the alarm state(Opened or terminated)
- **Ack Status** - to filter if alarm is acknowledged or not
- **Probable Cause** - to filter by cause for alarm generation (Loss of signal, Equipment malfunction etc.)
- **Managed Object Class** - to filter by class level of the object (for example, IXP, IMF, Host name).
- **Alarm Type** - to filter by type (for example, communications, environment, equipment).
- **Alarm Ack Time**- to filter by time the alarm is raised (Last 5 min, Last 10 min....etc.)
- **Alarm Changed Time**- to filter by time the alarm has gone through some change(Last 5 min, Last 10 min....etc.)
- **Alarm Cleared Time**- to filter by time the alarm is terminated or cleared(Last 5 min, Last 10 min....etc.)

Icons in Alarms List Toolbar

Alarm Icon	Description
	Navigation icon - to move from one record to another << is for first page < is for previous page > Is for next page >> is for last page
	Filter - to define filters for the basic Alarms list
	Refresh - to refresh the page to show the most current Alarms list
<input type="text" value="10"/>	Records per Page - to set the number of records to view per page
	Set Size - to refresh the page to reflect the number entered in Records Per Page
	Select Column - to Add/Remove the columns in the displayed list. We can also vary the position of the columns in the list using this option.
	Terminate alarm - to terminate selected alarms




	Acknowledge alarm - to acknowledge selected alarms
	Export -- to provide option to export list getting displayed.
	Print - to provide facility to print current list.

Table 1 : Alarms List Icons

Columns in Alarms List

Column Name	Description
Alarm Id	Unique ID for that alarm
Alarm Status	Define if alarm state is opened or terminated
Alarm Raised time	Time the alarm was registered
Ack State	Define if alarm is acknowledged or not
Perceived Severity	Alarm severity level (color coded)
Event Count	Number of events for the alarm
Probable Cause	Cause of the alarm based on history of similar alarms
Specific Problem	Alarm name
Managed Object	Specific object on which the alarm occurred, if the alarm is associated with an object
User Name	User who acknowledged the alarm
Alarm Ack Time	Time the alarm was acknowledged
Alarm Changed time	Time the status of alarm was changed
Alarm Cleared time	Time the alarm was terminated or cleared
Alarm Cleared user	User who cleared the alarm
Managed Object Class	Class level of the object (for example, IXP, IMF, Host) if the alarm is associated with an element
Alarm Type	Type of alarm (for example, equipment, processing error, quality of service).

Table 2 : Alarms List Columns

Terminated Alarms

The list of terminated alarms can be seen by applying filter on alarm status column and selecting terminated in Basic alarms list.

Note: The system exports terminated alarms (with all their fields) for storage on a dedicated directory. The files are kept for 90 days, after which they are purged. This feature enables users to calculate statistics on alarms.

Events Tab

The Events tab displays a table that details events for an alarm received from the Performance Intelligence Center system. An alarm can have more than one event associated with it.

You can perform the following actions on the Events page:

- View event details for a selected alarm

- Manage the display by setting the number of rows per page and sorting columns, applying filters, select required column and navigate.

Icons in the Events Tab

Icons in event tab are similar to that of icons in all alarms which include navigation icons, filter, refresh, records per page, set size, print, export and select column.

Columns in the Events List

Column Name	Description
Event Id	Unique identifier for the event; this identifier is different from that of the associated alarm
Event Time	Date and time the event occurred
Specific Problem	Description of the problem that occurred
Perceived Severity	Event severity level (color coded)
Additional Text	Additional information (optional) provided by the event originator

Table 3: Events List Column

Comments Tab

Users have the option to make comments about an alarm. These comments are displayed in a table on the Comments tab.

You can perform the following actions in the Comments page:

- View a comment for a selected alarm
- Edit comments for a selected alarm
- Delete comments for a selected alarm
- Manage the display by setting the number of rows per page and sorting columns

Icons in the Comments List

Icons in Comments tab are similar to that of icons in all alarms which include navigation icons, filter, refresh, records per page, set size, print, export and select column. Additionally following 2 icons are there for comments List.



Icon	Description
	Edit Comment - to edit the comment for the selected alarm record
	Delete Comment - to remove the comment about the selected alarm from the Comments page

Table 4: Comments List Icons

Columns in the Comments List

Column Name	Description
-------------	-------------

Comment Id	Unique ID for the comment
Comment Time	Time and date the comment was entered
User Name	Person who entered the comment
Comment Text	Body of the comment

Table 5: Comments List Columns

Troubleshooting Tab

An alarm can have an associated Troubleshooting guideline that provides specific recommendations for resolving the alarm.

You can perform the following actions in the Troubleshooting page:

- View a Troubleshooting details for a selected alarm which includes:
 - Problem name
 - Description
 - Recovery steps
 - Guidelines
 - IP Address
 - Host Address
- View, write or edit a Troubleshooting guideline for a selected alarm

Icons in the Troubleshooting Page


Icon	Description
	Edit Guideline- to enter a new Troubleshooting guideline or edit an existing one for the selected alarm record

Table 6: Troubleshooting Tab Icons

Changing Alarm Status

Changing an alarm status means setting the alarm to be either "acknowledged" or "terminated."


Acknowledging an Alarm

- Select the alarm/s which needs to be acknowledged (Note: All selected alarms must be in unacknowledged state).
- Click the Acknowledge Alarm icon in the toolbar.
The list refreshes to and changes are getting reflected in the Alarm Ack time, Ack State, user name etc., columns of alarms list.
After you click the Acknowledge Alarm icon, a pop-up dialog is displayed, giving you the option to add a comment for that alarm.

Note: If the dialog is not displayed, check Display preferences in the Menu Bar to ensure the Auto Comments Popup is set to true.

Terminating an Alarm

- Select the alarm/s which needs to be terminated (Note: All selected alarms must be in Opened alarm state).

- Click the Terminate Alarm icon  in the Menu Bar. A pop-up dialog is displayed, giving you the option to add a comment for that alarm. On the next Refresh cycle, the alarm status is changed to terminated in the list (If the alarm has not been acknowledged, the system acknowledges the alarm first.)

Note: If the Comments dialog is not displayed, check Display preferences in the Menu Bar to ensure the Auto Comments Popup is set to true.

Terminate Filtered Open Alarms

This option is available in Action option in portal menu bar. Using this option All the opened alarms in the currently filtered list in all alarms list is terminated.

A pop-up dialog is displayed, giving you the option to add a comment for that alarm. On the next Refresh cycle, the alarm status is changed to terminated in the list (If the alarm has not been acknowledged, the system acknowledges the alarm first.)

Note: If the Comments dialog is not displayed, check Display preferences in the Menu Bar to ensure the Auto Comments Popup is set to true.

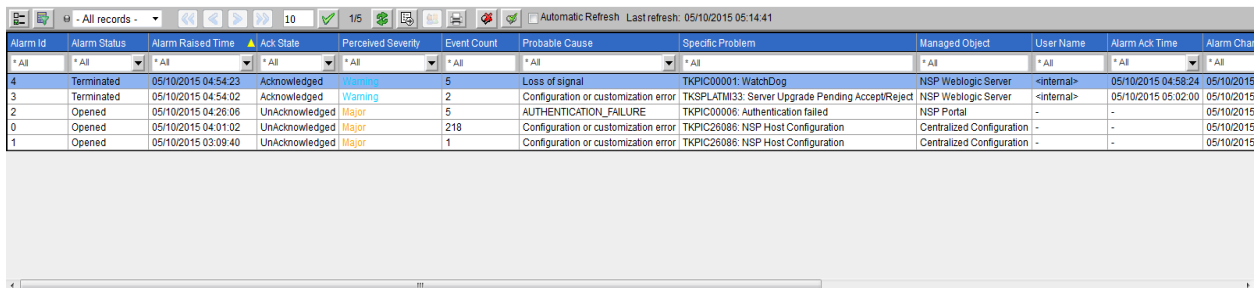
Sorting Columns in Alarm Page

You can sort records in ascending or descending order in the Alarm tables by clicking the column header. A small yellow arrow is displayed, indicating in which direction the column is sorted.

Displaying Alarm Events, Comments, and Troubleshooting Guidelines

Follow these steps to view Events, Comments and Troubleshooting information associated with active or terminated alarms.

- Select single alarm for which we need to view their event, comments or troubleshoot details.

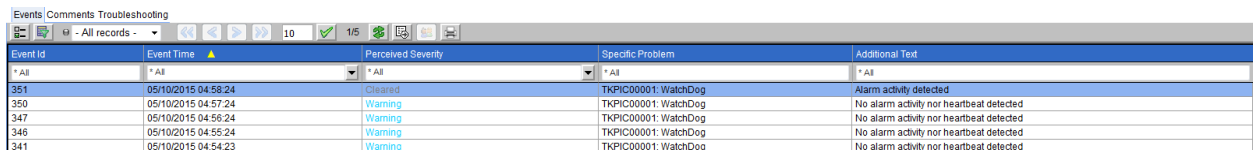


Alarm Id	Alarm Status	Alarm Raised Time	Ack State	Perceived Severity	Event Count	Probable Cause	Specific Problem	Managed Object	User Name	Alarm Ack Time	Alarm Char
4	Terminated	05/10/2015 04:54:23	Acknowledged	Warning	5	Loss of signal	TKPIC00001: WatchDog	NSP Weblogic Server	<internal>	05/10/2015 04:58:24	05/10/2015
3	Terminated	05/10/2015 04:54:02	Acknowledged	Warning	2	Configuration or customization error	TKSPLATMI33: Server Upgrade Pending Accept/Reject	NSP Weblogic Server	<internal>	05/10/2015 05:02:00	05/10/2015
0	Opened	05/10/2015 04:26:06	Unacknowledged	Major	5	AUTHENTICATION_FAILURE	TKPIC00006: Authentication failed	NSP Portal	-	-	05/10/2015
2	Opened	05/10/2015 04:01:02	Unacknowledged	Major	218	Configuration or customization error	TKPIC26086: NSP Host Configuration	Centralized Configuration	-	-	05/10/2015
1	Opened	05/10/2015 03:09:40	Unacknowledged	Major	1	Configuration or customization error	TKPIC26086: NSP Host Configuration	Centralized Configuration	-	-	05/10/2015

Figure 1: Alarms Table with Alarm Selected

Note: There is no column for Group tag in case of system alarm

By Default the Events information for the selected alarm is displayed in the below list



Event Id	Event Time	Perceived Severity	Specific Problem	Additional Text
351	05/10/2015 04:58:24	Cleared	TKPIC00001: WatchDog	Alarm activity detected
350	05/10/2015 04:57:24	Warning	TKPIC00001: WatchDog	No alarm activity nor heartbeat detected
347	05/10/2015 04:56:24	Warning	TKPIC00001: WatchDog	No alarm activity nor heartbeat detected
346	05/10/2015 04:55:24	Warning	TKPIC00001: WatchDog	No alarm activity nor heartbeat detected
341	05/10/2015 04:54:23	Warning	TKPIC00001: WatchDog	No alarm activity nor heartbeat detected

Figure 2 : Event details for Selected Alarm.

The Details of Comment or troubleshoot can be viewed for selected alarms by clicking on comment tab or troubleshoot tab, which can be seen in above figure.

Note: The Comments and Troubleshooting tables are not always populated.

Adding, Editing, and Deleting Comments

You can add comments when acknowledging or terminating an alarm. You can edit these comments from the Comments page (at the bottom of the screen).

Adding a New Comment

Users add new comments when terminating or acknowledging an alarm from the Opened Alarms. The alarm status changes only after the Comments window contents are saved.

Note: Management Application makes it possible for an external system to change alarm status using an alarm-forwarding Simple Network Management Protocol (SNMP) agent in the host. See *Alarm Forwarding Administrator's Guide* for details.

- Select the appropriate open alarm from the all alarm list which needs to be acknowledged or terminated.
- Click either the Acknowledge Alarm icon or the Terminate Alarm icon. The Comments Dialog is displayed

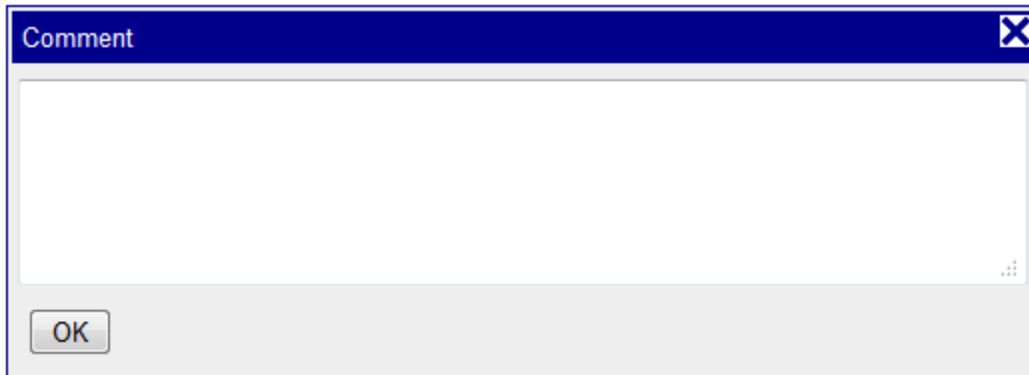



Figure 3 : Comment Dialog


Note: If the dialog is not displayed, check Display preferences in the Menu Bar to ensure the Auto Comments Popup is set to true.

- Enter a comment (optional) containing up to 255 characters and click Apply. The comment is saved.

Editing a Comment

- Select the appropriate alarm from the all alarm list for which comments needs to be edited.
- Click the comment tab in the below list.
- If there are comments for this alarm, they are displayed in the Comments table.
- Select the appropriate comment and click the Edit Comment icon . The Comments dialog containing the comment text is displayed.
- Make the necessary changes and click Ok. The content changes are saved.


Deleting a Comment

- Select the appropriate alarm from the all alarm list for which comments needs to be deleted.
- Click the comment tab in the below list.
- If there are comments for this alarm, they are displayed in the Comments table.
- Select the appropriate comment and click the Delete Comment icon the  comment is deleted.

Adding and Editing Troubleshooting Guidelines

An alarm can have a Troubleshooting guideline associated with it that provides specific recommendations for resolving the alarm. You can add and edit Troubleshooting Guidelines for individual alarms. Troubleshooting Guidelines are optional.

Follow these steps to add a new guideline for an alarm or edit an existing guideline.

- Select the appropriate alarm from the all alarm list for which guidelines needs to be edited.
- Click the troubleshoot tab in the below list.
- Click the Edit Guideline icon  .
The Guidelines Dialog is displayed.

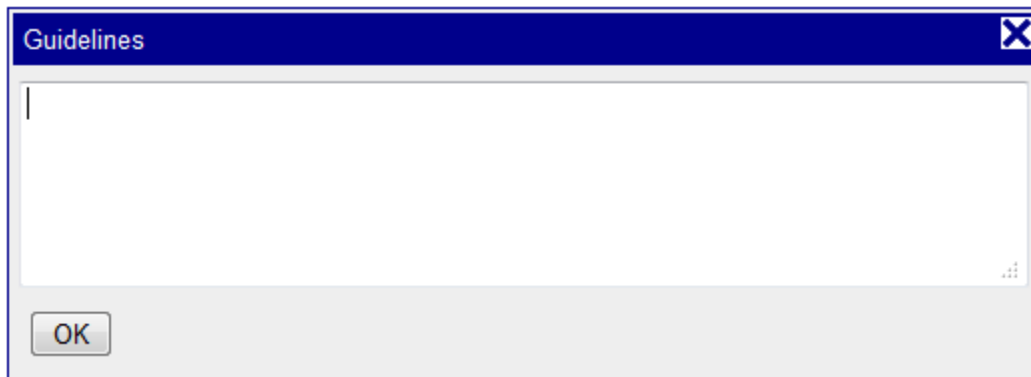


Figure 4 : Guidelines Dialog

- Enter the necessary information and click Ok. The content is saved.

Configuring Preferences

Modifying Application Preferences

You can modify application preferences for System Alarm. These preferences apply only to the System Alarm application and do not affect preferences for other applications.

Note: Users must have the role of nspUser or nspPowerUser to manage alarm preferences.

1. From the System Alarm Menu Bar, select **Alarm ► Preferences**.

The System Alarm application preferences dialog is displayed.

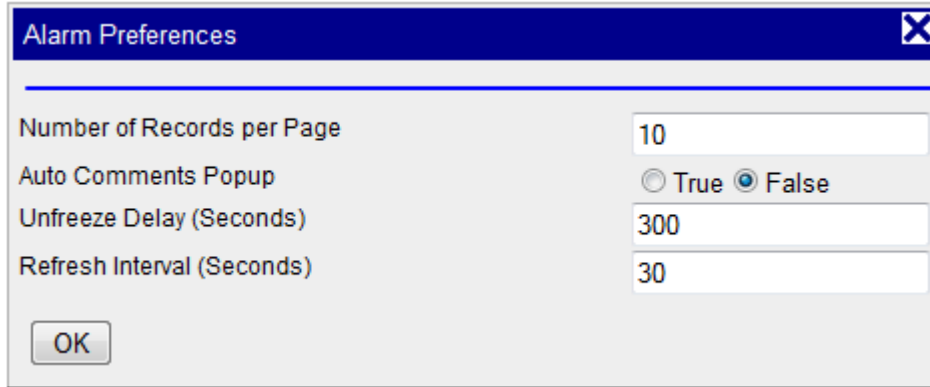


Figure 5 : System Alarm Application Preferences Dialog

2. Modify the preferences as needed.

Option	Explanation
Number of Records Per Page	The number must be an integer from 1 to 300.
Auto Comments Popup	The option toggles between two settings: <ul style="list-style-type: none"> • True - Allows automatic commenting of an alarm or group of alarms when the user acknowledges or terminates alarms. • False - Disables automatic commenting.
Unfreeze delay	This delay is the amount of time the system waits before automatically reactivating the automatic refresh cycle. The unfreeze delay must be from 15 to 300 seconds.
Refresh interval.	The refresh interval must be from 1 to 300 seconds.

Table 7 : Fields in System Alarm Application Preferences Dialog

3. Click Ok.

Modifying User Preferences

User Preferences settings apply globally to Management Application. For information on setting User Preferences, see in the Quick Start Guide.

Note that within User Preferences, you can modify the default colors that indicate alarm severity. The colors are displayed in the Perceived Severity column of alarm tables.

Closing System Alarm

To close System Alarm, click Home to return to the Application board; or click Logout to exit Management Application.

Appendix A: My Oracle Support

MOS (<https://support.oracle.com>) is your initial point of contact for all product support and training needs. A representative at Customer Access Support (CAS) can assist you with MOS registration.

Call the CAS main number at 1-800-223-1711 (toll-free in the US), or call the Oracle Support hotline for your local country from the list at <http://www.oracle.com/us/support/contact/index.html>. When calling, make the selections in the sequence shown below on the Support telephone menu:

1. Select 2 for New Service Request
2. Select 3 for Hardware, Networking and Solaris Operating System Support
3. Select 2 for Non-technical issue

You will be connected to a live agent who can assist you with MOS registration and provide Support Identifiers. Simply mention you are a Tekelec Customer new to MOS.

MOS is available 24 hours a day, 7 days a week.