

**Oracle® Communications
Performance Intelligence Center
Alarm Application Guide**

Release 10.2

E66866 Revision 1

February 2016

ORACLE®

Copyright © 2003, 2016, Oracle and/or its affiliates. All rights reserved.

This software and related documentation are provided under a license agreement containing restrictions on use and disclosure and are protected by intellectual property laws. Except as expressly permitted in your license agreement or allowed by law, you may not use, copy, reproduce, translate, broadcast, modify, license, transmit, distribute, exhibit, perform, publish, or display any part, in any form, or by any means. Reverse engineering, disassembly, or decompilation of this software, unless required by law for interoperability, is prohibited.

The information contained herein is subject to change without notice and is not warranted to be error-free. If you find any errors, please report them to us in writing.

If this is software or related documentation that is delivered to the U.S. Government or anyone licensing it on behalf of the U.S. Government, the following notices are applicable:

U.S. GOVERNMENT END USERS: Oracle programs, including any operating system, integrated software, any programs installed on the hardware, and/or documentation, delivered to U.S. Government end users are "commercial computer software" pursuant to the applicable Federal Acquisition Regulation and agency-specific supplemental regulations. As such, use, duplication, disclosure, modification, and adaptation of the programs, including any operating system, integrated software, any programs installed on the hardware, and/or documentation, shall be subject to license terms and license restrictions applicable to the programs. No other rights are granted to the U.S. Government.

This software or hardware is developed for general use in a variety of information management applications. It is not developed or intended for use in any inherently dangerous applications, including applications that may create a risk of personal injury. If you use this software or hardware in dangerous applications, then you shall be responsible to take all appropriate fail-safe, backup, redundancy, and other measures to ensure its safe use. Oracle Corporation and its affiliates disclaim any liability for any damages caused by use of this software or hardware in dangerous applications.

Oracle and Java are registered trademarks of Oracle and/or its affiliates. Other names may be trademarks of their respective owners.

Intel and Intel Xeon are trademarks or registered trademarks of Intel Corporation. All SPARC trademarks are used under license and are trademarks or registered trademarks of SPARC International, Inc. AMD, Opteron, the AMD logo, and the AMD Opteron logo are trademarks or registered trademarks of Advanced Micro Devices. UNIX is a registered trademark of The Open Group.

This software or hardware and documentation may provide access to or information about content, products, and services from third parties. Oracle Corporation and its affiliates are not responsible for and expressly disclaim all warranties of any kind with respect to thirdparty content, products, and services unless otherwise set forth in an applicable agreement between you and Oracle. Oracle Corporation and its affiliates will not be responsible for any loss, costs, or damages incurred due to your access to or use of third-party content, products, or services, except as set forth in an applicable agreement between you and Oracle.



CAUTION: Use only the guide downloaded from Oracle Help Center (OHC)
(<http://www.oracle.com/technetwork/indexes/documentation/oracle-comms-tekelec-2136003.html>).

Refer to Appendix section for instructions on accessing My Oracle Support.

Table of Contents

<i>Table of Contents</i>	iii
<i>List of Figures</i>	v
<i>List of Tables</i>	v
Chapter 1: About This Help Text.....	1
Alarm Application Overview	1
Alarm Application Scope and Audience	1
General Information.....	1
Chapter 2: Product Highlights	2
Alarm Application Summary.....	2
Components	2
Alarm Colors.....	2
Alarm Types.....	3
Chapter 3: Understanding Alarm Application Features	4
Menu Bar.....	4
Group tag List.....	4
Filters in the Group tag List.....	4
Icons in the Group tag List	5
Columns in Group tag List.....	6
All Alarms List.....	6
Alarms List.....	6
Events Tab.....	9
Comments tab.....	10
Troubleshooting tab.....	10
Chapter 4: Using Alarm Application.....	12
Accessing Alarm Application.....	12
Opening Alarm Page	12
Viewing Alarm Details	12
Changing Alarm Status	12
Acknowledging an Alarm.....	12
Terminating an Alarm.....	13
Terminate Filtered Open Alarms	13
Sorting Columns in Alarm Pages	13
Drilling Down to Troubleshoot KPI Cell Alarms.....	13
Displaying Alarm Events, Comments, and Troubleshooting Guidelines	14
Adding, Editing, and Deleting Comments	14
Adding a New Comment.....	14
Editing a Comment.....	15
Deleting a Comment	15

Adding and Editing Troubleshooting Guidelines	15
Linking to SS7 Surveillance.....	16
Opening Group Tag View	16
Closing Alarm Application.....	16
Chapter 5: Alarm Application Preferences	17
Modifying Application Preferences	17
Modifying User Preferences	17
Chapter 6: Alarm Graphical View	18
Opening and Viewing Graphical View	18
Icons in Graphical View	20
Refresh Force After	20
Drilldown to All alarm List	20
Appendix A: My Oracle Support (MOS).....	22
Appendix B: Locate Product Documentation	23

List of Figures

Figure 1 : Color contrast as per VPAT compliance	3
Figure 2 : Filter Dialog	5
Figure 3: Alarms page default display	12
Figure 4 : All Alarm List with alarm selected.....	14
Figure 5 : Event List corresponding to selected alarm.....	14
Figure 6 : Comment dialog.....	15
Figure 7 : Guidelines dialog.....	16
Figure 8 : Alarm Application Application Preferences dialog	17
Figure 9: Global Alarm User Preference	18
Figure 10: Group Tag in Graphical View	18
Figure 11: Filtered group tag list.....	19
Figure 12: Visual Tag View	19
Figure 13: Alarm Preference	20
Figure 14: Filtered All Alarm List.....	21

List of Tables

Table 1:Default Alarm Color.....	2
Table 2 : Group tag list icons.....	6
Table 3 : Columns in group tag list.....	6
Table 4 : Contents for Alarm page	6
Table 5 : Icons in Alarms List.....	8
Table 6 : Columns in alarms list	9
Table 7 : Columns in the Events List.....	9
Table 8 : Icons in comments list.....	10
Table 9: Columns in comments list.....	10
Table 10 : Troubleshoot tab icon	11
Table 11: Icons in Visual Tag View	20

Chapter 1: About This Help Text

Alarm Application Overview

In Alarm Application, users can monitor alarm information. The user interface provides alarm details, including the alarm name, probable cause, severity level, start time, and number of associated events. Users can acknowledge and terminate alarms.

The network elements being monitored are configured in group tags.

Alarm Application Scope and Audience

This help text is for users responsible for monitoring alarm information for network elements.

General Information

You can find general information about OCPIC, 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: Product Highlights

Alarm Application Summary

Alarm Application is part of the Management Application toolbox, which is part of the Performance Intelligence Center (OCPIC) Solution .

OCPIC performs the following:

- Acquires network data for real-time events by surveying SS7 network elements, linksets, links, and applications
- Correlates and stores the data
- Raises alarms

In Alarm Application, the user monitors alarm information for elements that are configured in the group tags. (A user with the role nspManager configures group tags of managed elements using Alarm Configuration.)

. ProAlarm handles the following types of alarms:

- Alarms based on traffic supervision (Q.752)
- Alarms based on Key Performance Indicators (KPIs) (KPI)
- Alarms based on SS7 links (transmission, multiplexing)
- Alarms based on system errors (for system maintenance)

Components

The Alarm Application resides on the Management Application platform. The main components of Alarm Application are the

- Group tag view - list of group tags configured in the Alarm Configuration application.
- All Alarm - display of alarm details, events, comments, and troubleshooting guidelines.

Alarm Colors

Alarms are color coded and can be configured to have different colors. Refer to Quick start Guide Chapter 2.2 User Preferences

Default colors are shown below:

Color	Associated Alarm
	(Red) Critical Alarm
	(Orange) Major Alarm
	(Yellow) Minor Alarm
	(Light Blue) Warning Alarm
	(Light Green) Cleared Alarm
	(White) Indeterminate Alarm

Table 1:Default Alarm Color

Note: For VPAT compliant color contrast, following color combinations can be used as an example:

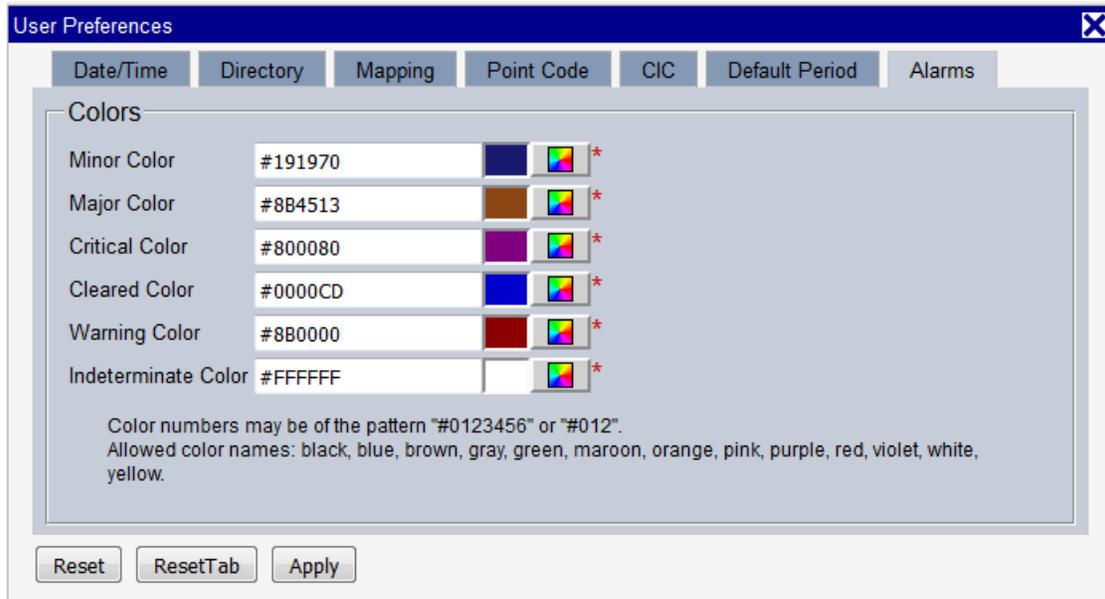


Figure 1 : Color contrast as per VPAT compliance

Alarm Types

Complete list of alarms can be displayed in Centralized Configuration Manager application . You have to refer to Centralized Configuration Guide at Chapter Home Screen Operation – section Configure alarm severity offset.

Anyway, alarm type with its description, troubleshooting guide and additional information can be accessed at anytime in All Alarm section in Alarm Application.

Chapter 3: Understanding Alarm Application Features

Menu Bar

The Menu Bar has three drop-down menus:

- **Alarm**
 - **Group TagView**- an alarm tag must first be configured in Alarm Configuration before it is displayed in the Group tag View (Alarm Configuration is accessible in the Configuration group on the Management Application board with name 'Alarm'.)
 - **All Alarms** - view of all the existing alarms in a table format regardless of if an alarm is configured on a group tag. This view does not require Alarm Configuration. The All alarm list is independent of configured group tags and their content. This All Alarm list always displays all alarms.
- **Display**
 - **Preferences** - a means to set application preferences such as Refresh Interval and default Number of Records Per Page. (Also see Chapter 5: Alarm Application Preferences.)
- **Action**
 - **Terminate Filtered Open Alarms**- a link to terminate all opened alarms in the current filtered list.
- **Help**
 - **User manual** - a link to online help topics
 - **About** - basic contact and version information

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.

Group tag List

The Group tag list is a list of all available group tags that have been configured in Alarm Configuration along with its severity. If the List is empty, there are no tags assigned to you. See ProAlarm Configuration User Guide for information on creating and viewing group tag. Also see the Security Guide for privacy information.

You can perform the following actions in the Group tag list:

- View a list of the configured tags to which you have access
- Define and apply filters for the list
- Refresh the view to see the most current list of group tags
- Set the number of records to view per page

Filters in the Group tag List

From the Group tag list, you can access the Filter dialog, which enables you to define filters for the list.

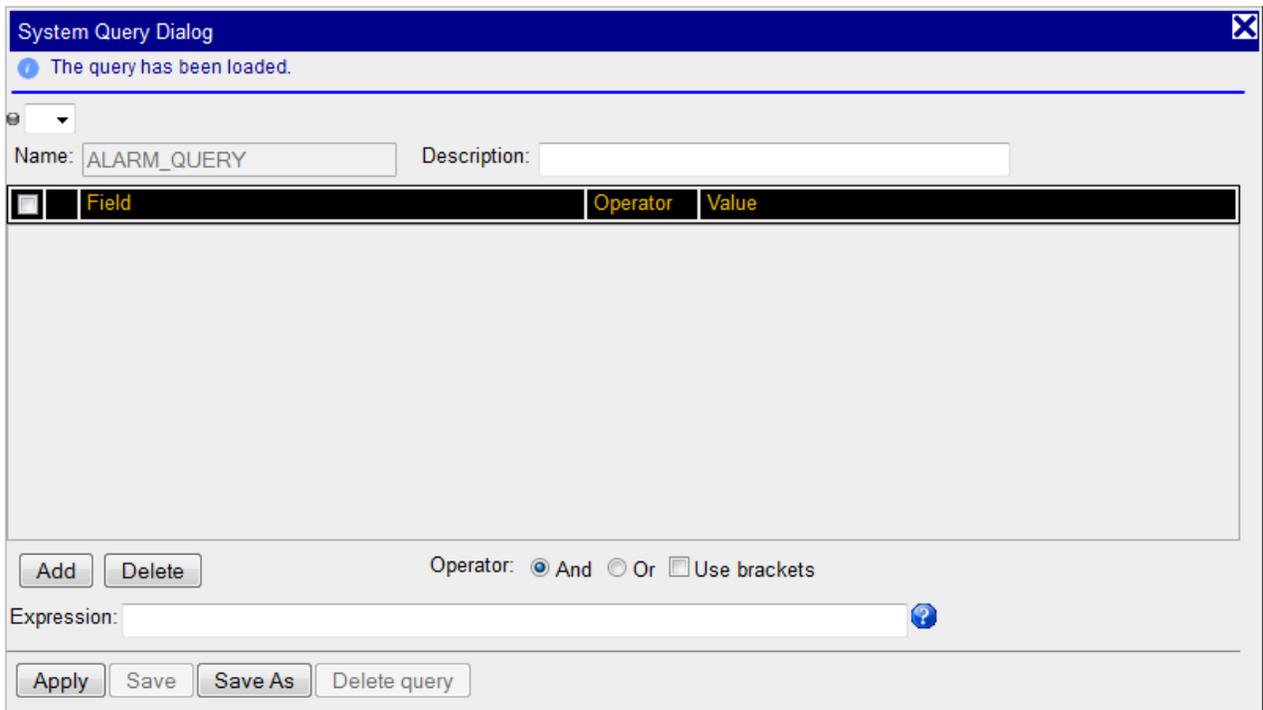


Figure 2 : Filter Dialog

Icons in the Group tag List

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 <i>Group tag</i> list
	Refresh - to refresh the page to show the most current Group tag 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. You can also vary the position of the columns in the list using this option.
	Export -- to provide option to export list getting displayed.
	Print – to provide facility to print current list.

	Severity Count – Display total critical,major,minor and warning count of alarms in the currently filtered list.
---	---

Table 2 : Group tag list icons

Columns in Group tag List

Column Name	Description
Group tag	Name of the group tag configured in alarm configuration
Severity	Displays Severity of the corresponding group tag
Objects	Displays count of managed object associated with this group tag
Critical	Displays count of critical alarms associated with this tag
Major	Displays count of major alarms associated with this tag
Minor	Displays count of minor alarms associated with this tag
Warning	Displays count of warning alarms associated with this tag

Table 3 : Columns in group tag list

All Alarms List

Alarm details are displayed as the default page in Alarm Application. The pages and their tables are laid out the same for the Group tag view and the Alarm List view. (Both views are accessible from the **Alarm** menu.)

Alarm Page	Explanation
Alarms	provides details for all alarms; filters can be set to customize the view. Note:You can customizes to see list of all opened alarms using alarm status column.
Events	provides the details of events associated with a selected alarm record
Comments	allows a user to add and edit comments applicable to a specific alarm when acknowledging or terminating the alarm
Troubleshooting	allows a user with the nspManager role to add and edit troubleshooting guidelines for a specific alarm

Table 4 : Contents for Alarm page

Alarms List

You can perform the following actions in the Alarms: opened page:

- View all alarms for Managed Objects.
- View all opened alarms for Managed Objects by customizing alarm status column.
- View the details of an alarm.
- Drill down to charts and Key Performance Indicators (KPIs) to further analyze the alarm (for KPI cell alarms only).
- **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

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)
- Group Tag – to filter by group tag configured in alarm configuration
- Alarm Raised Time- to filter by time the the alarm is raised Last 5 min,Last 10 min....
- Alarm Status – to filter bu 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 the alarm is raised (Last 5 min,Last 10 min....etc)
- Alarm Changed Time- to filter by time the the alarm has gone through some change (Last 5 min,Last 10 min....etc)
- Alarm Cleared Time- to filter by time the the alarm is terminated or cleared(Last 5 min,Last 10 min....etc)

Icons in Alarms List

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 <i>All Alarms</i> 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. You 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
	Jump to chart - to open a chart in Dashboard to further troubleshoot the alarm (enabled only for KPI cell alarms)
	Jump to KPI data - to access the KPI data in Troubleshooting to further troubleshoot the alarm (enabled only for KPI cell alarms)
	Export -- to provide option to export list getting displayed.
	Print – to provide facility to print current list.

Table 5 : Icons in Alarms List

Columns in Alarms List

Column Name	Description
Alarm Id	unique ID for that alarm
Group Tag	group tags configured in alarm configuration
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 6 : Columns in alarms list

Terminated Alarms

The list of terminated alarms can be seen by applying filter on alarm status column and selecting terminated in All 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 (OCPI) 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 7 : Columns in the Events List

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 8 : Icons in comments list

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 9: Columns in comments list

Troubleshooting tab

An alarm can have a 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 Tab

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

Table 10 : Troubleshoot tab icon

Chapter 4: Using Alarm Application

Accessing Alarm Application

To access and log in to Alarm Application, follow these steps:

- Log in to Management Application using your Web browser. The Application board is displayed.
- Click **Alarm** in the Application group.
The Alarm Application page is displayed, with the All Alarm list active by default.

Opening Alarm Page

Viewing Alarm Details

To open a detailed list of alarms, perform:

- From the Management Application board, click Alarm. The All alarm list and Portal Menu bar are displayed.

Alarm Id	Alarm Status	Alarm Raised Time	Ack State	Perceived Severity	Event Count	Probable Cause	Specific Problem	Managed Object	User Name	Alarm Ack Time
* All	* All	* All	* All	* All	* All	* All	* All	* All	* All	* All
3636	Terminated	22/09/2015 02:19:19	Acknowledged	Major	2	Equipment malfunction	TKPIC20523: Message Feeder PDU Loss	imf9040-1a	<internal>	22/09/2015 02:48:52
3634	Terminated	22/09/2015 01:15:15	Acknowledged	Major	2	Equipment malfunction	TKPIC20523: Message Feeder PDU Loss	imf9040-1a	<internal>	22/09/2015 02:05:11
3633	Terminated	22/09/2015 01:15:31	Acknowledged	Major	2	Equipment malfunction	TKPIC20523: Message Feeder PDU Loss	imf9040-1a	<internal>	22/09/2015 01:30:33
3632	Terminated	22/09/2015 00:58:26	Acknowledged	Major	4	Equipment malfunction	TKPIC20523: Message Feeder PDU Loss	imf9040-1a	<internal>	22/09/2015 01:13:51
3631	Terminated	21/09/2015 13:55:40	Acknowledged	Major	2	Equipment malfunction	TKPIC20523: Message Feeder PDU Loss	imf9040-1a	<internal>	21/09/2015 14:10:43
3630	Terminated	21/09/2015 13:47:09	Acknowledged	Major	2	Equipment malfunction	TKPIC20535: Server failure, out of service	imf9040-1a	<internal>	21/09/2015 13:47:01
3629	Terminated	21/09/2015 13:45:27	Acknowledged	Warning	2	Equipment malfunction	TKSP1ATM10: Server NTP Daemon Not Synchronized	imf9040-1a	<internal>	21/09/2015 13:48:21
3628	Terminated	21/09/2015 13:44:33	Acknowledged	Major	2	Equipment malfunction	TKPIC20535: Server failure, out of service	imf9040-1a	<internal>	21/09/2015 13:48:21
3627	Terminated	21/09/2015 13:30:35	Acknowledged	Major	4	Equipment malfunction	TKPIC20524: Message Feeder PDU timestamps are delayed beyond configured limit	imf9040-1a	<internal>	21/09/2015 13:47:01
3626	Opened	21/09/2015 10:04:07	UnAcknowledged	Major	1	Receive failure	TKPIC25005: DP: Data Timeout	lp1021-1a	-	-

Event Id	Event Time	Perceived Severity	Specific Problem	Additional Text
* All	* All	* All	* All	* All
1884349	22/09/2015 02:48:52	Cleared	TKPIC20523: Message Feeder PDU Loss	
1884262	22/09/2015 02:19:19	Major	TKPIC20523: Message Feeder PDU Loss	

Figure 3: Alarms page default display

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 etx 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 Pop-up 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 options 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 Pages

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.

Drilling Down to Troubleshoot KPI Cell Alarms

You can drill down to view charts or KPI data for a KPI cell alarm. This feature enables a quicker view of alarm data for more in-depth analysis and easier troubleshooting.

To drill down to a chart in Dashboard, click the Jump to Chart icon in the all alarms list toolbar.
Note:The icon is enabled only if selected alarm is the KPI cell alarm.

The Dashboard chart is opened in another window. See Dashboard User Guide for details on interpreting the chart.

To drill down to a chart in Troubleshooting, click the Jump to KPI Data icon in the all alarms list toolbar.
Note:The icon is enabled only if selected alarm is the KPI cell alarm.

The Troubleshooting xDR Viewer is opened in another window. See Troubleshooting User Guide for details on interpreting the KPI data.

Note: If the following message is displayed after you click the Jump to KPI Data icon, see KPI User Guide to turn on the drilldown function. (The message provides the session name, which is the identifier in KPI.)

Message: The drilldown is turned off for the statistical session: <session_name>.

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
3636	Terminated	22/09/2015 02:19:19	Acknowledged	Major	2	Equipment malfunction	TKPIC20523: Message Feeder PDU Loss	imf9040-1a	<internal>	22/09/2015 02:48:52
3634	Terminated	22/09/2015 01:50:15	Acknowledged	Major	2	Equipment malfunction	TKPIC20523: Message Feeder PDU Loss	imf9040-1a	<internal>	22/09/2015 02:05:11
3633	Terminated	22/09/2015 01:15:31	Acknowledged	Major	2	Equipment malfunction	TKPIC20523: Message Feeder PDU Loss	imf9040-1a	<internal>	22/09/2015 01:30:32
3632	Terminated	22/09/2015 01:05:23	Acknowledged	Major	1	Equipment malfunction	TKPIC20523: Message Feeder PDU Loss	imf9040-1a	<internal>	22/09/2015 01:18:33
3631	Terminated	21/09/2015 13:55:40	Acknowledged	Major	2	Equipment malfunction	TKPIC20523: Message Feeder PDU Loss	imf9040-1a	<internal>	21/09/2015 14:10:44
3630	Terminated	21/09/2015 13:47:09	Acknowledged	Major	2	Equipment malfunction	TKPIC20535: Server failure, out of service	imf9040-1a	<internal>	21/09/2015 13:47:09
3629	Terminated	21/09/2015 13:45:27	Acknowledged	Warning	2	Equipment malfunction	TKSP1ATM10: Server NTP Daemon Not Synchronized	imf9040-1a	<internal>	21/09/2015 13:45:27
3628	Terminated	21/09/2015 13:44:33	Acknowledged	Major	2	Equipment malfunction	TKPIC20535: Server failure, out of service	imf9040-1a	<internal>	21/09/2015 13:45:27
3627	Terminated	21/09/2015 13:30:35	Acknowledged	Major	4	Equipment malfunction	TKPIC20524: Message Feeder PDU timestamps are delayed beyond configured limit	imf9040-1a	<internal>	21/09/2015 13:47:09
3626	Opened	21/09/2015 10:04:07	UnAcknowledged	Major	1	Receive failure	TKPIC25005: IXP: Data timeout	lp1021-1a	-	-

Figure 4 : All Alarm List with alarm selected

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
1884080	22/09/2015 01:13:50	Cleared	TKPIC20523: Message Feeder PDU Loss	-
1884014	22/09/2015 00:58:49	Major	TKPIC20523: Message Feeder PDU Loss	-
1884013	22/09/2015 00:58:37	Cleared	TKPIC20523: Message Feeder PDU Loss	GN_RESPONE/CLR Alarm cleared by external process: procmgr [RaMgr.ccx:346] ** [15773:RaMgr.ccx:349]
1884010	22/09/2015 00:58:26	Major	TKPIC20523: Message Feeder PDU Loss	-

Figure 5 : Event List corresponding to 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 6 : 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.

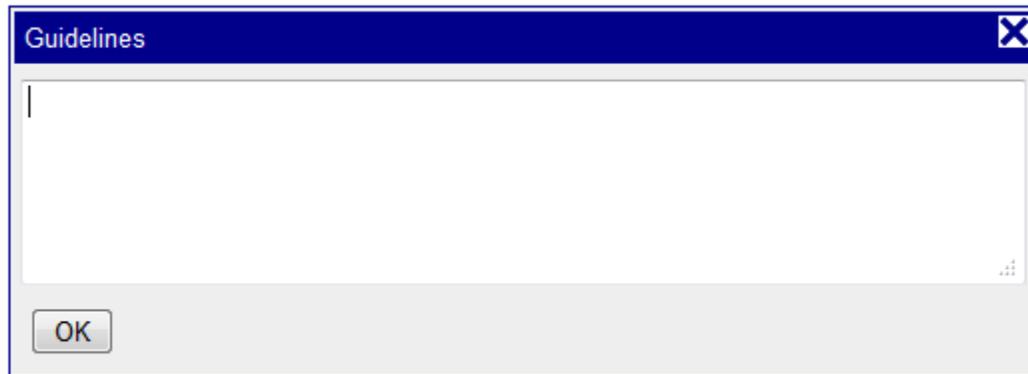


Figure 7 : Guidelines dialog

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

Linking to SS7 Surveillance

You can check the status and state of a link or linkset if you have SS7 Surveillance installed on your system. For information on SS7 Surveillance and how to link to it from Alarm Application, see SS7 Surveillance User Guide.

Opening Group Tag View

Alarm Application displays its group tags view in separate list. To go to the group tag list perform, Click the Group tag view in the menu bar. A list is opened with details of group tags that were configured in alarm configuration/

Closing Alarm Application

To close Alarm Application, click Home to return to the Management Application Portal page or click Logout to exit the Management Application.

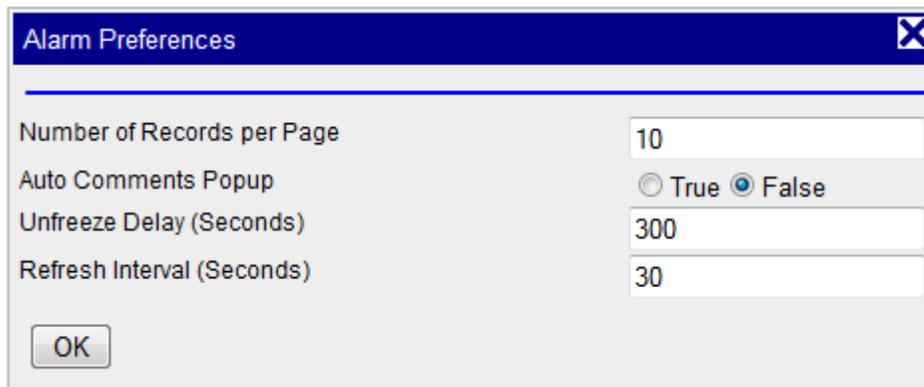
Chapter 5: Alarm Application Preferences

Modifying Application Preferences

You can modify Application Preferences in Alarm Application. These preferences apply only to the Alarm Application and do not affect preferences for other applications.

Note: Users must have the role of nspAdmin or nspManager to manage alarm preferences.

- From the Alarm Application Menu Bar, select Display ► Preferences. The Alarm Application application preferences dialog is displayed.



Setting	Value
Number of Records per Page	10
Auto Comments Popup	<input type="radio"/> True <input checked="" type="radio"/> False
Unfreeze Delay (Seconds)	300
Refresh Interval (Seconds)	30

Figure 8 : Alarm Application Application Preferences dialog

- Modify the preferences as needed. The options are explained below:

Modifying User Preferences

User Preferences settings apply globally to Management Application. For information on setting User Preferences, refer to 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 and Severity Column of Group tag table.

Chapter 6: Alarm Graphical View

Visual group tag view (5 X 5 Matrix) is a graphical view for the filtered Group tag list in alphabetical order from left to right. In this graphical view each group tag is represented as a colored square where color corresponds to the highest severity of group tag and a label representing tag name.

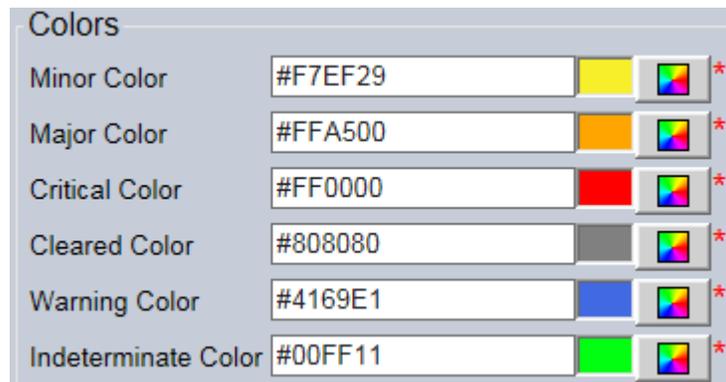


Figure 9: Global Alarm User Preference

In the above figure the color of all the severity are mentioned and it is modifiable from User Preference > Alarm Tab. The color of each Group tag in Graphical view corresponds to the color of its highest severity.

Below Figure represents a single group tag representation in graphical view. Here the color of square is 'RED' and the label represents the Group Tag 'AFRICA WEST', which means the highest severity of Group tag 'AFRICA NORTH' is 'CRITICAL' (which means in all alarms list out of all the opened alarms associated with group tag 'AFRICA NORTH' at least one alarm has 'CRITICAL' Severity)



Figure 10: Group Tag in Graphical View

Opening and Viewing Graphical View

The Graphical View can be seen in Alarm Application. Graphical View is displayed on the basis of filtered group tag list. So in order to open graphical you must go to Group tag list first.

Go to Alarm in Application section, all alarm list is displayed by default. Switch to Group tag view using Portal Menu Alarm -> Group Tag View. Now Filter the Group tag List to make a list of all those tag for which the user wants to view the graphical view. Following Figure shows the filtered Group tag view.

Group Tag	Severity	Objects	Critical	Major	Minor	Warning
AFRICA	Cleared	2	0	0	0	0
AFRICA AUST	Cleared	1	0	0	0	0
AFRICA NORTH	Cleared	2	0	0	0	0
AFRICA SOUTH	Cleared	2	0	0	0	0
AFRICA WEST	Critical	1	1	1	0	0
ANTARCTICA	Cleared	2	0	0	0	0
ASIA	Cleared	2	0	0	0	0
ASIA ANDHRA	Major	2	0	1	0	0
ASIA INDIA MUMBAI	Cleared	1	0	0	0	0
ASIA SOUTH	Major	3	0	2	1	0
ASIA WEST	Cleared	2	0	0	0	0
AUSTRALIA	Major	2	0	1	0	0
BHUTAN	Warning	2	0	0	0	1

Figure 11: Filtered group tag list

Now click on 'Toggle group tag view' button  to open the graphical view for the filtered group tag list. Below figure show the Graphical view.

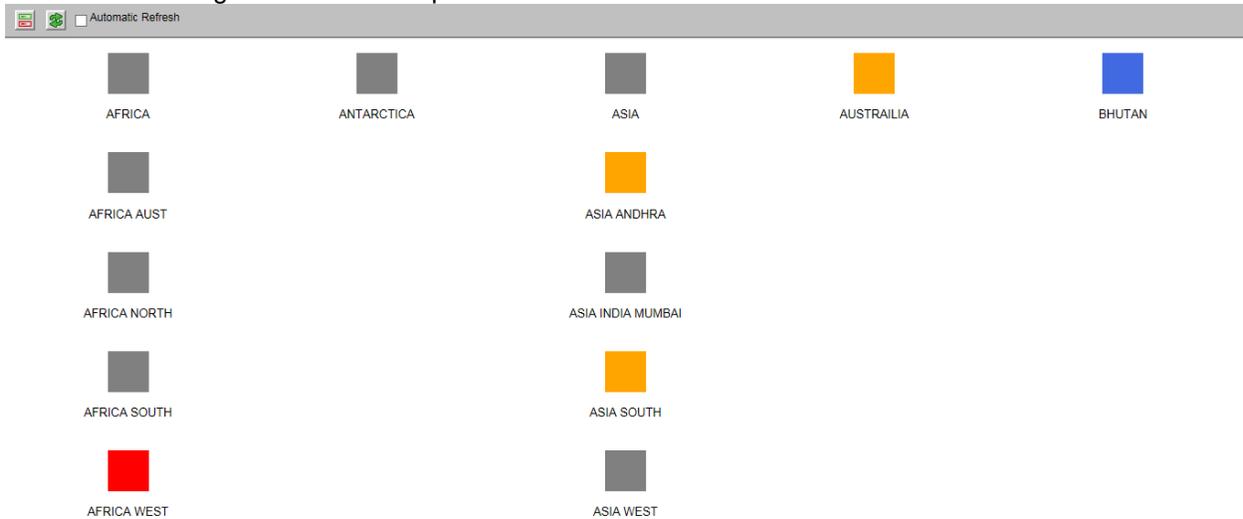


Figure 12: Visual Tag View

Here Group tags are in alphabetical order from left to right. In the above figure group tags AFRICA, ANTARTICA, ASIA, AUSTRALIA and BHUTAN are in alphabetical order from left to right all the group tags with single word and coming after BHUTAN will be ignored as the graphical view displays only 5 X 5 matrix.

In graphical view first word is determining the column and the rest after space will determine line, which means if a Group tag Name is ASIA it will always be seen in the first row only and rest group tag with space after ASIA like ASIA ANDHRA, ASIA INDIA MUMBAI, ASIA SOUTH and ASIA WEST will be seen below ASIA in alphabetical order.

All Items after first space will be again arranged alphabetically. No spaces further should be considered. In the above example we can observe that for group tag's with space after ASIA like ANDHRA, INDIA, SOUTH, and WEST they are in alphabetical order from top to bottom in the column determined by Group tag ASIA.

Note: The user should create the name of group tags in Alarm(Configuration) in alphabetical order of their preference, so that it is simple for the user to view these Group tag's in graphical view. User should not name a group tag starting with number or special character. Also Group tag are case sensitive i.e, ASIA and asia are two different group tag.

Icons in Graphical View

Icon	Description
	Toggle Graph View - to switch back to the filtered group tag list.
	Refresh - to refresh the visual tag view
<input type="checkbox"/> Automatic Refresh	Automatic refresh checkbox – to refresh the visual tag view after fixed Refresh interval mentioned in Alarm Preferences, if the checkbox is ticked.
Last refresh	Display Last refresh time of the graphical view

Table 11: Icons in Visual Tag View

Refresh Force After

Refresh force after functionality also works for the graphical view which will force the refresh of graphical view after fixed interval which is mentioned in the Alarm preferences as Refresh Force After(in seconds).Below figure shows the Alarm preferences dialog box

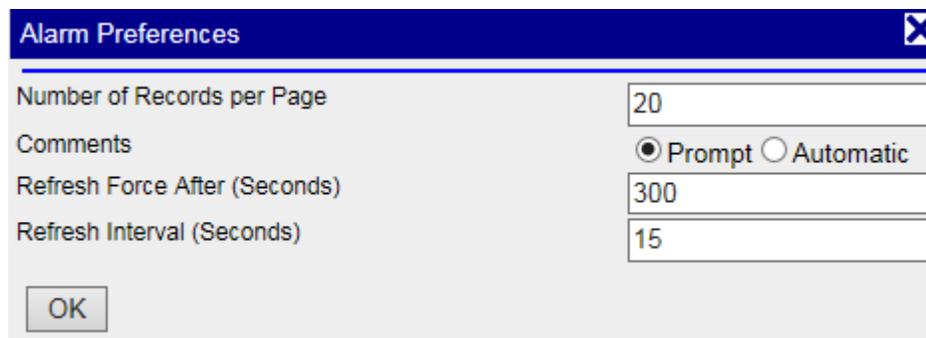


Figure 13: Alarm Preference

Note: The changes done in this dialog box will be applicable for all three views All alarm list , group tag list and graphical view.

Drilldown to All alarm List

User can check all the opened alarm's for a Group Tag using Drilldown functionality in graphical view.

A click on the colored square takes the user back to All Alarms with quick filters set to

- o Group Tag = label of clicked tag

- o Alarm state = OPEN

Below figure show the filtered all alarm list when you click on Group tag 'AFRICA WEST'.

Alarm Id	Group Tag	Alarm Status	Alarm Raised Time	Ack State	Perceived Severity	Event Count	Probable Cause	Specific Problem	Managed Object	User Name
* All	AFRICA WEST	Opened	* All	* All	* All	* All	* All	* All	* All	* All
342	AFRICA WEST	Opened	29/09/2015 07:31:16	UnAcknowledged	Critical	4601	Application subsystem failure	TKPIC25063: IXP: Pool connection error	ixp1000-1a	-
317	AFRICA WEST	Opened	22/09/2015 16:33:12	UnAcknowledged	Major	5	Receive failure	TKPIC25005: IXP: Data timeout	ixp1000-1a	-
276	AFRICA WEST	Opened	16/09/2015 10:43:57	UnAcknowledged	Major	5	Call establishment error	TKPIC25057: IXP: Datawarehouse connection error	ixp1000-1a	-
274	AFRICA WEST	Opened	16/09/2015 10:41:30	UnAcknowledged	Major	10	Receive failure	TKPIC25004: IXP: Stream Connection Loss	ixp1000-1a	-
226	AFRICA WEST	Opened	27/08/2015 07:42:06	UnAcknowledged	Major	54	Timing problem	TKPIC25026: IXP: No Frame Timeout exceeded	ixp1000-1a	-
108	AFRICA WEST	Opened	12/08/2015 10:58:22	UnAcknowledged	Major	21	Performance degraded	TKPIC25058: IXP: Transfer late	ixp1000-1a	-

Event Id	Event Time	Perceived Severity	Specific Problem	Additional Text
* All	* All	* All	* All	* All
459263	30/09/2015 10:24:03	Critical	TKPIC25063: IXP: Pool connection error	Pool connection on IXP_DWS_1_Pool - DFP: S_CapacityManagement
459262	30/09/2015 10:23:33	Cleared	TKPIC25063: IXP: Pool connection error	Pool connection on IXP_DWS_1_Pool - DFP: S_CapacityManagement
459261	30/09/2015 10:23:13	Critical	TKPIC25063: IXP: Pool connection error	Pool connection on IXP_DWS_1_Pool - DFP: S_CapacityManagement
459260	30/09/2015 10:22:53	Cleared	TKPIC25063: IXP: Pool connection error	Pool connection on IXP_DWS_1_Pool - DFP: S_CapacityManagement
459259	30/09/2015 10:22:43	Critical	TKPIC25063: IXP: Pool connection error	Pool connection on IXP_DWS_1_Pool - DFP: S_CapacityManagement
459258	30/09/2015 10:22:33	Cleared	TKPIC25063: IXP: Pool connection error	Pool connection on IXP_DWS_1_Pool - DFP: S_CapacityManagement
459257	30/09/2015 10:22:13	Critical	TKPIC25063: IXP: Pool connection error	Pool connection on IXP_DWS_1_Pool - DFP: S_CapacityManagement
459256	30/09/2015 10:21:43	Cleared	TKPIC25063: IXP: Pool connection error	Pool connection on IXP_DWS_1_Pool - DFP: S_CapacityManagement
459255	30/09/2015 10:21:33	Critical	TKPIC25063: IXP: Pool connection error	Pool connection on IXP_DWS_1_Pool - DFP: S_CapacityManagement
459254	30/09/2015 10:21:23	Cleared	TKPIC25063: IXP: Pool connection error	Pool connection on IXP_DWS_1_Pool - DFP: S_CapacityManagement
459253	30/09/2015 10:21:03	Critical	TKPIC25063: IXP: Pool connection error	Pool connection on IXP_DWS_1_Pool - DFP: S_CapacityManagement

Figure 14: Filtered All Alarm List

Appendix A: My Oracle Support (MOS)

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, 365 days a year.

Appendix B: Locate Product Documentation

Oracle Communications customer documentation is available on the web at the Oracle Help Center (OHC) site, <http://docs.oracle.com>. You do not have to register to access these documents. Viewing these files requires Adobe Acrobat Reader, which can be downloaded at www.adobe.com.

1. Access the **Oracle Help Center** site at <http://docs.oracle.com>.
2. Click **Industries** icon.
3. Under the **Oracle Communications** heading, click the **Oracle Communications documentation** link. The Communications Documentation page appears. Go to the **Network Visibility and Resource Management** section.
4. Click on **Performance Intelligence Center** and then the release number. A list of the entire documentation set for the selected release appears.
5. To download a file to your location, right-click the **PDF** link and select Save Target As (or similar command based on your browser), and save to a local folder.

Note: As long as the documentation site has not been significantly refactored, you can use this link as a shortcut to step 4:

<http://docs.oracle.com/en/industries/communications/performance-intelligence-center/index.html>