DIH 1.2

System Alarms User Guide

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Tekelec

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About This Help Text

Topics:

System Alarms Overview

System Alarms is a "read-only" application designed for viewing and filtering alarms for pre-defined KPI sessions and graphically represented in the ProPerf (also read-only) and ProTrace applications.

From this application one can use the ProTraq Cell filter in the Managed Object Class drop-down list to view specific pre-defined KPI sessions and then by clicking the specific link in the Troubleshooting Actions column within the Alarms List screen.

Scope and Audience

This online help is designed for users, for example users assigned the role NSPMonitoringUser, who are monitoring DIH alarms for pre-defined KPI sessions.

About the Diameter Intelligence Hub (DIH)

The Diameter Intelligent Hub (DIH) is used to monitor a LTE network. DIH also creates a small hardware "footprint" for customers who administer 3G and 4G diameter networks. The DIH:

- Is a single blade server and storage blade collocated within a single or dual Diameter Signaling Router (DSR) enclosure(s).
- Provides filtering, data feed, tracing, decoding, and SNMP functions.
- Enables the selective collection and storage of diameter traffic within one or more instances of PMF and IXP.
- Provides nodal diameter troubleshooting.
- Provides data export for diameter messages.
- Supports both IPv4 and IPv6 traffic simultaneously.
- Provides KPI tracking using ProTrace application as well as viewing KPIs in graphic format using ProPerf dashboard configured at installation.
- Provides filtering for alarms using ProTraq Cell filter (see system alarms online help).
- Uses diameter protocol exclusively.

   Note: The DIH system can use other protocols if the Diameter mode has not been selected and system is in Standard mode. (Default setting is Standard mode. For more information on selecting Diameter mode, see Centralized Configuration Manager Administration online help, "Setting System to Diameter Mode."

The Diameter Protocol

The diameter protocol has evolved from the Radius protocol and enables diameter applications to extend the base protocol by adding new commands and/or attributes, such as those for use of the Extensible Authentication Protocol (EAP).

The diameter protocol provides for an Authentication, Authorization, and Accounting (AAA) framework that overcomes the limitations of RADIUS, (a protocol that handles AAA and EAP), which

cannot effectively deal well with remote access, IP mobility and policy control. The Diameter protocol defines a policy protocol used by clients to perform Policy, AAA and Resource Control. This allows a single server to handle policies for many services.

As mentioned above, Diameter protocol provides AAA functionality, but in addition it is made more reliable by using TCP and SCTP instead of UDP. The Diameter protocol is further enhanced by the development of the 3rd Generation Partnership Project (3GPP) IP Multimedia Subsystem (IMS). Through the use of extensions, the protocol was designed to be extensible to support Proxies, Brokers, Strong Security, Mobile-IP, Network Access Servers (NASREQ), Accounting and Resource Management.

Setting User Preferences

Users can set User Preferences that apply across all the NSP applications. These include

- Time specifications (date format, time zone, etc.)
- Directory names (for exporting, uploading, and downloading)
- Enumeration values (numerals vs. text)
- Point code specifications
- CIC specifications
- Default alarm colors
- Default object privacy privileges

Setting Time Format

Follow these steps to set the time format:

1. Click **User Preferences** on the Application board.
   The User Preferences page is displayed.
2. Click the **Time** tab.
   The Time page is displayed. The red asterisk denotes a required field.

   Note: Use the tips on the page to help you configure the time format.

Figure 1: Time Formatting Page

3. Enter the format for these time-related displays.

   • **Date format**
   • **Time format**
   • **Date and time fields**

4. Select the formats for these time-related displays by using the drop-down arrow.

   • **Duration fields**
   • **Time zone**

     Note: You must choose your time zone to get local time.

5. If you want to reset the time-related displays to default settings, click **Reset for Time**. (The bottom **Reset** button resets all the tabbed pages to default settings.)

6. Click **Apply** to save settings.

Setting Directory Preferences

Use the User Preferences feature to set the Export, Upload and Download directory paths for your system. These paths define where xDR's, dictionary files and other elements are stored.

Follow these steps to set the directory preferences.

1. Click **User Preferences** on the Application board.

   The User Preferences page is displayed.

2. Click the **Directory** tab.
   The Directory page is displayed. The red asterisk denotes a required field.
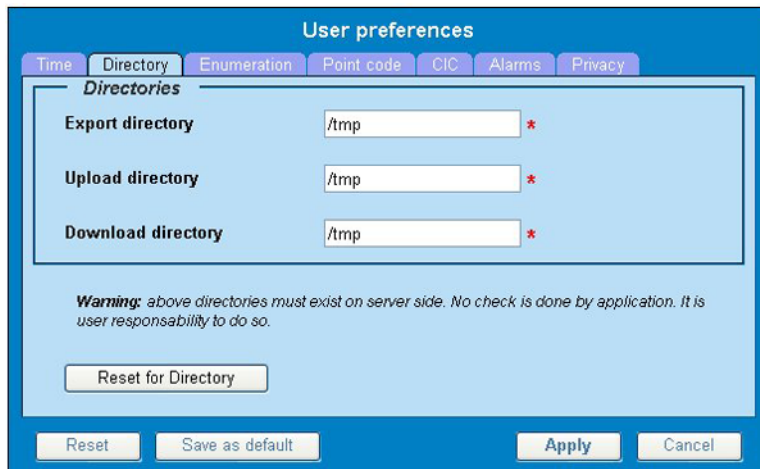
Figure 2: Directory Page

3. Type in the following:

   - **Export directory**
   - **Upload directory**
   - **Download directory**

4. If you want to reset the directories to default settings, click **Reset for Directory.** (The bottom **Reset** button resets all the tabbed pages to default settings.)

5. Click **Apply** to save your settings.

Setting Mapping Preferences

You can set the Mapping settings using the User Preferences feature.

Follow these steps to set Mapping preferences.

1. Click **User Preferences** in the Application board.
   The User Preferences page is displayed.

2. Click the **Mapping** tab .
   The Mapping page is displayed.
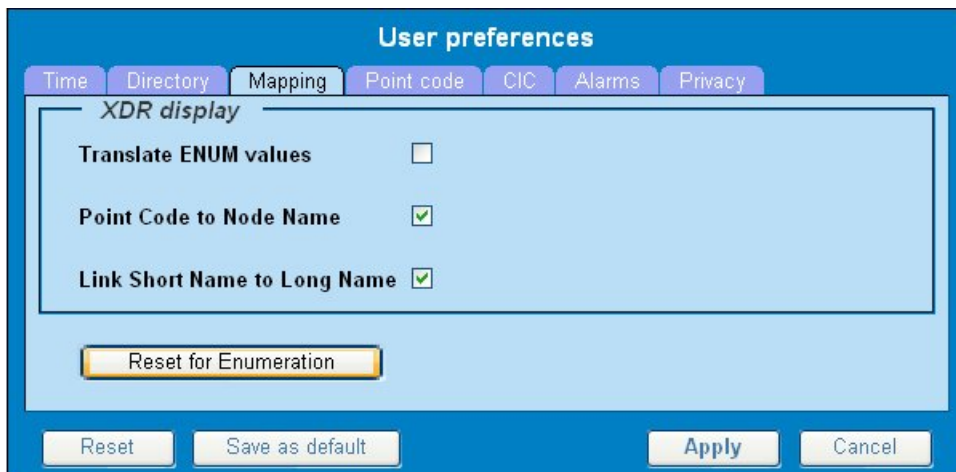
Figure 3: Mapping Page

3. Check **Translate ENUM values** to display text instead of numerals.

   Enumeration is used by xDRs to display text values instead of numeric. (For example, rather than showing the numeral for Alarm Severity, the user interface will show the actual word, such as "Major" or "Critical.")

4. Check **Point Code to Node Name** to display the custom (user-defined) name of the node. Otherwise, the Point Code value is displayed.

5. Check **Link Short Name to Long Name** to display the custom (user-defined) link name or the Eagle link name. Otherwise, the short name is displayed, which is the name that begins with an asterisk (*).

6. To reset the Mapping values to the default, click **Reset for Enumeration**. (The bottom **Reset** button resets all the tabbed pages to default settings.)

7. Click **Apply** to save the changes.

Setting Point Code Preferences

The User Preferences feature enables you to set the Point Code preferences for your system. A Point Code is a unique address for a node (Signaling Point), used to identify the destination of a message signal unit (MSU).

Follow these steps to set the Point Code preferences.

1. Click **User Preferences** in the Application board.
   The User Preferences page is displayed.

2. Click the **Point Code** tab.
   The Point Code page is displayed. The red asterisk denotes a required field.

Figure 4: Point Code Tab

3. Select either **Hexadecimal display** or **Decimal display**.

4. Select or de-select **Split format**.
   If **Split format** is checked, the Bit groups settings in the box below are active. If **Split format** is not checked, Bit groups settings are not applicable.

5. If you selected Split format above, go to the next step. If you did not select Split format, go to step *Step 8*.

6. In the Bit groups panel, use the drop-down box to select the **Separation** type .

7. Type in values for **Groups 0-3**.

8. To reset the point code preferences to default settings, click **Reset for Point code**. (The bottom **Reset** button resets all the tabbed pages to default settings.)

9. Click **Apply** to save your settings.

Setting CIC Preferences

The Circuit Identification Code (CIC) provides a way to identify which circuit is used by the Message Signaling Unit (MSU). This is important in ProTrace applications. Use the User Preferences feature to set the CIC settings for your system.

Complete these steps to set the CIC preferences:

1. Click **User Preferences** in the Application board.
   The User preferences page is displayed.

2. Click the **CIC** tab.
   The CIC page is displayed. The red asterisk denotes a required field.
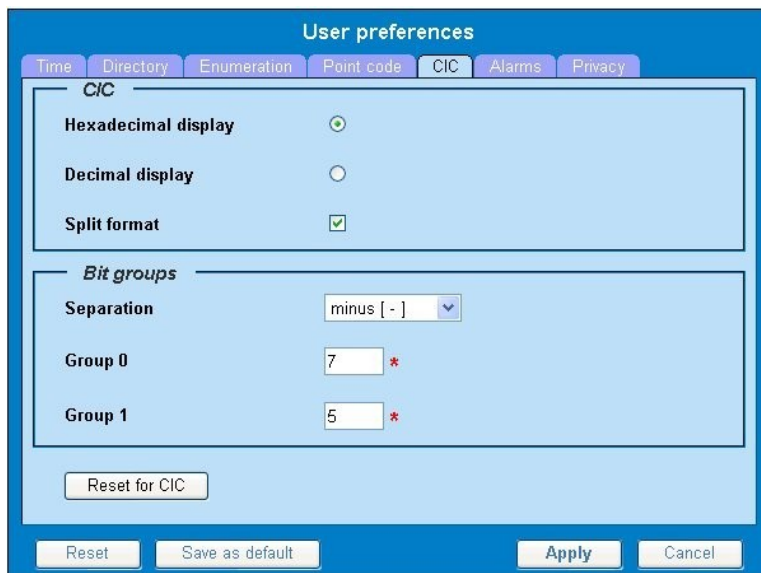
Figure 5: CIC Page

3. Select either **Hexadecimal display** or **Decimal display**.

4. Select or de-select **Split format**.
   If **Split format** is checked, the Bit groups settings in the box below are active. If **Split format** is not checked, Bit groups settings are not applicable.

5. If you selected Split format above, go to the next step. If you did not select Split format, go to step *Step 8*.

6. In the Bit groups panel, use the drop-down box to select **Separation** type..

7. Type in values for **Group 0** and **Group 1**.

8. If you want to reset CIC preferences to the default, click **Reset for CIC**. (The bottom **Reset** button resets all the tabbed pages to default settings.)

9. Click **Apply** to save your settings.

Setting Alarms Preferences

Use the Alarms tab in User Preferences to define the default colors that indicate alarm severity. The colors are displayed in the Perceived Severity column of alarms tables and on object icons in maps.

Follow these steps to modify alarm status colors.

1. Click **User Preferences** in the Application board.
   The User preferences page is displayed.

2. Click the **Alarms** tab.
   The Alarms page is displayed. The red asterisk denotes a required field.
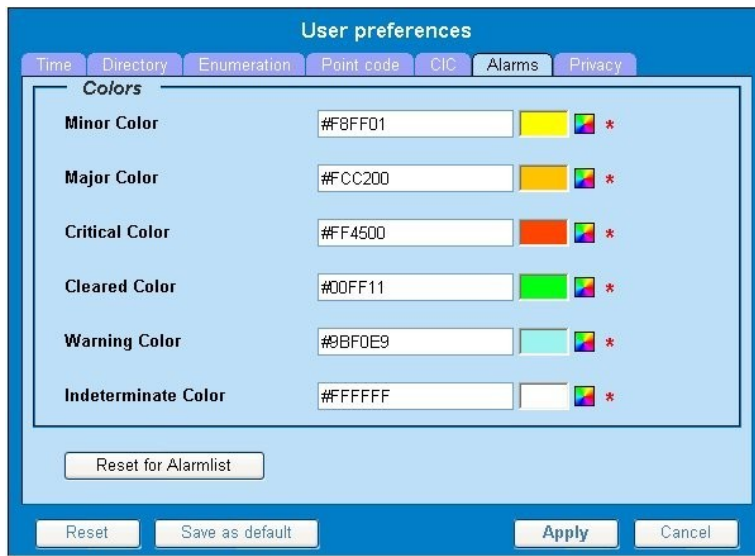
Figure 6: Alarms Page

3. Click the color palette (icon on the right side of the screen) associated with the alarm status color(s) you want to modify.
   A pop-up palette window is displayed.

4. Click the color you want for the type of alarm.
   The color palette pop-up is closed and the color box for the alarm displays the selected color. The number for the color is also displayed.

5. If you want to reset the Alarm preferences to the default, click **Reset for Alarmlist**. (The bottom **Reset** button resets all the tabbed pages to default settings.)

6. Click **Apply** .
   The changes do not take effect until you log out of and in again to NSP.

Setting Default Object Privacy

All NSP users can set default access privileges for Objects (data) they create in NSP applications. An owner has full rights to modify or delete the object . Other users are assigned to a Profile and have access to these Objects through that Profile's associated Privacy Roles.

To enter the default Object Privacy (data) settings, follow these steps:

1. Click **User preferences** in the Application board menu.
   The User Preferences window is displayed. The **Time** tab is active by default.

2. Click the **Privacy** tab .
   The Privacy page is displayed.
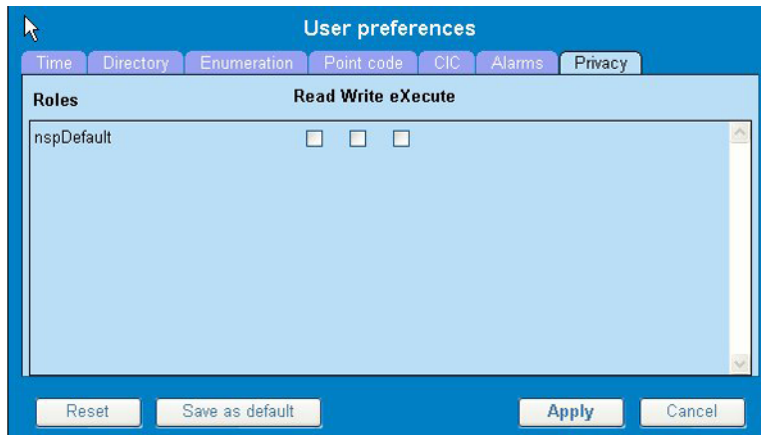
Figure 7: Privacy Page

3. Click the appropriate box to select **Read**, **Write**, or **eXecute**. If you want the role to have no access to the selected object(s), ensure that no box is checked.

4. Click **Save as default**.

5. To reset all the tabbed pages to default settings, click **Reset**.

6. Click **Apply**.
   The settings are saved.

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The Tekelec Customer Care Center is your initial point of contact for all product support needs. A representative takes your call or email, creates a Customer Service Request (CSR) and directs your requests to the Tekelec Technical Assistance Center (TAC). Each CSR includes an individual tracking number. Together with TAC Engineers, the representative will help you resolve your request.

The Customer Care Center is available 24 hours a day, 7 days a week, 365 days a year, and is linked to TAC Engineers around the globe.

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DIH Documentation Library

DIH customer documentation and online help are created whenever significant changes are made that affect system operation or configuration. Revised editions of the documentation and online help are distributed and installed on the customer system. Consult your NSP Installation Manual for details on how to update user documentation. Additionally, a Release Notice is distributed on the Tekelec Customer Support site along with each new release of software. A Release Notice lists the PRs that have been resolved in the current release and the PRs that are known to exist in the current release.

Listed is the entire DIH documentation library of online help.

- Centralized Configuration Manager Administration Online Help
- Alarm Forwarding Administration Online Help

- Diagnostic Utility Administration Online Help
- ProTrace Online Help
- System Alarms Online Help
- ProPerf Online Help
- ProTraq Configuration Online Help
- Data Feed Export Online Help
- System Alarms Online Help

Locate Product Documentation on the Customer Support Site

Access to Tekelec's Customer Support site is restricted to current Tekelec customers only. This section describes how to log into the Tekelec Customer Support site and locate a document. Viewing the document requires Adobe Acrobat Reader, which can be downloaded at www.adobe.com.

1. Log into the *Tekelec Customer Support* site.

   Note: If you have not registered for this new site, click the **Register Here** link. Have your customer number available. The response time for registration requests is 24 to 48 hours.

2. Click the **Product Support** tab.
3. Use the Search field to locate a document by its part number, release number, document name, or document type. The Search field accepts both full and partial entries.
4. Click a subject folder to browse through a list of related files.
5. To download a file to your location, right-click the file name and select **Save Target As**.

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This product may be covered by one or more of the following U.S. and foreign patents:

U.S. Patent Numbers:

6,456,845; 6,765,990; 6,968,048; 7,043,001; 7,155,512; 7,206,394; 7,215,748; 7,231,024; 7,286,516; 7,286,647; 7,401,360; 7,706,343; 7,844,033; 7,860,799;

Foreign Patent Numbers:

None.

Chapter

2

System Alarms Procedures

Topics:

Overview of Functionality

System Alarms is a "read-only" application designed to monitor pre-defined KPI session alarms graphically represented in the ProPerf application (read-only) as well as in tabular form in ProTrace xDR Viewer application (also read-only) that resides on the Diameter Intelligence Hub (DIH) network. System Alarms lists all alarms generated and the user can view specific pre-defined alarms generated by using the ProTraq Cell filter in the Managed Object Class drop-down list.

Note: Java plug-in 1.6.0-13 (or higher) must be installed to ensure proper functioning of the application.

Accessing System Alarms

Note: NSP only supports versions of IE 7.0 or later and Firefox 3.6 or later. Before using NSP, turn off the browser pop up blocker for the NSP site.

1. To access System Alarms, log in to NSP using your Web browser.

   The Application board is displayed.

2. Click **System Alarms** in the Surveillance group.
   The Alarms interface is displayed.

Understanding Alarm Pages

The alarm information is displayed on five tabbed pages (all read only):

- Alarms: opened screen - provides details for all open alarms; filters can be set to customize the view
- Alarms: terminated screen - provides details for terminated 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 NSPConfigManager role to add and edit troubleshooting guidelines for a specific alarm

Each type of screen is discussed in this online help.

Note: Do not use the Function Keys (F1 through F12) when using NSP. Function keys work in unexpected ways. For example, the F1 key does not open NSP 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: Opened Page

The Alarms: opened page displays a table with information about alarms that are still active. Each active alarm is a single record in the Alarms: opened table.

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

- View all opened alarms for Managed Objects.
- View the details of an alarm.
- Drill down to charts and Key Performance Indicators (KPIs) to further analize the alarm (for ProTraq 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 NSPMonitorPowerUser.

- Acknowledge an alarm.

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

- 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: Opened Page

You can filter alarms by using any combination of the three filters on the Alarms: opened page. Each filter defaults to No Filtering. The filter fields are

- **Perceived Severity** - to filter by specific severity (critical, major, minor, warning).
- **Managed Object Class** - to filter by class level of the object.

  Note: ProTraq Cell is the only functional filter in the Managed Object Class drop-down list.

- **Alarm Type** - to filter by type (for example, communications, environment, equipment).

Icons in Alarms: Opened Page

Table 1: Alarms: Opened Icons

Alarm Icon	Description
	Terminate alarm - to terminate selected alarms
	Acknowledge alarm - to acknowledge selected alarms
	Change records per page - to refresh the view to show the number of rows entered in the Number of Rows field

Alarm Icon	Description
	View details - to view events, comments, and troubleshooting tips for a selected alarm (or the last alarm selected in a group of alarms)

Columns in Alarms: Opened Page

Table 2: Alarms: Opened Columns

Column Name	Description
Select	check box to select alarm record(s)
Alarm Identifier	unique ID for that alarm
Perceived Severity	alarm severity level (color coded)
Managed Object	specific object on which the alarm occurred, if the alarm is associated with an object
Probable Cause	cause of the alarm based on history of similar alarms
Specific Problem	alarm name
Raised Time	time the alarm was registered
Changed Time	time the status of the alarm was changed
Event Count	number of events for the alarm
Managed Object Class	class level of the object (for example, IXP, IMF, Host) if the alarm is associated with an element
Acknowledge • State • Time • User	• state of the acknowledged alarm; check denotes "yes"; yellow triangle denotes "no." • time the alarm was acknowledged • user who acknowledged the alarm
Alarm Type	type of alarm (for example, equipment, processing error, quality of service).
Troubleshooting Action	drill-down links (for ProTraq cell alarms only) to chart and KPI data

Alarms: Terminated Page

The Alarms: terminated page displays a table that contains information about alarms that have been terminated. Each terminated alarm is a single record in the Alarms:terminated table.

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.

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

- View all terminated alarms for Managed Objects for a designated time, ranging from the past hour through the past 30 days
- View the details of an alarm
- Drill down to charts and Key Performance Indicators (KPIs) to further analize the alarm (for ProTraq cell alarms only).
- Manage the display by setting filters, setting the number of rows per page, and sorting columns

Filters in Alarms: Terminated Page

You can filter alarms by using any combination of the three filters on the Alarms: terminated page. The filter fields are

- **Alarm Type** - to filter by type (for example, communications, environment, equipment). The default is No Filtering.
- **Managed Object Class** - to filter by class level of the object . The default is No Filtering.

   Note: ProTraq Cell is the only functional filter in the Managed Object Class drop-down list.

- **Time Interval** - the time range during which the alarm was terminated. The default is Last Hour.

Icons in Alarms: Terminated Page

Table 3: Alarms: Terminated Icons

Alarm Icon	Description
Number of Rows 20	Number of Rows -- maximum number of rows to display on each page
	Change records per page-- to refresh the view to show the number of rows entered in the Number of Rows field
	View details - to view events, comments, and troubleshooting tips for a selected alarm (or the last alarm selected in a group of alarms)

Columns in Alarms: Terminated Page

Table 4: Alarms: Terminated Columns

Column Name	Description
Select	radio button to select a terminated alarm record
Alarm Identifier	unique ID for the alarm
Managed Object	specific object on which the alarm occurred, if the alarm is associated with an object
Probable Cause	cause of the alarm based on history of similar alarms

Column Name	Description
Specific Problem	alarm name
Raised Time	time the alarm was registered
Cleared Time	time that the alarm was terminated
Event Count	number of events for the alarm record
Managed Object Class	class level of the object (for example, IXP, IMF, Host), if the map is associated with an element
User	user who terminated the alarm
Acknowledge • State • Time • User	• indicator as to whether the alarm was acknowledged. (A check means "yes," and yellow triangle means "no.") • time that the alarm was acknowledged • user who acknowledged the alarm
Alarm Type	type of alarm (for example, equipment, processing error, quality of service)
Changed Time	time the alarm status was changed
Perceived Severity	alarm severity level (color coded)
Troubleshooting Action	drill-down links to chart and KPI data (for ProTraq cell alarms only)

Events Page

The Events page displays a table that details events for an alarm received from the Diameter Intelligence Hub (DIH). An alarm can have more than one event associated with it.

This page is "read only" and cannot be altered.

Icons in the Events Page

Table 5: Events Icons

Alarm Icon	Description
	Change records per page-- to refresh the view to show the number of rows entered in the **Number of Rows** field.
	Number of rows -- indicates the number of rows for display on one page.

## Columns in the Events Page

Table 6: Events Page Columns

Column Name	Description
Event Identifier	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
Alarm Type	type of alarm (for example, equipment, processing error, quality of service)

Comments Page

This page is "read only" and cannot be altered.

Icons in the Comments Page

Table 7: Comments Page Icons

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
Number of Rows 20	Number of Rows - number of rows for display on each page
	Change records per page - to refresh the view to show the number of rows entered in the Number of Rows field.

Columns in the Comments Page

Table 8: Comments Page Columns

Column Name	Description
Select	radio button for selecting a comment to edit or delete
Comment Identifier	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

Troubleshooting Page

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 guideline for a selected alarm
- Drill down to charts and Key Performance Indicators (KPIs) to further analyze the alarm

Icons in the Troubleshooting Page

Table 9: Troubleshooting Page Icons

Icon	Description
	Jump to chart - to open a chart in ProPerf to further troubleshoot the alarm (for ProTraq cell alarms only)
	Jump to KPI data - to access the KPI data in ProTrace to further troubleshoot the alarm (for ProTraq cell alarms only)
	Edit Guideline- to enter a new Troubleshooting guideline or edit an existing one for the selected alarm record

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 ProTraq Cell Alarms

You can drill down to view charts or KPI data using the ProTraq Cell filter in the Managed Object Class drop-down list. This feature enables a quicker view of alarm data for more in-depth analysis and easier troubleshooting.

Note: ProTraq Cell is the only functional filter in the Managed Object Class drop-down list.

To drill down to a chart in ProPerf, click the Jump to Chart icon in one of these locations:

• the Troubleshooting Action column of the Alarms: opened or Alarms: terminated page.

Figure 8: Alarms Opened Page with Troubleshooting Column

• the Troubleshooting page displayed in the Alarm details section (at the bottom of the screen)

The ProPerf chart is opened in another window shown in the figure. See *ProPerf User Guide* for details on interpreting the chart.

Figure 9: ProPerf Chart Screen

To drill down to a chart in ProTrace, click the Jump to KPI Data icon in one of these locations:

• the Troubleshooting Action column of the Alarms: opened or Alarms: terminated page.
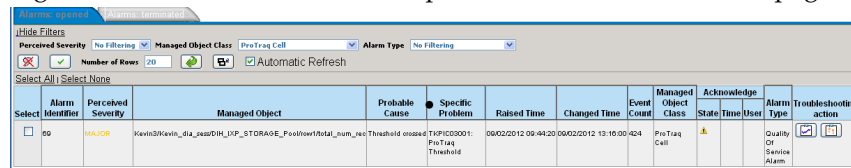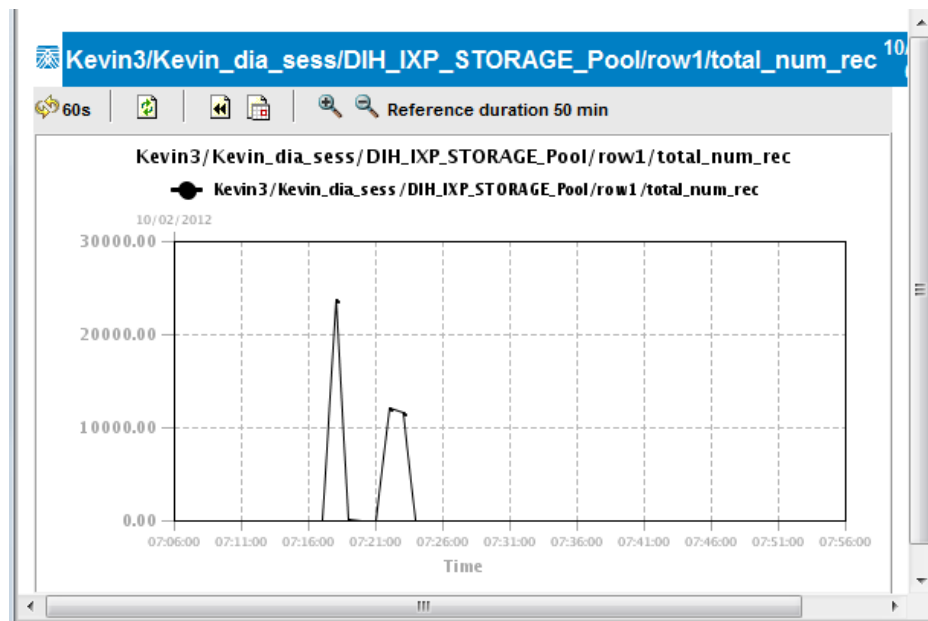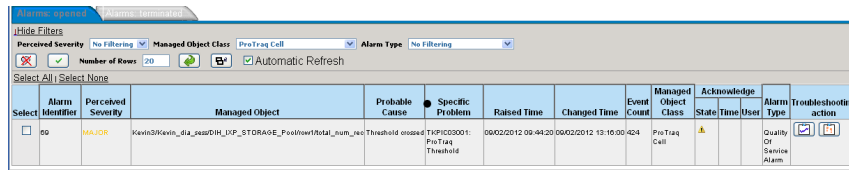
Figure 10: Alarms Opened Page with Troubleshooting Column

- the Troubleshooting page displayed in the Alarm details section (at the bottom of the screen)

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

Note: The ProTraq configurations are pre-set for your system at installation.

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

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

Rec#	Period end	Duration	Sample	Corner	Line	total_num_rec	total_num_signal_unit
1	10/02/2012 07:19:00	60	1	-	row1	95	939
2	10/02/2012 07:20:00	60	1	-	row1	0	0
3	10/02/2012 07:21:00	60	1	-	row1	0	0
4	10/02/2012 07:22:00	60	1	-	row1	12184	23878
5	10/02/2012 07:23:00	60	1	-	row1	11707	23611
6	10/02/2012 07:24:00	60	1	-	row1	14	131
7	10/02/2012 07:25:00	60	1	-	row1	0	0
8	10/02/2012 07:26:00	60	1	-	row1	0	0
9	10/02/2012 07:27:00	60	1	-	row1	0	0
10	10/02/2012 07:28:00	60	1	-	row1	0	0
11	10/02/2012 07:29:00	60	1	-	row1	0	0
12	10/02/2012 07:30:00	60	1	-	row1	0	0
13	10/02/2012 07:31:00	60	1	-	row1	0	0
14	10/02/2012 07:32:00	60	1	-	row1	0	0
15	10/02/2012 07:33:00	60	1	-	row1	0	0
16	10/02/2012 07:34:00	60	1	-	row1	0	0
17	10/02/2012 07:35:00	60	1	-	row1	0	0
18	10/02/2012 07:36:00	60	1	-	row1	0	0
19	10/02/2012 07:37:00	60	1	-	row1	0	0
20	10/02/2012 07:38:00	60	1		row1	0	0

Figure 11: ProTrace Viewer Screen

Configuring Preferences

Modifying Application Preferences

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

Note: Users must have the role of NSPMonitoringUser or NSPBusinessUser to manage alarm preferences.

1. From the System Alarms Menu Bar, select **Display ➤ Preferences**.
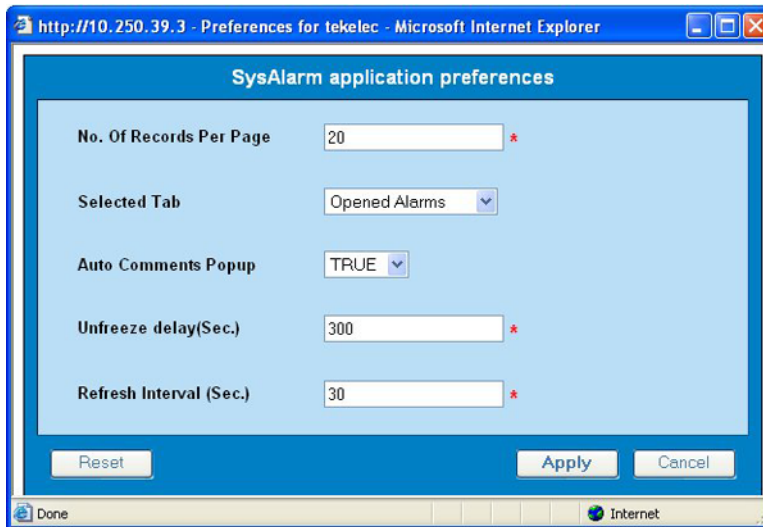   The SysAlarm application preferences dialog is displayed.

Figure 12: SysAlarm Application Preferences Dialog

2. Modify the preferences as needed.

Table 10: Fields in SysAlarm Application Preferences Dialog

Option	Explanation
Number of Records Per Page	The number must be an integer from 1 to 300.
Selected Tab	Use the drop-down box to select either the Alarms: opened or Alarms: terminated screen.
Auto Comments	The option toggles between two settings: • **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.

3. Click **Apply**.

The changes do not take effect until you log out and in again to the Network Software Platform.

Modifying User Preferences

User Preferences settings apply globally to Network Software Platform (NSP) applications. For information on setting User Preferences, see *About This Help Text*.

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 Alarms

To close System Alarms, click **Home** to return to the Application board; or click **Logout** to exit NSP.