

**Oracle® Communications
Performance Intelligence Center**
ProAlarm Configuration User Guide
Release 9.0

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Chapter1: About this Help Text

Topics:

- *Overview*
- *Scope and Audience*
- *About the Performance Intelligence Center*
- *Customer Care Center*
- *PIC Documentation Library*
- *Locate Product Documentation on the Customer Support Site*

Overview

ProAlarm Configuration, an application in the Network Software Platform Toolbox, enables the System Administrator to configure the detailed list and map displays to help in monitoring the status of managed objects in such as these:

- Signaling links
- Linksets
- Signaling points
- Message Switches
- ProTraq
- IMF
- PMF
- IXP
- ProTrace

Scope and Audience

This user's manual provides information about the ProAlarm Configuration's graphical user interface to enable you to efficiently and effectively configure ProAlarm detailed lists and map displays. See Security User Guide for specifics on access privileges for ProAlarm Configuration.

About the Performance Intelligence Center

The Performance Intelligence Center (PIC) is a monitoring and data gathering system that provides network performance, service quality and customer experience - across various networks, technologies, protocols, etc. Beyond monitoring performance and gathering data, the solution also provides analytics, actionable intelligence and potentially an intelligent feedback mechanism. It allows Service Providers to simultaneously look across the Data Link, Network, Transport and Application layer traffic to better correlate and identify the impact of network problems on revenue generating applications and services.

PIC functionality is based on the following general flow. The Integrated Message Feeder (IMF) is used to capture SS7 and SigTran traffic. The Probed Message Feeder (PMF) is used to capture both SS7 and IP traffic. Both products forward Probe Data Units (PDUs) to the Integrated xDR Platform (IXP). The IXP stores this traffic data and correlates the data into detailed records (CDRs, IPDRs, TDRs, etc.). The IXP then stores the data on the system for future analysis. The Network Software Platform (NSP) provides applications that mine the detailed records to provide value-added services such as network performance analysis, call tracing and reporting.

PIC centralized configuration tasks fall into one of two categories:

- Data Acquisition and Processing - the configuration of the probes, routing of PDUs to the xDR builder setup, KPI generation, data feeds, etc.
- PIC System Administration - the configuration of monitoring sites, configuring PIC servers, setting up permissions, etc.

Note: For more information see Centralized Configuration Manager Administration Guide. This is

a graphic overview of the PIC system.

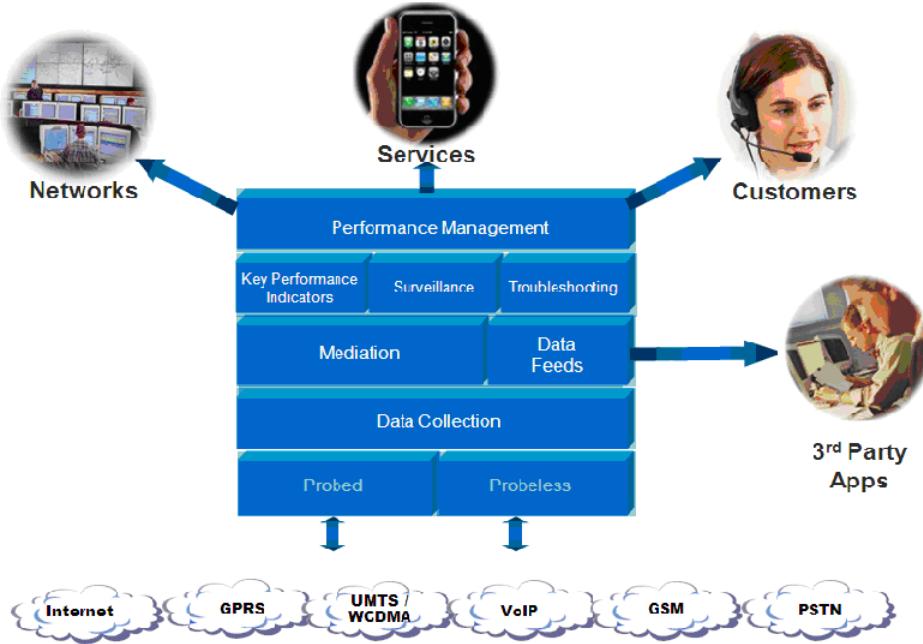


Figure 1: PIC Overview

Setting User Preferences

Users can set certain User Preferences that apply to the following NSP applications:

- Alarm Forwarding
- Audit Viewer
- ProAlarm Configuration
- ProAlarm Viewer
- ProPerf
- ProPerf Configuration
- ProTraq
- Security
- System Alarms

These User Preferences include

- Time specifications (date format, time zone, etc.)
- Directory names (for exporting, uploading, and downloading)
- Enumeration values (numerals vs. text)
- Node name and node link display
- 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.

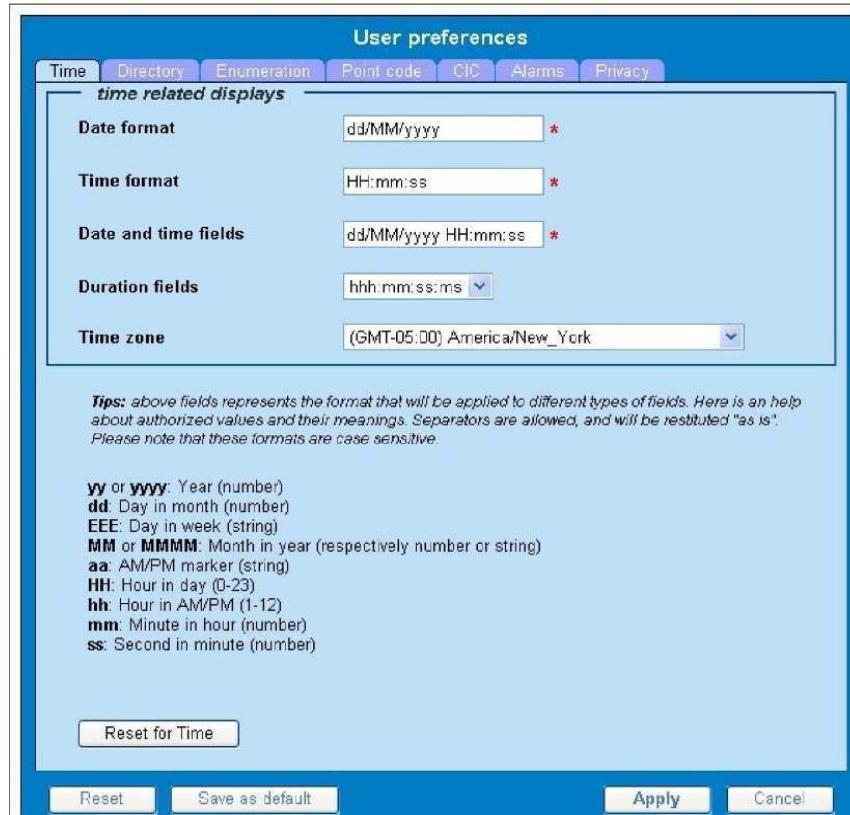


Figure 2: Time Formatting Page

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.

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.

The screenshot shows the "User preferences" window with the "Directory" tab selected. The "Directories" section contains three input fields: "Export directory" (value: /tmp), "Upload directory" (value: /tmp), and "Download directory" (value: /tmp). Each field has a red asterisk next to it, indicating it is a required field. Below the fields is a warning message: "Warning: above directories must exist on server side. No check is done by application. It is user responsibility to do so." At the bottom of the window are four buttons: "Reset", "Save as default", "Apply" (highlighted in blue), and "Cancel".

Figure 3: Directory Page

Follow these steps to set the directory preferences.

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.

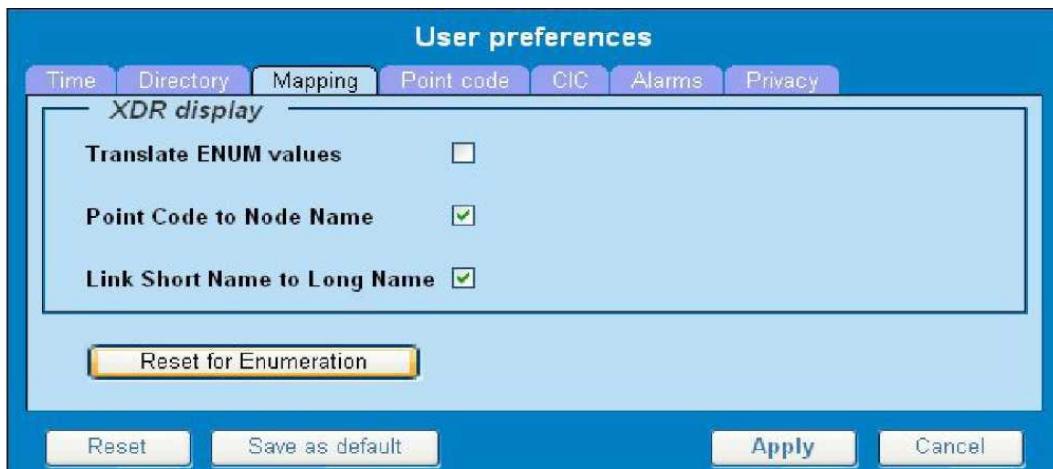


Figure 4: Mapping Page

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.

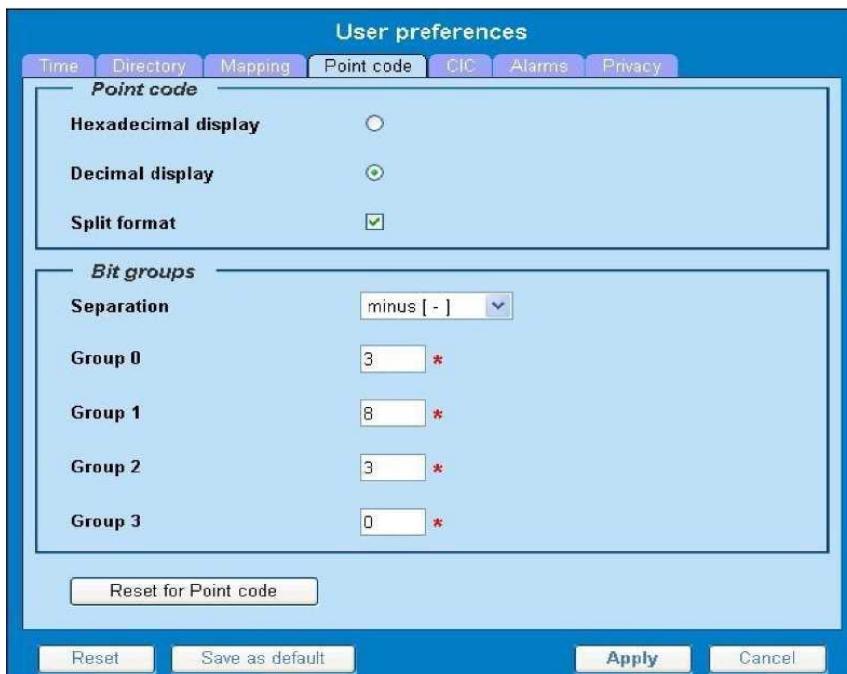


Figure 4: Point Code Tab

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 [13](#).
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.

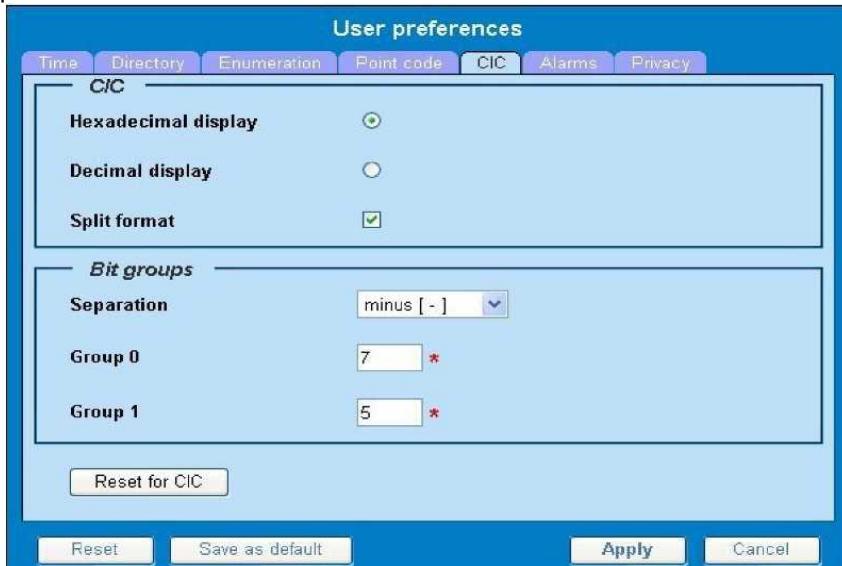


Figure 5: CIC Page

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 [14](#).
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.

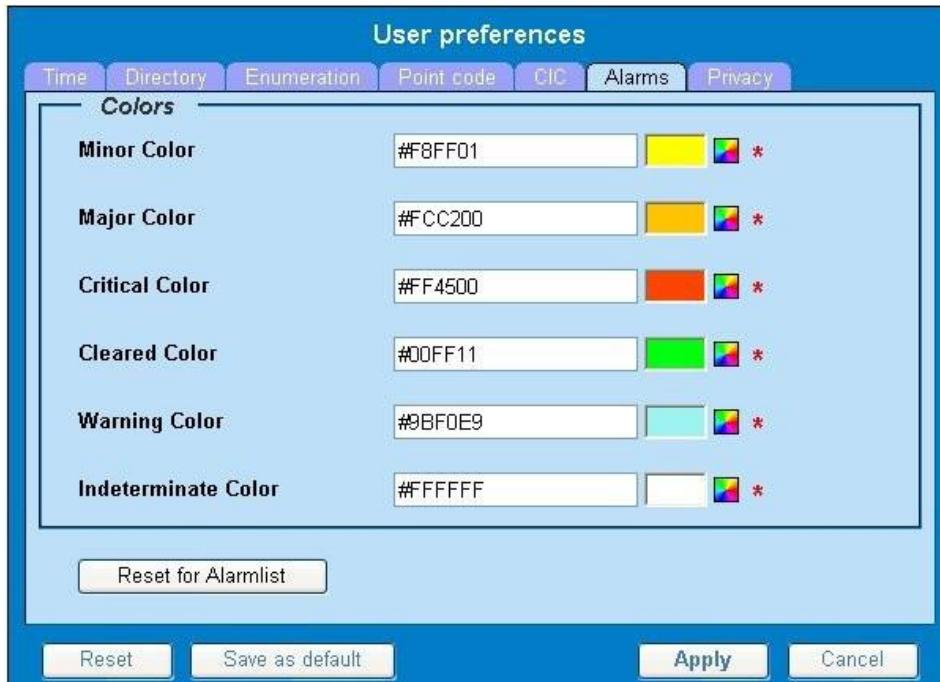


Figure 6: Alarm Page

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.

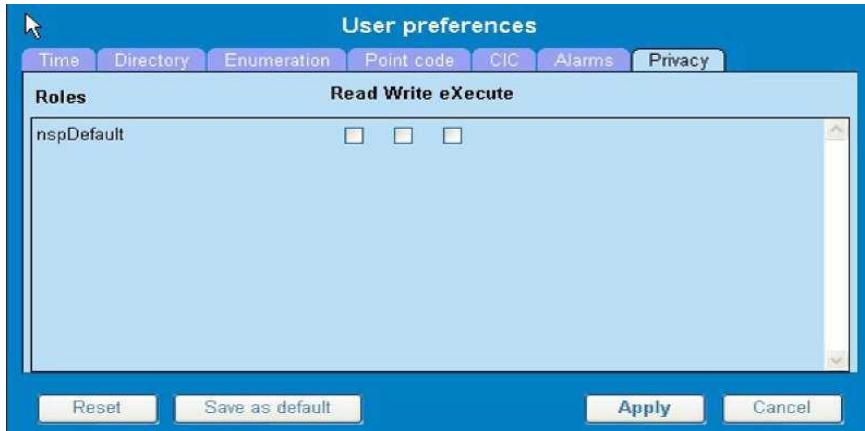


Figure 7: Privacy Page

The Privacy page is displayed.

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.

Customer Care Center

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.

Tekelec TAC Engineers are available to provide solutions to your technical questions and issues 7 days a week, 24 hours a day. After a CSR is issued, the TAC Engineer determines the classification of the trouble. If a critical problem exists, emergency procedures are initiated. If the problem is not critical, normal support procedures apply. A primary Technical Engineer is assigned to work on the CSR and provide a solution to the problem. The CSR is closed when the problem is resolved.

Tekelec Technical Assistance Centers are located around the globe in the following locations:

Teklec - Global

Email (All Regions): support@tekelec.com

USA and CanadaPhone:

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1-919-460-2150 (outside continental USA and Canada)

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8:00 a.m. through 5:00 p.m. (GMT minus 5 hours), Monday through Friday, excluding holidays

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USA access code +1-800-658-5454, then 1-888-FOR-TKLC or 1-888-367-8552 (toll-free)

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- **Colombia**

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800-912-0537

- **Dominican Republic**

Phone:

1-888-367-8552

- **Mexico**

Phone:

001-888-367-8552

- **Peru**
Phone:
0800-53-087
- **Puerto Rico**
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1-888-367-8552 (1-888-FOR-TKLC)
- **Venezuela**
Phone:
0800-176-6497

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- **Signaling**
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+44 1784 467 804 (within UK)
- **Software Solutions**
Phone:
+33 3 89 33 54 00

Asia

- **India**

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excluding holidays

- **Singapore**

Phone:
+65 6796 2288

TAC Regional Support Office Hours:

9:00 a.m. through 6:00 p.m. (GMT plus 8 hours), Monday through Friday, excluding
holidays

PIC Documentation Library

PIC 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 PIC documentation library of user guides.

- Security User Guide
- Alarms User Guide
- ProAlarm Viewer User Guide
- ProAlarm Configuration User Guide
- Centralized Configuration Manager Administration Guide
- Customer Care User Guide
- Alarm Forwarding Administration Guide
- Diagnostic Utility Administration Guide
- ProTraq User Guide
- ProPerf User Guide
- ProPerf Configuration User Guide
- System Alarms User Guide
- ProTrace User Guide
- Data Feed Export User Guide
- Audit Viewer Administration Guide
- ProDiag User Guide
- SigTran ProDiag User Guide
- Report Server Platform User Guide
- Reference Data User Guide
- Exported Files User Guide
- Scheduler User Guide
- Quick Start User Guide

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**”.

Chapter 2: Understanding ProAlarm Configuration

Topics:

- *ProAlarm Functionality*
- *ProAlarm Configuration Views*

ProAlarm Functionality

ProAlarm Configuration is an application in the Network Software Platform (NSP) Toolbox, which is part of the Performance Intelligence Center (PIC).

PIC 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 within ProAlarm

ProAlarm Configuration is used to configure the tools necessary for monitoring the following types of alarms:

- Alarms based on traffic supervision (Q.752)
- Alarms based on Quality of Service supervision (ProTraq)
- Alarms based on SS7 links (transmission, multiplexing)
- Alarms based on system errors (for system maintenance)
- Alarms based on PIC software errors
- Alarms based on CPU and disk usage

A user with the role NSPConfigurationManager configures maps of managed elements using ProAlarm Configuration.

Note: Java plug-in 1.6.0_13 (or more current) is required for proper functioning of ProAlarm Configuration.

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.

Configuration

ProAlarm Configuration enables users to configure a Network topology for monitoring network activity and handling alarms. You can define and manage network objects using detailed lists and graphic displays. The Managed Objects include but are not limited to the following:

- DTO
- Data Broker Manager
- IXP
- Message Switch
- ProTraq Session
- Probe ATM 155
- Subsystem
- XMF

Alarm Display

Alarms are displayed on the screen according to a default color code that corresponds to a level of severity. The default alarm color code is

- Clear (green),

- Critical (red),
- Major (orange),
- Minor (yellow),
- Warning (magenta),
- Indeterminate (white).

Note: Alarm colors can be configured by the user.

Map Design

In designing your maps, you can use a map from the basemap selection, drag and drop Managed Objects onto the map, change the shape of the Managed Object icons, change the color of the icon labels, and hide or display linksets. All alarm details are displayed individually.

Security

Access to the ProAlarm Map Configuration tool is role-based. For NSP role descriptions, see *Security User Guide*.

ProAlarm Configuration Views

The three views in the ProAlarm Configuration graphical user interface are the Tree View, Map View, and Table View.

Tree View

ProAlarm's Tree View lists the following:

- Aggregates
- Managed Objects
- Maps
- Network Topology
- Resources
- Unmapped Objects

In the Tree View, you can perform these functions:

- Configure aggregates and maps
- Drag and drop maps, aggregates, and other Managed Objects from the Tree View to the map
- Create new aggregates and copy objects into aggregates
- Change Representation (object's shape and label settings) for a Managed Object class
- Associate wallpaper with maps
- Delete maps

Map View

In the Map View, you can perform the following:

- Place managed objects, simple aggregates and map aggregates on the Wallpaper for easier recognition of the alarm
- Change the layout of displayed objects
- Change the Representation of Managed Objects (object's shape and label settings)

Table View

The Table View shows detailed data in table format for any selected object in the Tree View.

Chapter 3: Accessing ProAlarm Configuration

Topics:

- *Configuring Java Plug-In for ProAlarm Configuration*
- *Accessing and Logging in to NSP*

Configuring Java Plug-In for ProAlarm Configuration

Before using ProAlarm Configuration, you must set the minimum requirement for executing ProAlarm Applets in the Web Browser: Internet Explorer 6.0 (JRE Plug-in for Internet Explorer with Java 1.6.0-21 [or higher] plug-in).

Follow these steps to configure the Applet Runtime Settings on a workstation that uses ProAlarm Configuration.

1. Select **Start Menu ▶ Control Panel ▶ Java**.
The **Java Control Panel** is displayed.

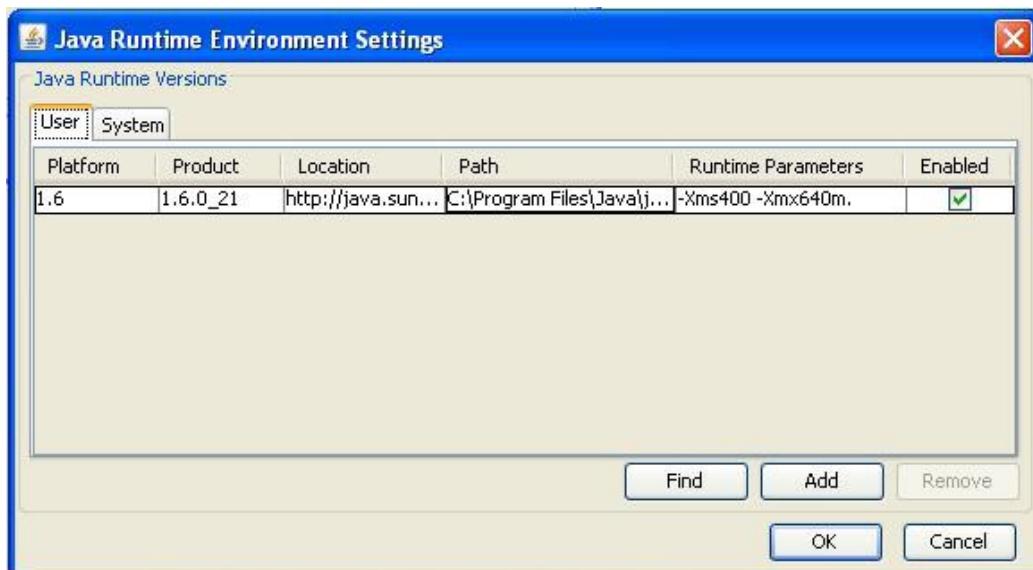


Figure 8: Java Runtime Parameters

2. Click the **Java** tab.
3. In the Java Applet Runtime Settings box, click **View**.
The Java Runtime Settings dialog is displayed.
4. In the **Java Runtime Parameters** field, type **-Xms4 0 0m -Xmx64 0m**.
5. On the **Java Runtime Environment Settings** display, click **OK**.
6. On the **Java Control Panel**, click **Apply**. The settings are saved
7. On the **Java Control Panel**, click the “Advanced” tab.
8. On the **Java Control Panel**, select **Security ▶ Mixed code (sandboxed vs. trusted) security verification ▶ Disable verification (Not recommended)**
9. On the **Java Control Panel**, click **Apply**.

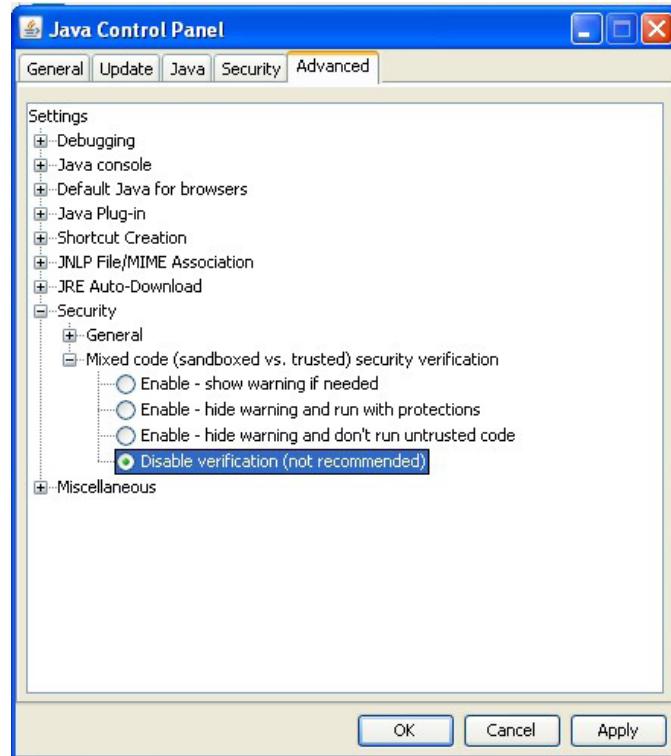


Figure 9: Java Advanced Settings

10. On **Java Control Panel**, click **OK**. The settings are saved. You can now run ProAlarm Configuration.

Accessing and Logging in to NSP

To open NSP ProAlarm Configuration, follow these steps:

1. Log in to NSP.
The NSPApplication board is displayed.
2. Click **ProAlarm Configuration**.
The ProAlarm Configuration home page is displayed.

Note: Users in the group NSPConfigManager can access ProAlarm Configuration. Users will be able to view maps for which they have Read access and configure maps for which they have Write access.

Chapter 4: Using ProAlarm Configuration

Topics:

- *ProAlarm Configuration Screen Layout*
- *Working in Map View*
- *Working in Tree View*
- *Working in Table View*
- *Creating Individual Maps and Aggregates*
- *Setting Application Preferences*

ProAlarm Configuration Screen Layout

The user interface for ProAlarm Configuration is organized into three views:

- Map View
- Tree View
- Table View

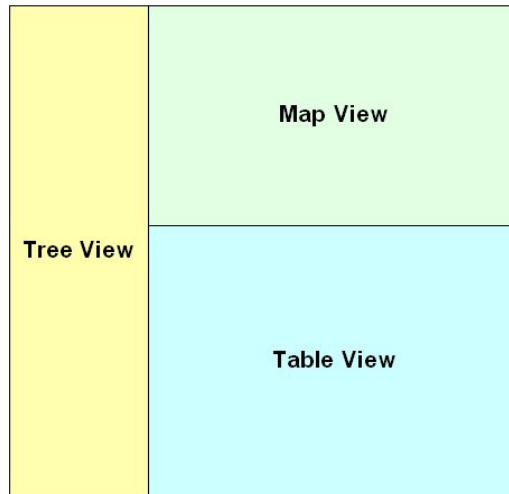


Figure 10: ProAlarm Configuration Screen Layout

Working in Map View

The Map View contains

- The Toolbar
- Tabbed pages with Maps

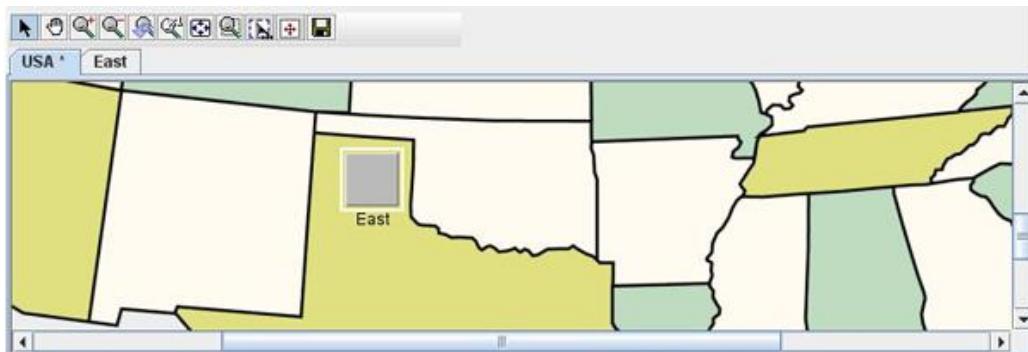


Figure 11: Map View

Map View: Toolbar

Icons	Functions
	Select - selects a network map
	Pan - scrolls the map
	Zoom In - enlarges the map view
	Zoom Out - reduces the map view
	Zoom Back - returns to the previous view
	Reset Zoom - sets view at a 1:1 ratio
	Fit Contents to Screen - fits contents of a map into the current screen
	Area select - selects a specific area to view
	Select All - selects all the contents in the current view
	Center on Map - moves the map to view its center
	Save - saves the selected map in its current state.

Table 1: Map View Toolbar Icons

Map View: Maps

Each map you have created has its own tabbed page in the Map View. Click the tab to open the map. Right-clicking on a map opens a menu like the one shown in [Figure 12: Map with Right Click Menu](#)

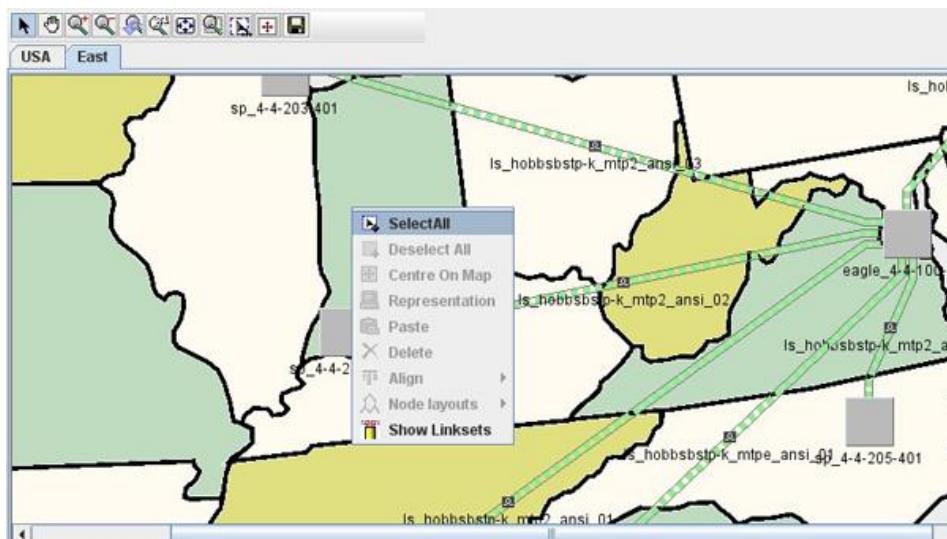


Figure 12: Map with Right Click Menu

Select All

This option enables you to select all the contents in the current view.

De-Select All

This option enables you to de-select all the nodes that are selected.

Center on Map

This option moves the map so that the selected object is in the center of the display.

Origin Map

This option enables you to find the origin map of the selected object.

Note: This option is available only when a Map Aggregate type node is selected.

Representation

This option enables you to choose a shape for the selected object on the map area and defines the font, foreground color, etc., for the object's label. Selecting the option displays a screen like the one shown in *Figure 13: Representation Dialog*.

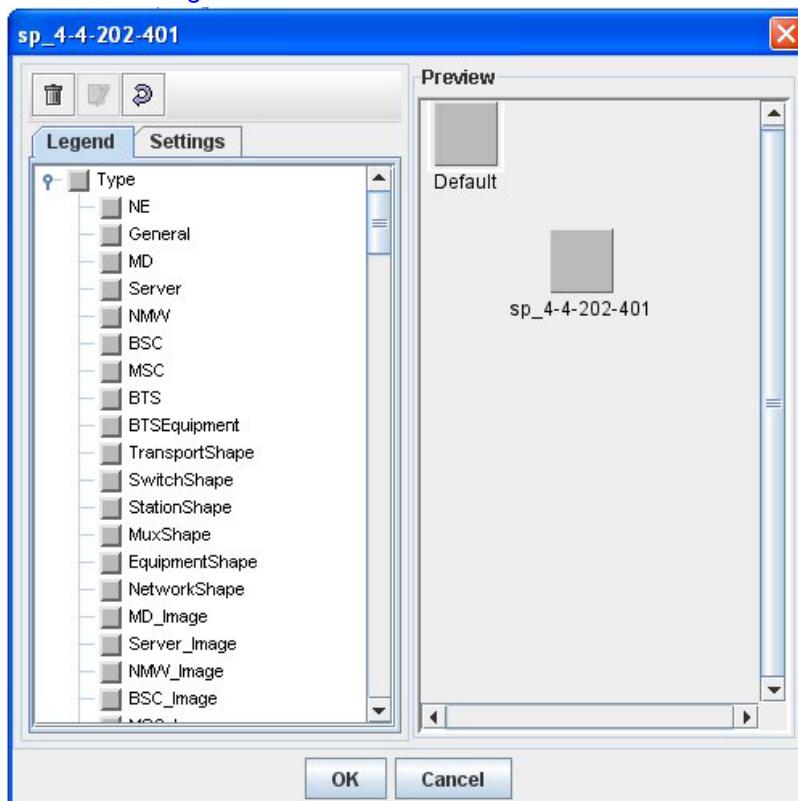


Figure 13: Representation Dialog

Representation Dialog Toolbar

The three toolbar buttons (listed from left to right) are

- **Delete Representation** - Removes all representations and resets to initial default
- **Change Value** - Applies the change entered to a selected object (can be used instead of double-clicking the object)
- **Default Value** - Resets the element to the previous default settings

Legend Page

The **Legend page** contains a list of types or shapes for the selected network object. To change the shape of the object,

- Click anywhere in the left panel.
- Use the up and down arrow keys on your keyboard to select the shape.
- Click the **Change Value** icon.

In [Figure 14: Legend Page](#), the network object shape has been changed to **Shape-Hexagon**.

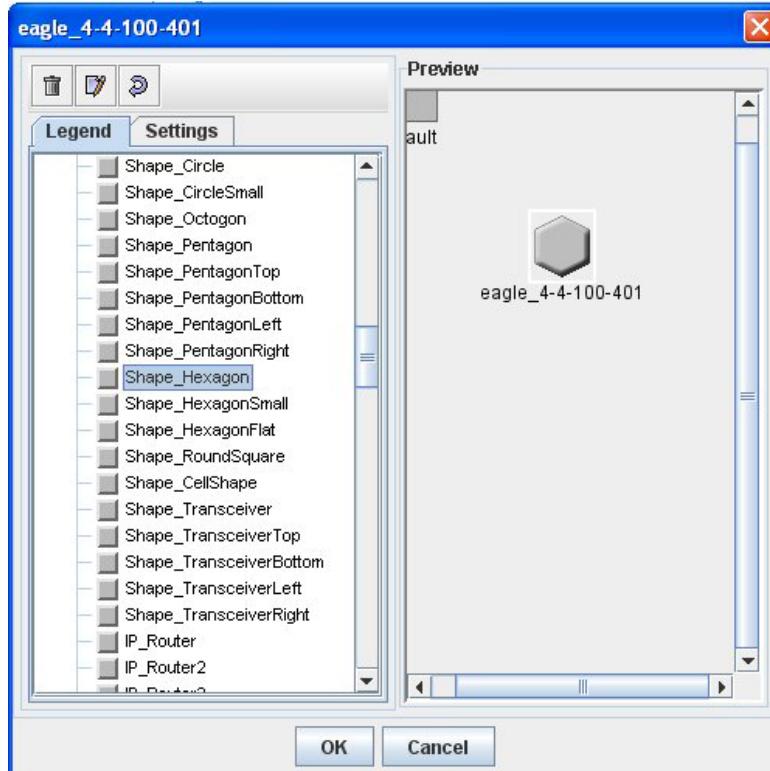


Figure 14: Legend Page

Setting Page

The Setting page provides options to configure the appearance of the Label for the selected network object. The different options for changing the label feature are explained below.

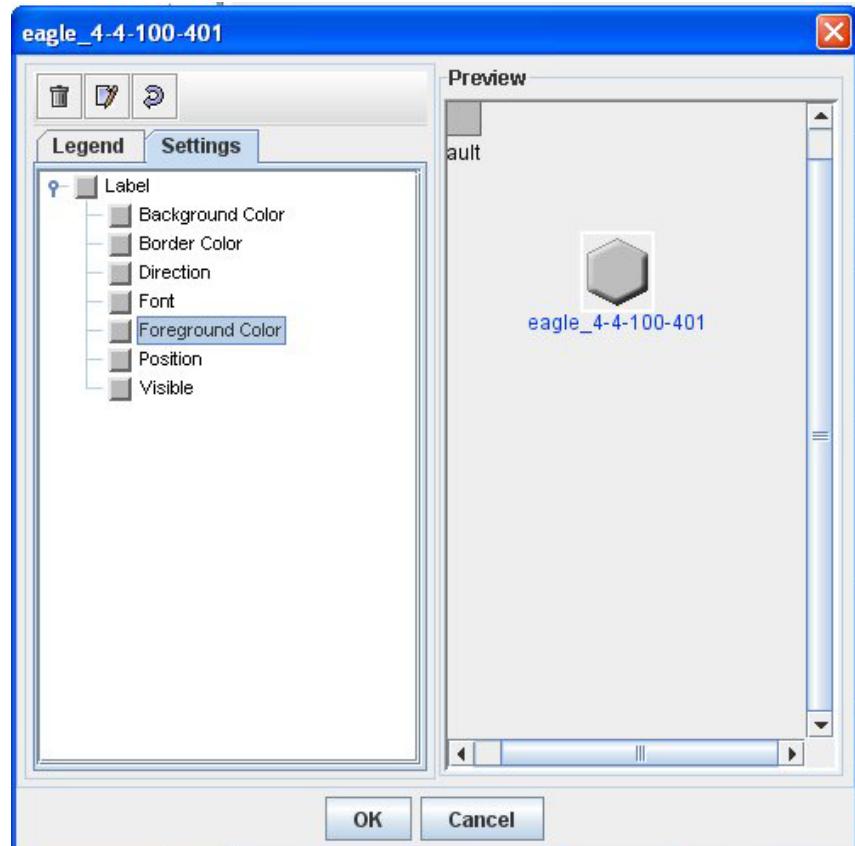


Figure 15: Settings Page

Setting a background color

1. Use the up and down arrow keys (on your keyboard) to select **Background Color**.
2. Click the **Change Value** icon. The Background Color dialog is displayed.
3. Click the color you want and click **OK**.

Setting a border color

1. Use the up and down arrow keys (on your keyboard) to select **Border Color**.
2. Click the **Change Value** icon. The Border Color dialog is displayed.
3. Click the color you want and click **OK**.

Setting a direction

1. Use the up and down arrow keys (on your keyboard) to select **Direction**.
2. Click the **Change Value** icon. The Direction dialog is displayed.
3. Click the direction you want and click **OK**.

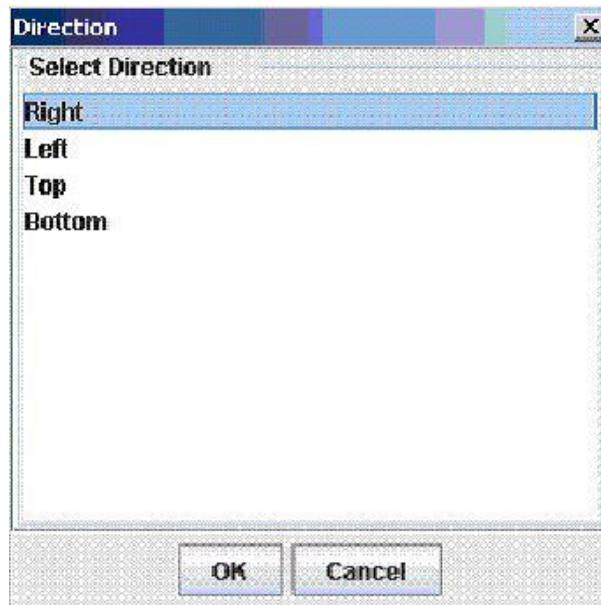


Figure 16: Direction Dialog

Setting the font

1. Use the up and down arrow keys (on your keyboard) to select **Font**.
2. Click the **Change Value** icon. The Border Color dialog is displayed.
3. Click the color you want and click **OK**.

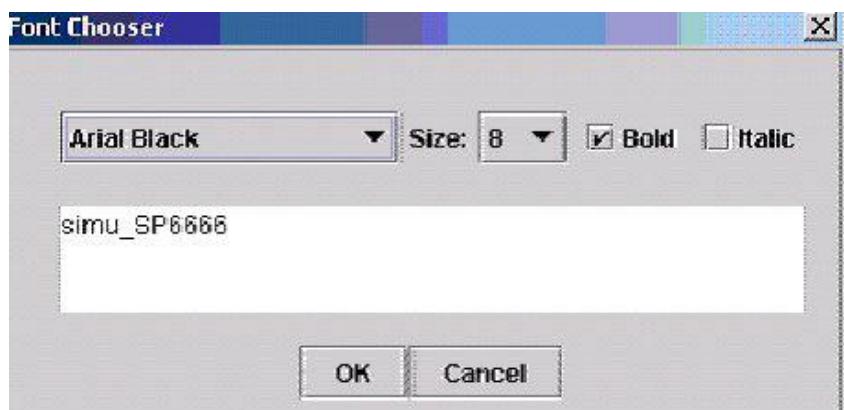


Figure 17: Font Chooser Dialog

Setting the foreground font

1. Use the up and down arrow keys (on your keyboard) to select **Foreground Color**.
2. Click the **Change Value** icon. The Foreground Color dialog is displayed.
3. Click the color you want and click **OK**.

Setting the position

1. Use the up and down arrow keys (on your keyboard) to select **Position**.
2. Click the **Change Value** icon. The Position dialog is displayed.

3. Click the position you want and click **OK**.



Figure 18: Select Position Dialog

Making text visible or invisible

1. Use the up and down arrow keys (on your keyboard) to select **Visible**.
2. Click the **Change Value** icon to toggle the label from visible to invisible.

Paste

This option enables you to paste an object that has been copied from a tree or table. The **Paste** option is disabled when the node to be pasted is already present.

Delete

This option enables you to delete a node.

Align

This option enables you to align the nodes to a specified position such as top, bottom, left, or right.

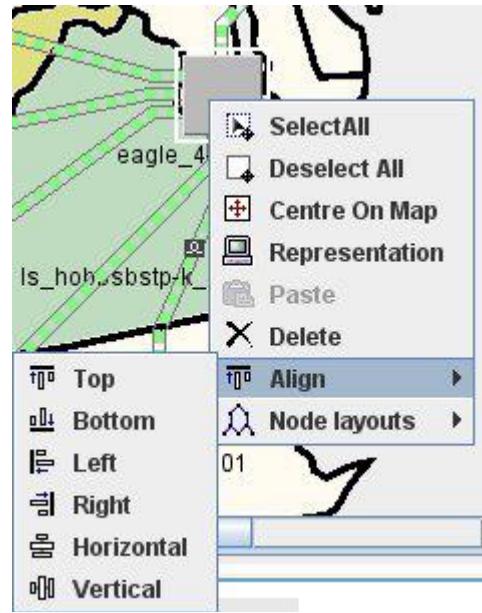


Figure 19: Alignment Menu Options

Node Layouts

The Node Layout menu provides options for arranging the objects on the map

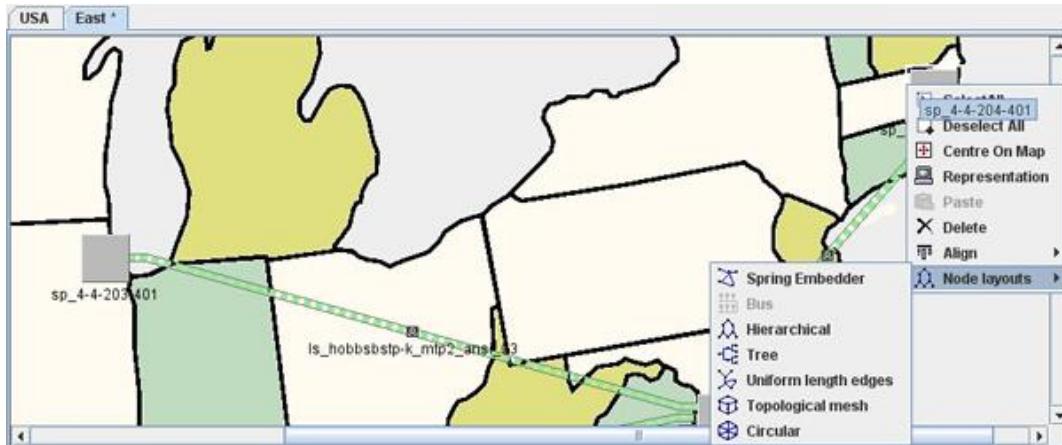


Figure 20: Node Layout Menu Options

Spring Embedder Arrangement

The Spring Embedder algorithm can be used to lay out any type of graph. It often provides a drawing with no edge crossings or few edge crossings for small- and medium-sized graphs. The nodes are placed inside a rectangle. The specified layout region must be in proportion to the number and size of the nodes.

Bus Arrangement

The Bus algorithm is designed to display bus network topologies (a set of nodes connected to a bus node). The algorithm takes into account the size of the nodes (so that no nodes overlap) and provides several ordering and alignment options.

Hierarchical Arrangement

The Hierarchical algorithm arranges the nodes in horizontal or vertical levels so that the majority of the links point in the same direction and the number of link crossings is small.

Tree Arrangement

The Tree algorithm places the nodes of a tree starting from the root of the tree to the leaves. If the graph has parts that are disconnected, it arranges each connected component as an individual tree. The algorithm is primarily designed for a number of trees. In a tree, each node except the root has a parent node.

Uniform Length Edges Arrangement

The Uniform Length Edges algorithm can be used to lay out any type of graph. It often creates a drawing with no, or only a few, edge crossings and with approximately equal-length edges for small-and medium-size graphs having a small number of cycles.

Topological Mesh Arrangement

The Topological Mesh algorithm can be used to lay out cyclic graphs, both planar and nonplanar. Most of the time, if the graph is topologically symmetric, it produces a symmetrical drawing. The layout algorithm places the nodes of a cycle of the graph on a circle and the remaining nodes inside this circle. For an optimal layout quality, the layout region needs to be large enough to have enough place for the nodes

Circular Arrangement

The Circular algorithm displays graphs representing interconnected ring and/or star network topologies. The algorithm takes into account the size of the nodes and tries to avoid overlapping nodes.

Show Linksets

Right-clicking the map when no object on the map is selected displays a menu with the **Show Linksets** option. This option enables you to view all linksets between different sets of Signaling Points (SPs) on the map.

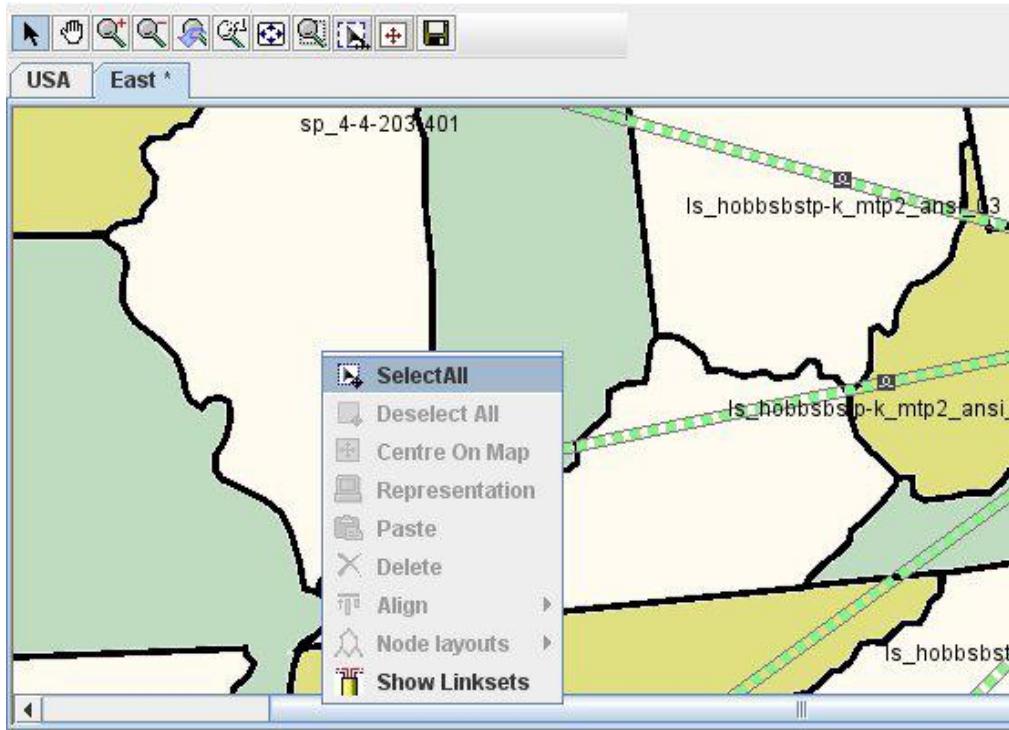


Figure 21: Show Linksets Option

Working in Tree View

The Tree View options are shown in [Figure 22: Tree View List](#).

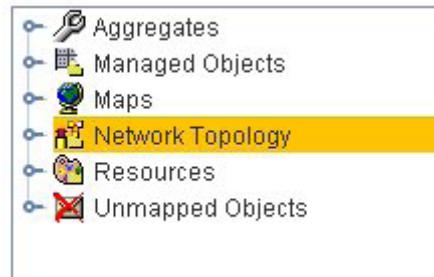


Figure 22: Tree View List

Tree View: User-Defined and Map Aggregates

ProAlarm Configuration enables you to build two types of aggregates: User-Defined Aggregates and Map Aggregates.

Individual Signaling Point (SP) nodes and Managed Objects can be aggregated to appear as a single icon in the map, forming User-Defined Aggregates. This simplification concentrates the alarm information for the aggregates at the Map level and therefore makes monitoring easier.

In addition to the user-defined aggregates described above, a map can be nested inside another map, creating a Map Aggregate.

Note the map aggregate and the user-defined aggregates in the figure below. **NewAggregate 1** is an example of a user-defined aggregate, and **Newmap 2** is an example of a map aggregate. **Newmap 2** is nested inside of **Newmap1**, as shown under **Maps** in the same figure.

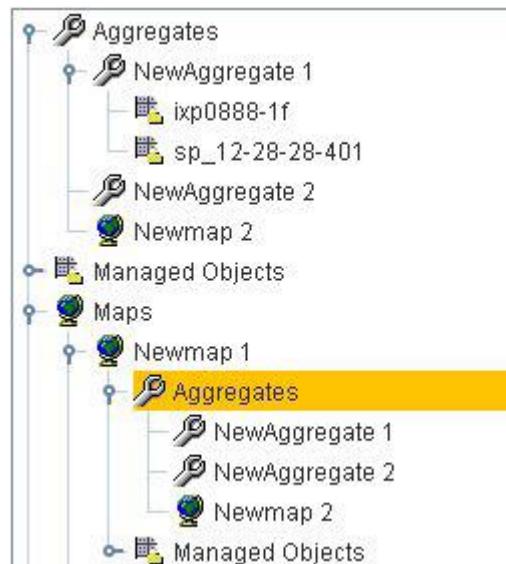


Figure 23: Aggregates in Tree View

ProAlarm Configuration also provides options for working with the User-Defined Aggregate:

Option	Explanation
Rename	Change the name of the Aggregate
Copy	Copy the object selected for pasting on the Map Area
Paste	Paste copied objects into the Aggregate
Center	Move the Map so that the selected option is in the center of the display
Delete	Delete an Aggregate from the Tree View and thus from any Map where it is configured

Table 2: Right-Click Options for User-Defined Aggregates

For further details on aggregates, see [Building Map Aggregates](#) and [Building User-Defined Aggregates](#).

Note: In ProAlarm Viewer, there is only a single instance of each Managed Object in a map. If the object is configured (in ProAlarm Configuration) as both an object on the map and part of an aggregate (user-defined or map aggregate), the map does not display both.

Tree View: Managed Objects

In the Tree View, **Managed Objects** lists all the Managed Object types configured in Centralized Configuration Manager.

Note: Centralized Configuration Manager is available from the Application Board in the Network Software Platform Portal.

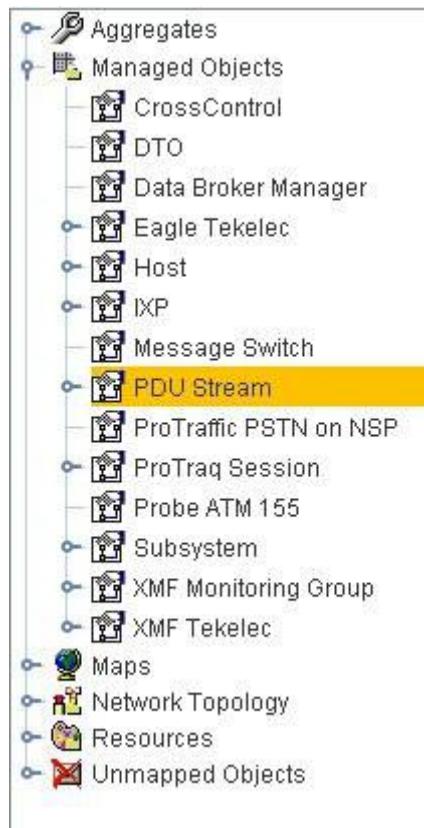


Figure 24: Expanded Managed Object Tree

Tree View: Maps

In the Tree View, **Maps** contains a list of all maps you have configured, including the **Aggregates** and **Managed Objects** for each. Right-clicking **Maps** displays the option to add a map.



Figure 25: Map Configuration Menu

Associate Wallpaper Option

Use the **Associate Wallpaper** option to download the background image for your Map ("wallpaper") from the available Basemap resources. A dialog box allows you to select a resource and configure its settings.



Figure 26: Associate Wallpaper Dialog

Rename Option

Use this option to rename the map.

Copy Option

Use this option to copy the object selected and paste it in the Map View.

Delete Option

Use this option to delete a Map from the Tree View and from the Map View.

Display Linksets Option

Use this option to view all the possible links between different sets of Signaling Points (SPs) on the Map.

Tree View: Network Topology

In the Network Topology tree, you can view Linksets and SPs configured in the system, copy SPs to be pasted on the Map or in Aggregates, and configure the appearance of both SPs and Linksets.



Figure 27: Network Topology Tree

Right-click **Network Topology** and click “**Refresh**” to reload the Network Topology settings with the latest changes made in Centralized Configuration Manager (CCM).

Network Topology: Linkset

Right-click **Linkset** and select **Representation**. This option displays the Linkset Representation dialog.

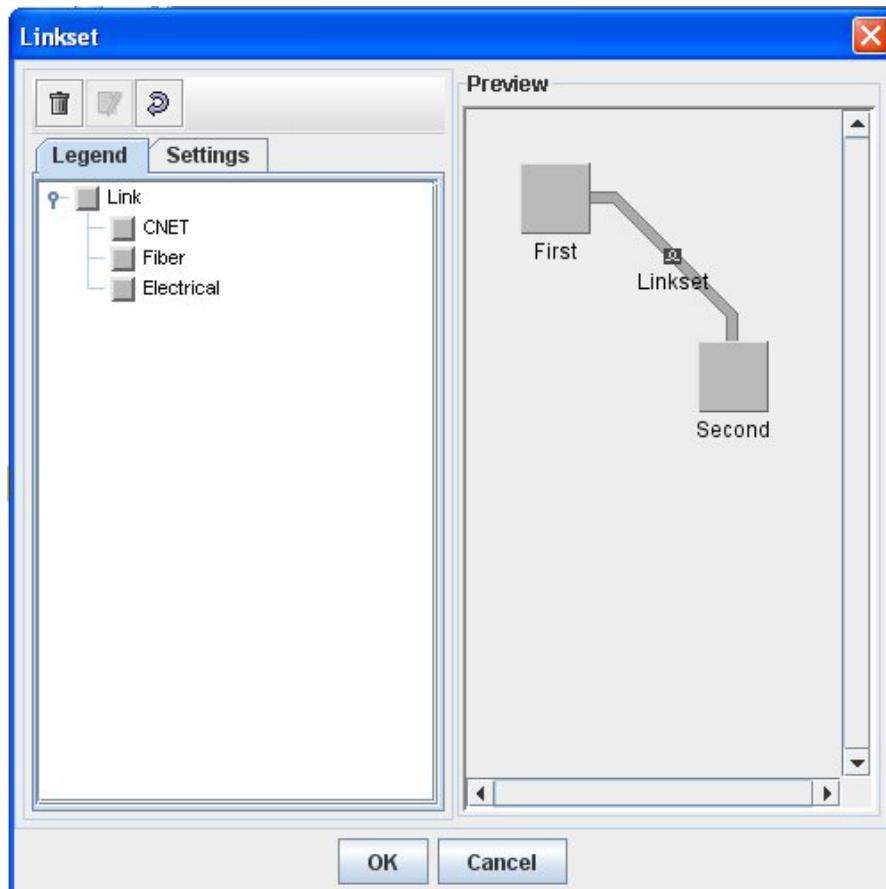


Figure 28: Linkset Representation Dialog

This dialog has three buttons and two tabbed pages, **Legends** and **Settings**:

Linkset Dialog Toolbar

The three toolbar buttons (listed from left to right) are

- **Delete Representation** - Resets the legend to initial default for Linksets
- **Change Value** - Applies the change entered to Linksets

- **Default Value** - Resets the Linksets to the previous default settings

Linkset Dialog Legend Page

The Legend page contains a list of Linkset types. Selecting a type changes the icon(s) on the Linkset(s) in the Map View. To change the icon,

1. Click anywhere in the left panel.
2. Use the up and down arrow keys on your keyboard to select the shape.
3. Click the **Change Value** icon.

In the example below, the Linkset icon has been changed to **CNET**.

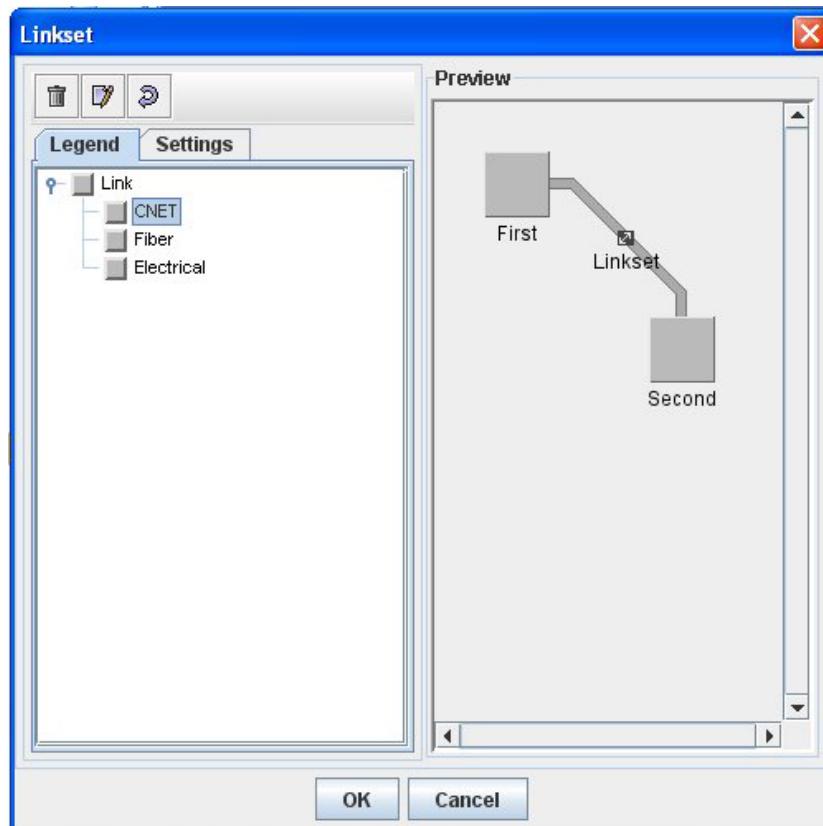


Figure 29: CNET Linkset Icon

Linkset Dialog Settings Page

The Linkset Settings page contains a list of settings for the Linkset label. To select a setting,

1. Click anywhere in the left panel.
2. Use the up and down arrow keys on your keyboard to select the shape.
3. Click the **Change Value** icon.

For information on applying the individual settings, see "[Setting Page](#)."

Network Topology: SP

Right-click the **SP** icon at the parent level and click **Representation**. The SP dialog is displayed. For instructions on using this dialog, see "[Representation](#)." Changes made through the SP Representation dialog affect all SPs on the Map.

Right-clicking an SP provides the options to **Copy** and **Center**. Both are explained below.

To copy an SP onto the map, use one of the following methods:

1. Click and drag the **SP** icon from the Tree View to the Map View.

Or

1. Right-click the **SP** icon in the Tree View and select **Copy**.
2. Click the appropriate location on the Map and select **Paste**.

To copy an SP in an Aggregate,

1. Right-click the **SP** icon in the Tree View and select **Copy**
2. Click the appropriate parent Aggregate and select **Paste**

To center the SP in the Map View,

1. Right-click the **SP** icon in the Tree View and select **Center**.

Tree View: Resources

The **Resource Tree** enables you to download a basemap as wallpaper for your Map and Alarm configurations:

To add the basemap, right-click **Basemap** and select **Add**.

Tree View: Unmapped Objects

The **Unmapped Objects** tree shows a listing of objects not configured in any Map.

To paste an object on the map or in the Aggregate Tree as a child Aggregate, follow these steps:

1. Right-click the Managed Object and select **Copy**.
2. Right-click the map in Map View or the aggregate in Tree View and select **Paste**.

Working in Table View

The Table View consists of a toolbar and a table that shows details about what is selected in the Tree View.

Table View Toolbar

Icons	Explanation
	Navigation Arrow -- navigates within the view. (Arrows might be in pairs or point in the opposite direction. Arrow shown here is to progress to the next record.)
	Column Select Record -- sets the order of the columns

	Refresh Page -- resets display to include the most current data. Check icon.
Records Per Page 11	Records Per Page --
	Change Records per Page -- resets display to include the number of Records per Page.
1 / 11	Record Number -- shows the number of the selected record / total number of records
	Count on Demand -- provides the total number of records in the database.
	Filter
	Privacy

Table 3: Icons in Table View Toolbar

Tables

Selecting an object in the Tree View displays that object's records in a table in the Table View. The details vary depending on what is selected.

The figure below shows a sample table with details for the selected item: Managed Objects of a Map named "East."

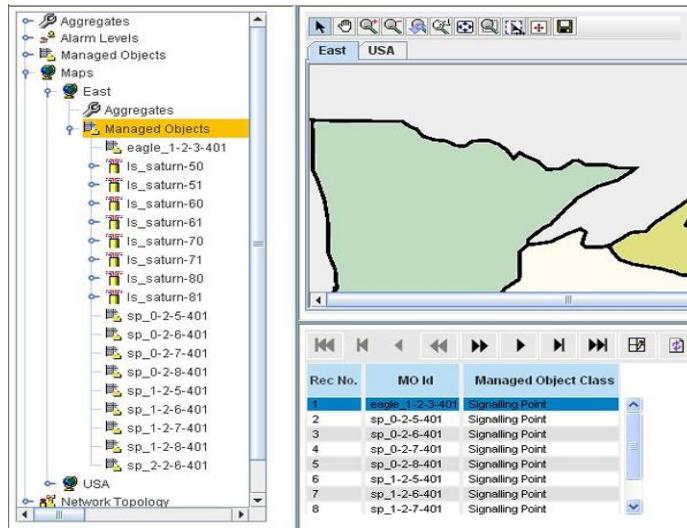


Figure 30: Sample Table

Definitions of the columns used in all the tables are listed in Table 3: Columns Used in Table View. (No single table has all these columns.)

Table Column	Explanation
Rec No.	Serial Number
Origin Oid	Unique identifier for the object

MO Name	Managed object
Managed Object Class	Class or type of Managed Object (for example, signaling point)
Mo ID	Unique identifier for the Managed Object
Map ID	Unique identifier of the Map
Name (for Maps)	Name of the Map
Description	Elaboration of Map name
Name (for Map Description)	Name of graphic file used as wallpaper for the Map View
Is Loaded	Indication as to whether map is loaded
Owner	User ID for the map creator
Created	Date the map was created
Name (for linksets)	Unique identifier for the LinkSet
Local SP	Starting Signaling Point for the linkset
Opposite SP	Opposite end (Signaling Point) of the linkset
MO Class Name (for SP)	Class or type of Managed Object (for example, signaling point, data server)
Origin ID (origin of the SP)	Database ID
Name (for Resources)	Name of type of resource
Name (for child Resources)	Name of file available to be used as a resource

Table 4: Columns Used in Table View

Creating Individual Maps and Aggregates

You can use ProAlarm Configuration to create

- Single maps
- Aggregates of maps and manageable objects

Note: ProAlarm Configuration saves any unsaved configuration changes automatically and transparently when the user exits the application. When the user selects another Map tab, ProAlarm Configuration saves unsaved changes and notifies the user. Clicking **OK** in the notification dialog box confirms the autosave.

Creating the Map and Wallpaper

1. To start designing network maps, log in to NSP and launch ProAlarm Configuration.

See "[Accessing and Logging in to NSP.](#)"

The ProAlarm Configuration home page is displayed.

2. Click the toggle switch beside **Maps** in the Tree View. A list of existing maps is displayed.

3. Right-click **Maps** and select **Add**.

A tab for the new Map is displayed at the top of the Map View and a new Maps subheading is listed in the Tree View.

4. Select the new tab to display the empty Map.

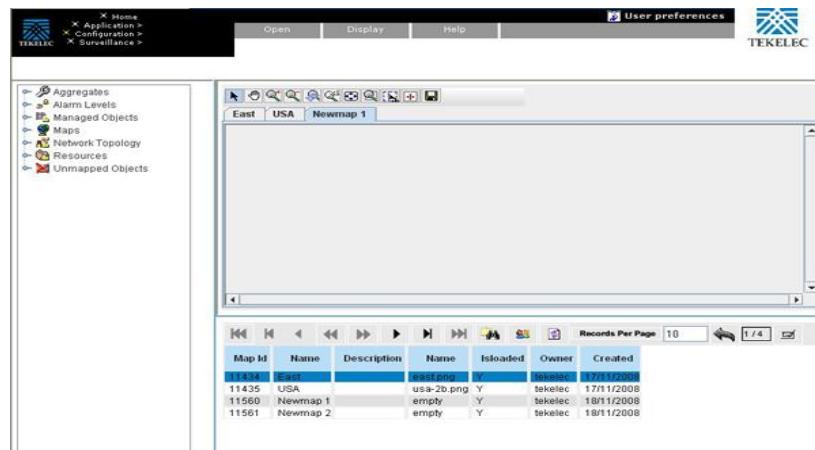


Figure 31: Empty Map Screen

5. Right-click the new Map subheading in the Tree View and select **Associate Wallpaper**.

Another dialog box is displayed for choosing the Map background.

6. Make your selections in the Associate Wallpaper dialog box and click **OK**.



Figure 32: Associate Wallpaper Dialog Box

7. Right-click the new Map name in the Tree View and select **Rename**.

A box is displayed around the existing name and a cursor is in place.

8. Type the new name and press Enter.

Adding Managed Objects

The next phase of the procedure is to define Linksets, Signaling Points and other Managed Objects. This phase involves copying object icons to the new Map workspace from Network Topology, Managed Objects, and Aggregates trees.

1. In the Tree View, expand **Network Topology**. A list of nodes and links is displayed.

2. Expand **SP**.
A list is displayed that shows all Signaling Points available for network alarm monitoring.
3. Click and drag Signaling Points applicable to the new Map from the Tree View to the Map.
4. In the Tree View, expand **Managed Objects**
Objects. A list of Managed Object types is displayed.
5. Expand to show the child Managed Objects related to the new Map.
6. Click and drag any objects applicable to the new Map from the Tree View to the Map.



Figure 33: Managed Objects Copied To the Map

Building User-Defined Aggregates

Individual Signaling Point (SP) nodes and Managed Objects can be aggregated to appear as a single icon in the map. This simplification concentrates the alarm information for the aggregates at the Map level and therefore makes monitoring easier. If an alarm is issued for a child member of the Aggregate, the alarm is reflected in the parent Aggregate.

(In addition to the user-defined aggregates described above, a map can be nested inside another map, creating a map aggregate. See [Building Map Aggregates](#).)



Figure 34: Add Aggregate Option

1. In the Tree View, right-click **Aggregates** and click **Add**.
A new Aggregate is added to the existing list.
2. Right-click the new Aggregate list entry and click **Rename**.
The name changes to edit mode.
3. Type the new name and press Enter.
4. Expand the list containing the object you want to add to the new “Aggregate”, right-click the object, and select **Copy**.
5. Right-click the new Aggregate list entry and click **Paste**. The new object is part of the Aggregate.

6. Repeat the copy-and-paste steps to add other objects to the Aggregate, if applicable.
7. Click and drag the new Aggregate from the Tree View to the Map. Or right-click the Aggregate and choose **Copy**. Then right-click the map and click Paste.

Building Map Aggregates

ProAlarm supports Map Aggregates. A Map Aggregate is a layered Map with at least one Map nested inside another. Also see [Building User-Defined Aggregates](#).

Users can drill down or up to see the different layers. To build a Map Aggregate, follow these steps:

1. In the Tree View, right-click on the Map being defined as a submap in an aggregate and click **Copy**.
 2. Right-click and select **Paste** to paste the submap icon on a blank space in the parent Map.
 3. To drill down to the submap from the parent, right-click its icon in the parent map and select **Origin Map**.
- The submap's screen is displayed.

Note: When maps are linked through aggregates, the x/y map coordinates used the first time an icon is displayed in a map are used to place that icon in the same location in other maps.

Displaying LinkSets

Right-click the entry for the active map in the **Maps** list in Tree View and select **Display LinkSets**. All linkset connections that have been configured between Signaling Points are displayed in the Map.

Setting Application Preferences

The ProAlarm Configuration Application Preferences feature enables you to configure the following defaults for the ProAlarm Viewer application:

- Which Map will be displayed
- Whether the Table View will be displayed

To open the Preferences menu option, select **Display>Preferences** in ProAlarm Configuration.



Figure 35: ProAlarm Configuration Application Preferences Screen

This screen has two fields, **selected map** and **Display TreeList**. Both have pull-down menus.

Selected Map

The **Selected map** field enables you to select the default Map for ProAlarm Viewer. The list includes all the loaded maps.

Display TreeList

The **Display TreeList** field enables you to select whether the Table View is displayed by default in ProAlarm Viewer.

- True = Table View is displayed
- False = Table View is not displayed

Click **Apply** to save your preferences.