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Performance Intelligence Center
ProAlarm Configuration User's Guide
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ProAlarm Configuration User's Guide

Oracle Communications Performance Intelligence Center ProAlarm Configuration User's Guide, Release 10.1

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See more information on MOS in the Appendix section.

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Chapter 1: About This Help Text

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
- ProTraj
- 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 Administrator's Guide. This is a graphic overview of the PIC system.

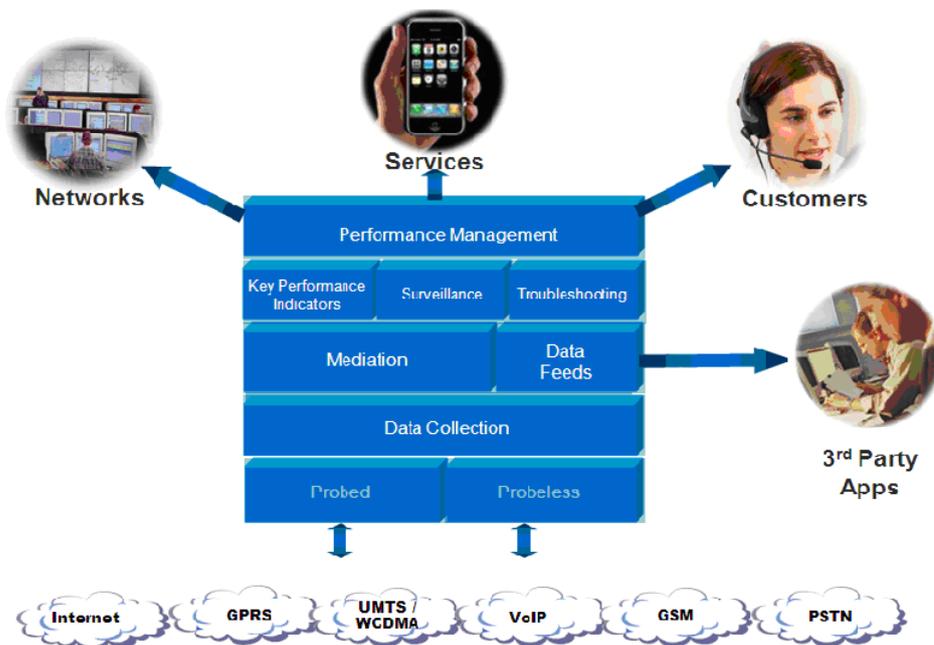


Figure 1 : PIC Overview

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, all customer documentation is available on the Oracle Technology Network (OTN). Release Notes are available on OTN with each new release of software. The Release Notes list the PRs that have been resolved in the current release and the PRs that are known to exist in the current release.

Listed below is the entire PIC documentation library of User's Guides.

- Security Guide
- NSP Security User's Guide
- Alarm Forwarding Administrator's Guide
- ProAlarm Viewer User's Guide
- ProAlarm Configuration User's Guide
- Centralized Configuration Manager Administrator's Guide
- Customer Care User's Guide
- ProTraq User's Guide
- ProPerf User's Guide
- ProPerf Configuration User's Guide
- System Alarms User's Guide
- ProTrace User's Guide
- Data Feed Export User's Guide
- Audit Viewer Administrator's Guide
- ProDiag User's Guide
- SigTran ProDiag User's Guide

- Reference Data User's Guide
- Exported Files User's Guide
- Scheduler User's Guide
- Quick Start User's Guide

Common instructions

For instructions about customer support, basic workflow and common features across application (browser compatibility, login/logout, user preferences...) please refer to Quick Start Guide for which a link can be found on the banner of each web page.

Chapter 2: Understanding ProAlarm Configuration

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: Refer to Quick Start guide for required Java plug-in settings 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

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

Note: Context menu may appear only on right click on far right part of tree item

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. This view can be hidden according application user preference.

Chapter 3: Using ProAlarm Configuration

ProAlarm Configuration Screen Layout

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

- Map View
- Tree View
- Table View

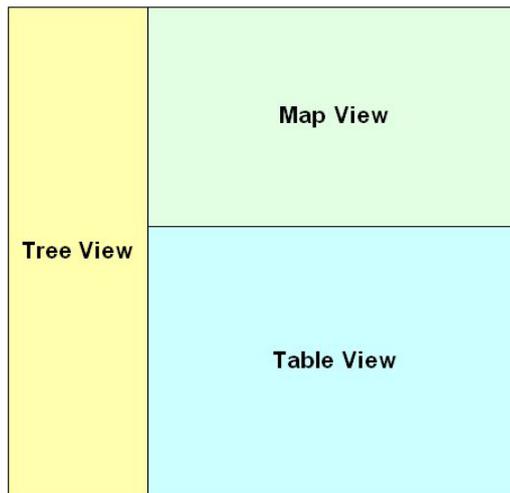


Figure 2: ProAlarm Configuration Screen Layout

Working in Map View

The Map View contains

- The Toolbar
- Tabbed pages with Maps

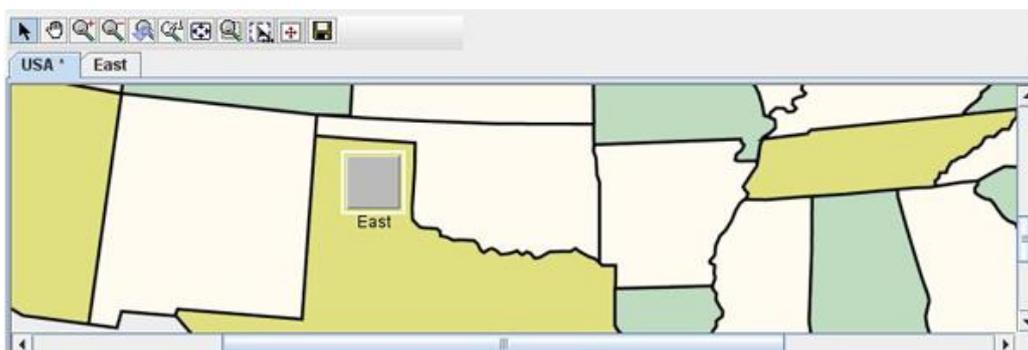


Figure 3: Map View

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 4: Map with Right Click Menu

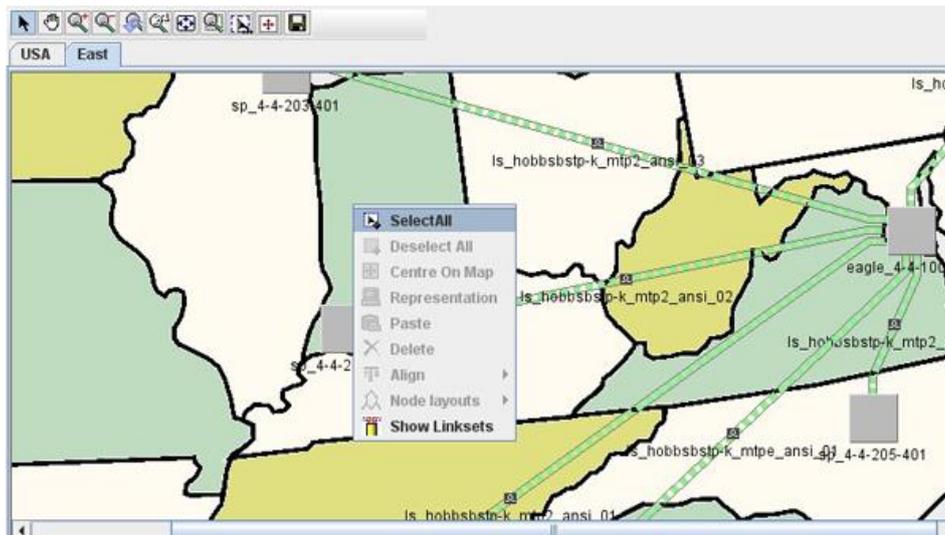


Figure 4: Map with Right Click Menu

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 5: Representation Dialog.

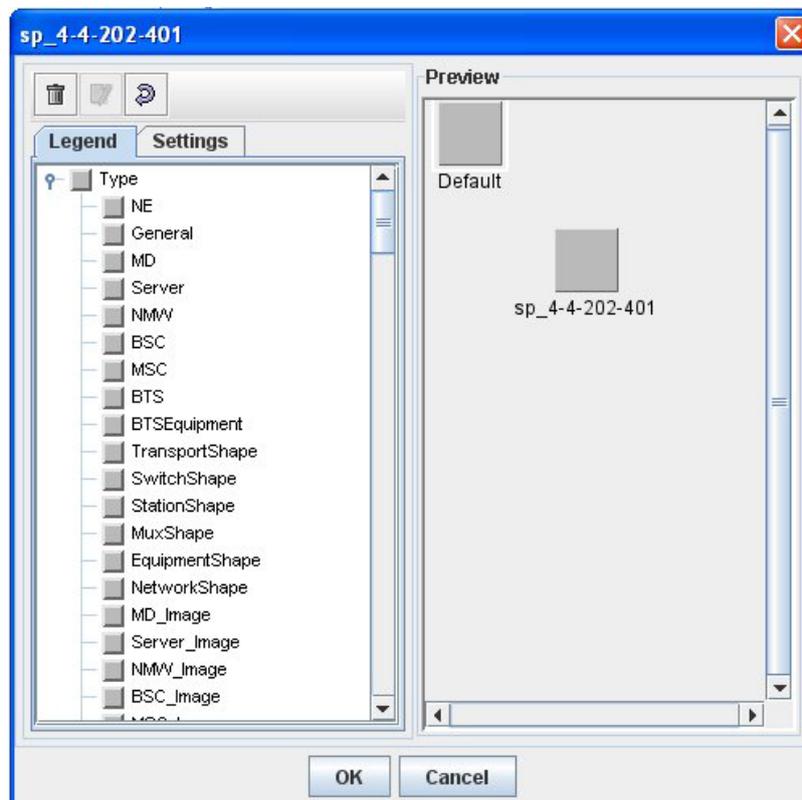


Figure 5: Representation Dialog

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 6: Legend Page, the network object shape has been changed to Shape-Hexagon.

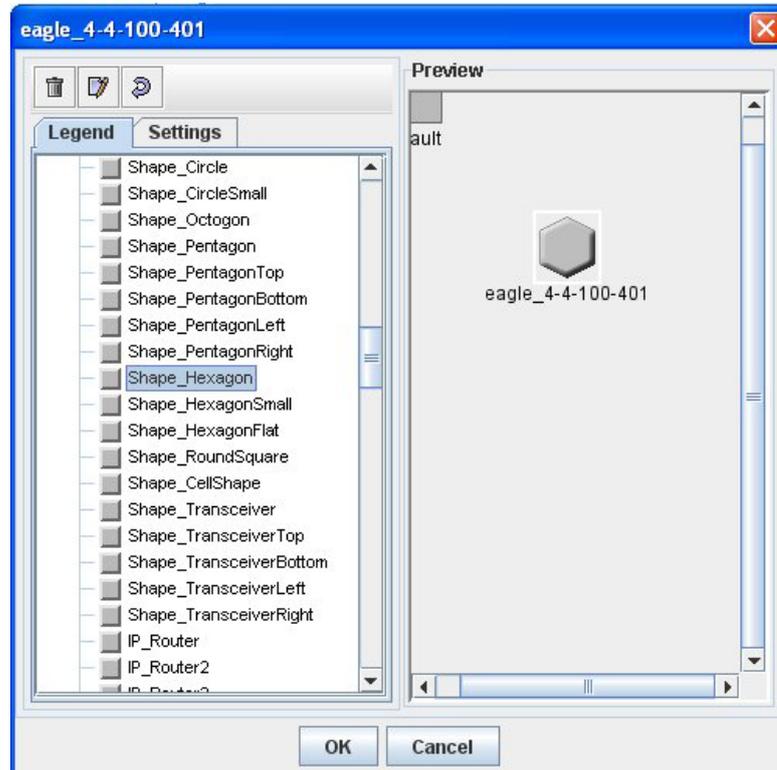


Figure 6: Legend Page

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.

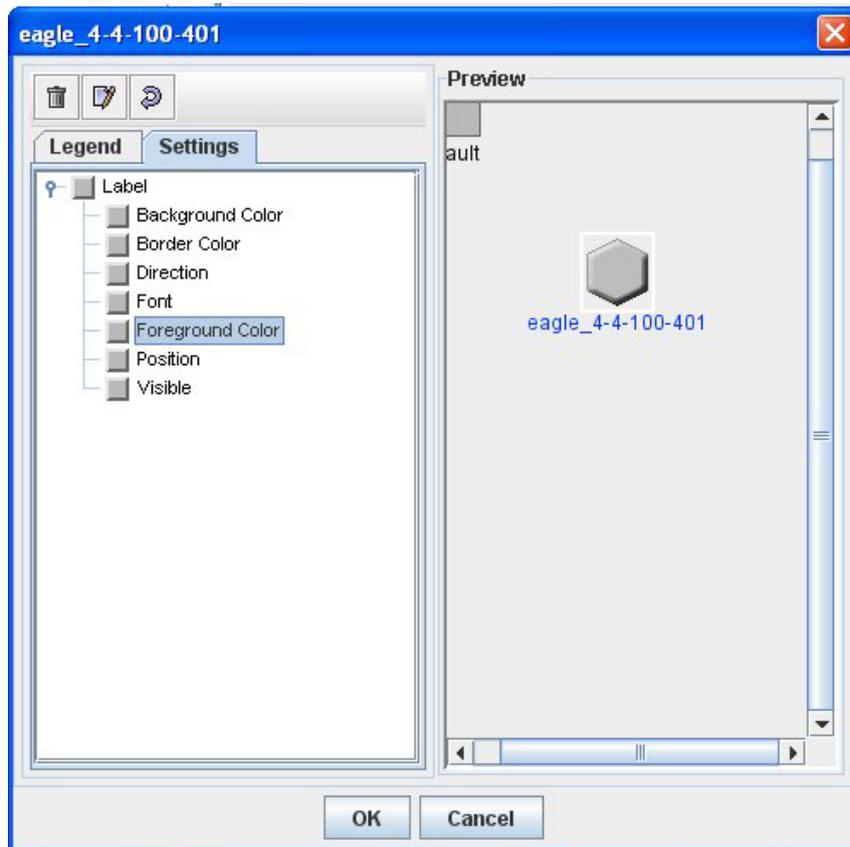


Figure 7: Settings Page

Setting a background color

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

Setting a border color

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

Setting a direction

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



Figure 8: Direction Dialog

Setting the font

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

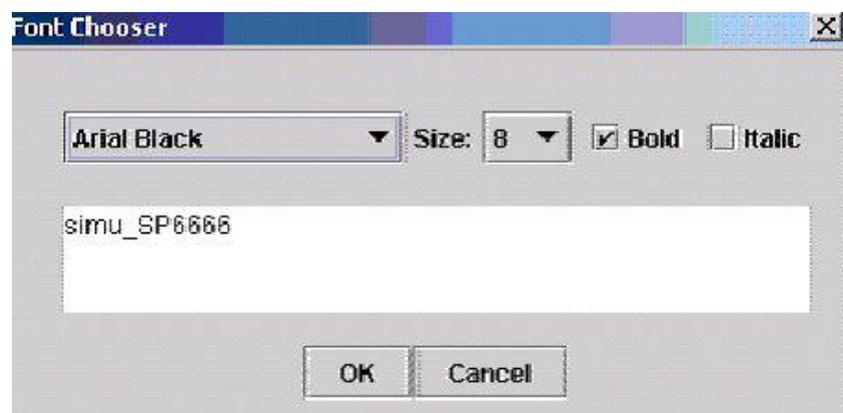


Figure 9: Font Chooser Dialog

Setting the foreground font

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

Setting the position

- Use the up and down arrow keys (on your keyboard) to select Position.
- Click the Change Value icon. The Position dialog is displayed.
- Click the position you want and click OK.



Figure 10: Select Position Dialog

Making text visible or invisible

- Use the up and down arrow keys (on your keyboard) to select Visible.
- 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.

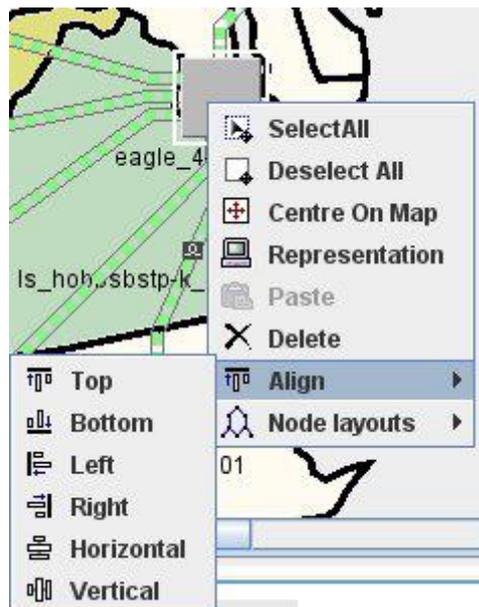


Figure 11: Alignment Menu Options

Node Layouts

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

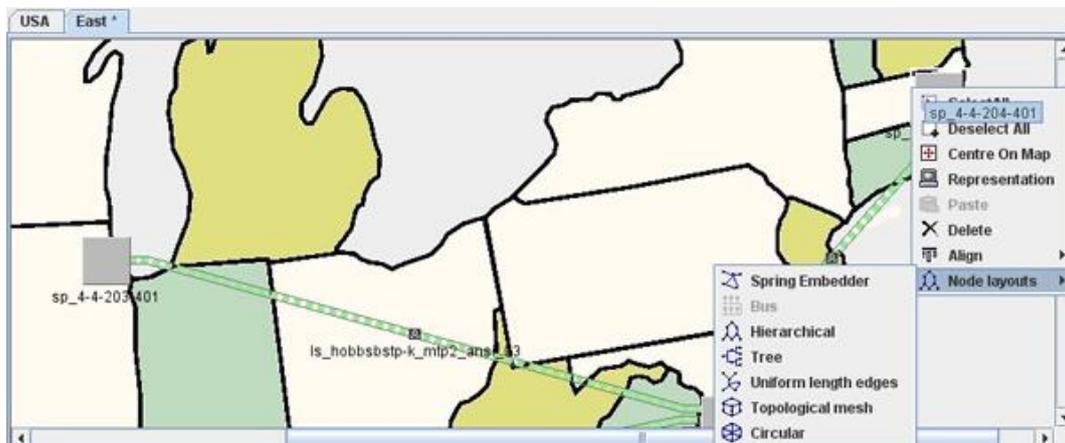


Figure 12: Node Layout Menu Options

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.

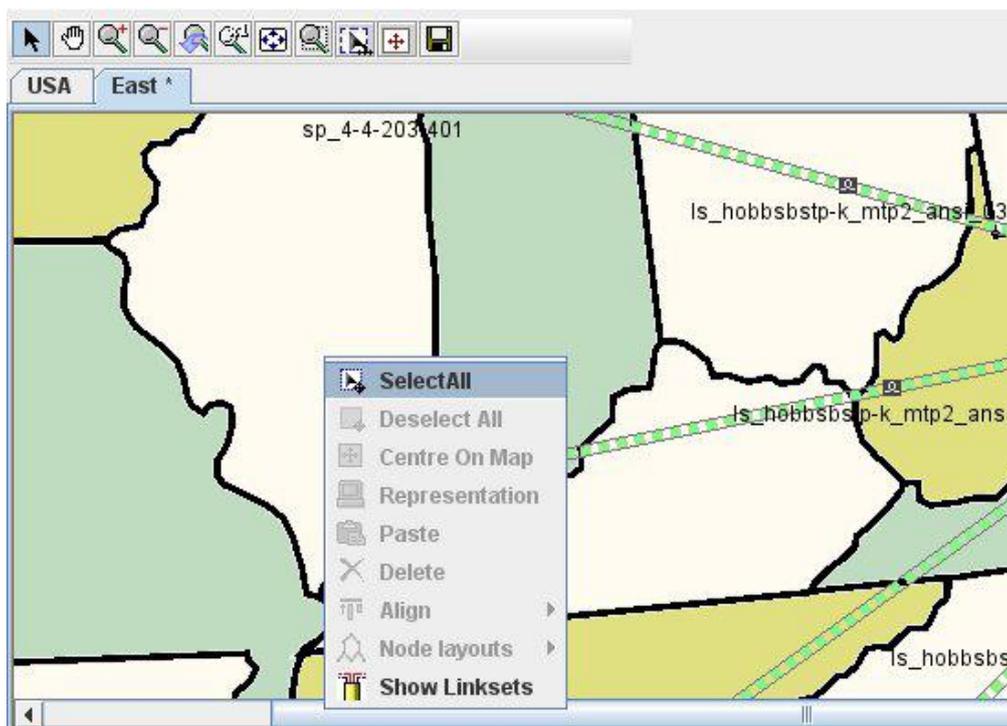


Figure 13: Show Linksets Option

Working in Tree View

The Tree View options are shown in Figure 14: Tree View List.

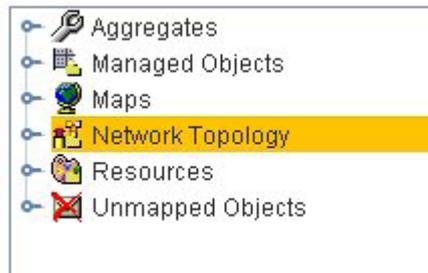


Figure 14: Tree View List

Note: Context menu may appear only on right click on far right part of tree item

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 Newmap 1, as shown under Maps in the same figure.

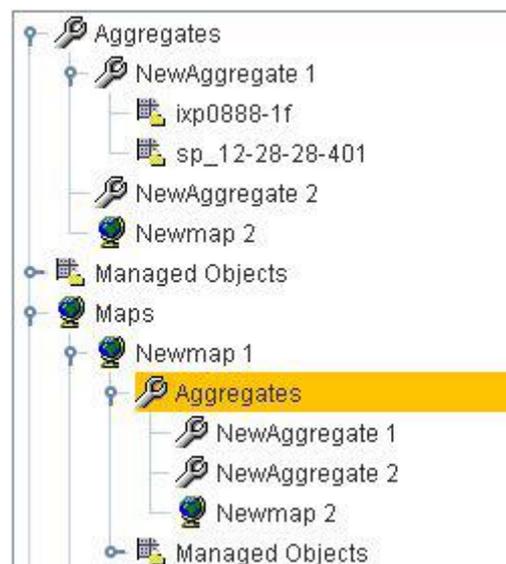


Figure 15: Aggregates in Tree View

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

Note: Context menu may appear only on right click on far right part of tree item

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.

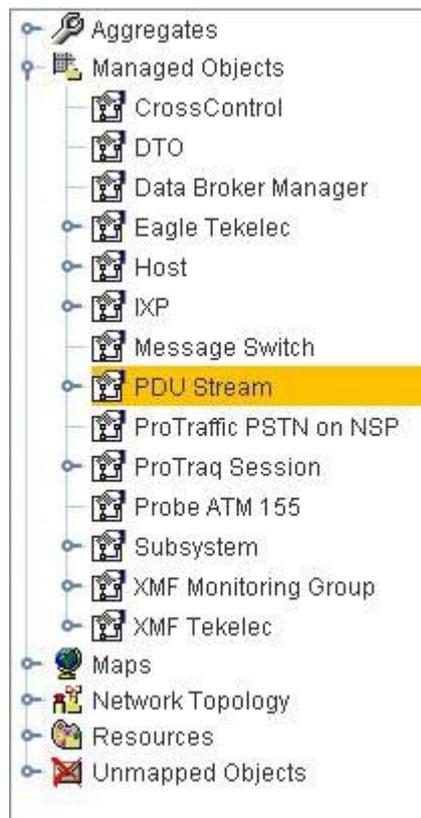


Figure 16: Expanded Managed Object Tree

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 17: Map Configuration Menu

Note: Context menu may appear on right click on far right part on tree item

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 18: 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 19: 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.

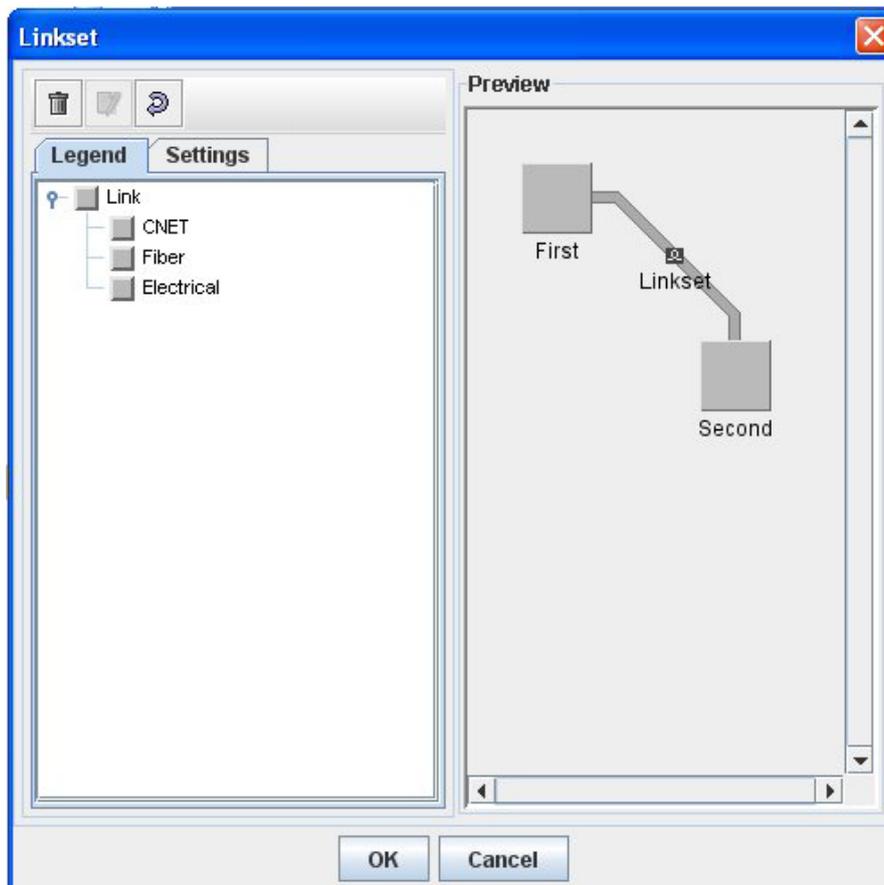


Figure 20: Linkset Representation Dialog

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,

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

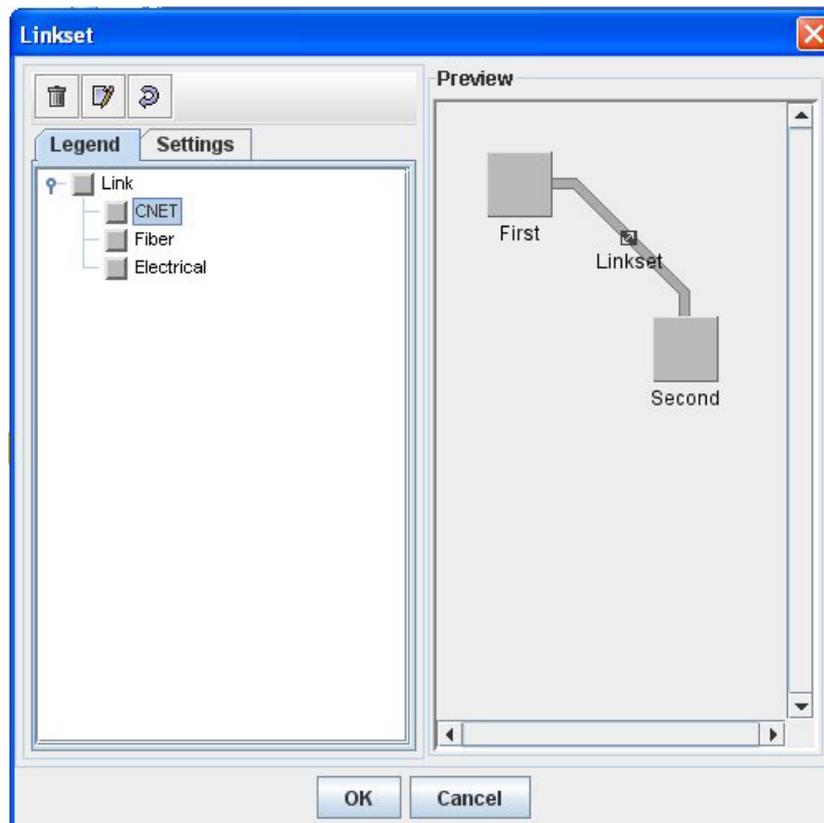


Figure 21: CNET Linkset Icon

Linkset Dialog Settings Page

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

- 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.

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:

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

Or

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

To copy an SP in an Aggregate,

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

To center the SP in the Map View,

- 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:

- Right-click the Managed Object and select Copy.
- 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.)
	Refresh Page -- resets display to include the most current data. Check icon.
	Records Per Page --
	Change Records per Page -- resets display to include the number of Records per Page.
	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.
	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."

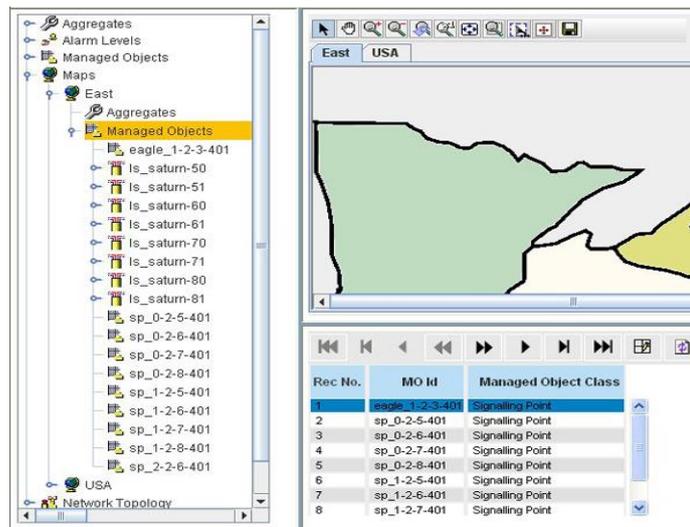


Figure 22: Sample Table

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

To start designing network maps, do the following.

- Click the toggle switch beside Maps in the Tree View. A list of existing maps is displayed.
- 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.
- Select the new tab to display the empty Map.

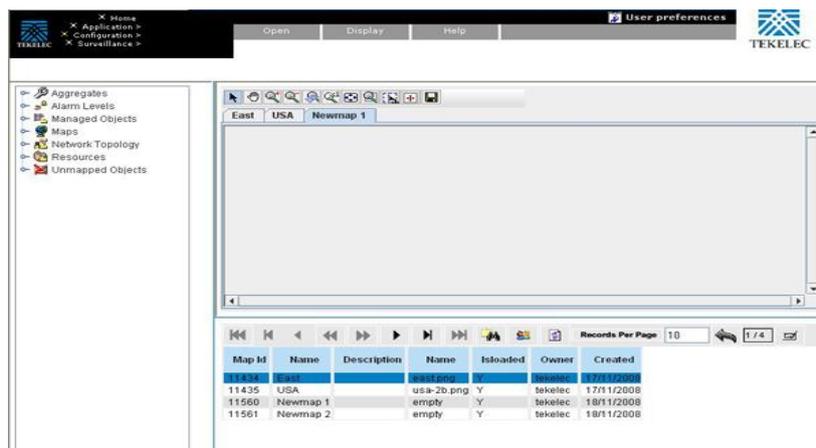


Figure 23: Empty Map Screen

- Right-click the new Map subheading in the Tree View and select Associate Wallpaper. Another dialog box is displayed for choosing the Map background.
- Make your selections in the Associate Wallpaper dialog box and click OK.



Figure 24: Associate Wallpaper Dialog Box

- 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.
- Type the new name and press Enter.

Adding Managed Objects to Map

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.

- In the Tree View, expand Network Topology. A list of nodes and links is displayed.
- Expand SP.
- A list is displayed that shows all Signaling Points available for network alarm monitoring.
- Click and drag Signaling Points applicable to the new Map from the Tree View to the Map.
- In the Tree View, expand Managed Objects. A list of Managed Object types is displayed.
- Expand to show the child Managed Objects related to the new Map.
- Click and drag any objects applicable to the new Map from the Tree View to the Map.



Figure 25: 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 26: Add Aggregate Option

- In the Tree View, right-click Aggregates and click Add. A new Aggregate is added to the existing list.
- Right-click the new Aggregate list entry and click Rename. The name changes to edit mode.
- Type the new name and press Enter.
- Expand the list containing the object you want to add to the new "Aggregate", right-click the object, and select Copy.
- Right-click the new Aggregate list entry and click Paste. The new object is part of the Aggregate.
- Repeat the copy-and-paste steps to add other objects to the Aggregate, if applicable.
- 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.

Note: When positioned aggregate contains an object also positioned on map, this one will not be rendered in ProAlarm viewer.

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:

- In the Tree View, right-click on the Map being defined as a submap in an aggregate and click Copy.
- Right-click and select Paste to paste the submap icon on a blank space in the parent Map.
- 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.

Note: When positioned map aggregate contains an object also positioned on parent map, this one will not be rendered on parent map in ProAlarm viewer. It will appear only in child map corresponding to map aggregate.

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 27: 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.

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

Click Apply to save your preferences.

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 on the Oracle Technology Network Site

Oracle customer documentation is available on the web at the Oracle Technology Network (OTN) 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. Log into the Oracle Technology Network site at <http://docs.oracle.com>.

2. Under Applications, click the link for Communications.

The Oracle Communications Documentation window opens with Tekelec shown near the top.

3. Click Oracle Communications Documentation for Tekelec Products.

4. Navigate to your Product and then the Release Number, and click the View link (the Download link will retrieve the entire documentation set).

5. To download a file to your location, right-click the PDF link and select Save Target As.