Oracle® Communications Performance Intelligence Center

Quick Start User's Guide

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Oracle Communications Performance Intelligence Center Quick Start User's Guide, Release 10.1.5

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

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Chapter 1: About This Help Text

Scope and Audience

This guide is designed to assist those users (individuals with roles NSPConfigManager, NSPAdministrator) to set up a basic system configuration using Centralized Configuration Manager (CCM) and be able to monitor traffic (xDRs and PDUs) using ProTrace. All basic procedures are described in this guide along with key concepts about using CCM to configure a system.

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.

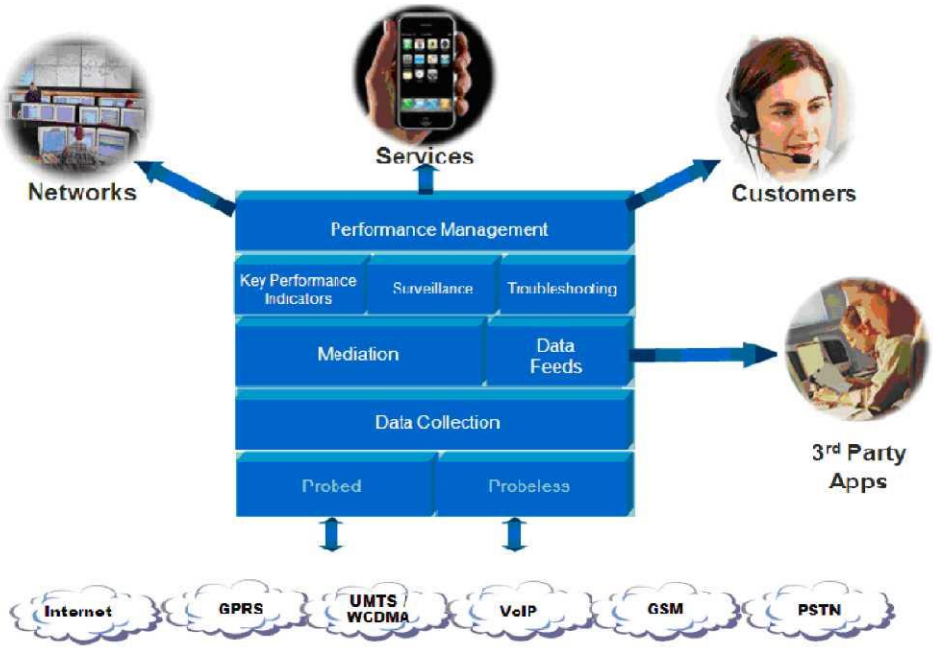

Figure 1: PIC Overview

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

Chapter 2: User Session

Prerequisites

NSP Workstation H/W Description

The following table identifies the minimum configuration for running NSP applications:

Item	Value	Unit
RAM	1	GB
CPU	Pentium 4 running @ 3 GHz	
Screen Size Internet Explorer	Min 15"(1280 x 800) 17" recommended IE 8.0/IE 9.0, FireFox28.0 IE6/IE7 no longer supported	
Flash Player	10 or later	
Java (for ProAlarm config)	JRE 7 latest update (update 65 or later)	

TABLE 1: H/W DESCRIPTION

Java Runtime settings

User has to Configure workstation Java plug-in for some application:

- Update to the latest JRE
- Configure Runtime parameters
  - Go to Start Menu ➢ Control Panel ➢ Java
  - Select the Java tab and click on View button
  - Here, you will find Java Runtime parametersremove any memory parameter (-Xmx or –Xms)
- As security rules have been enforced in order to run applets (ProAlarm config), configure Exception Site List in Security parameters
  - Go to Start Menu ➢ Control Panel ➢ Java
  - Select the Security tab
  - Click on Edit Site List ➢ Add
  - Enter NSP URL like https://<NSP_IP>

To apply new settings close the Browser and start it again in case application is already running

Browser Settings

Before using NSP, you should check the following settings:

- Turn off the browser pop up blocker for the NSP site.
- Set Force refresh option
- Disable script debugging or notification of script error
- Allow script intiated windows without size or position constraint
- Allow window without address bar
- Allow more than 2 download session at a time

- Enable active scripting

Specifically for IE, you should also

- Use Compatibility view
  Note: This step needs to be done for IE9
  Some NSP application may not display correctly for the desktop, using **Compatibility View** might help. If Internet Explorer recognizes a NSP application that isn't compatible, you'll see the Compatibility View icon on the address bar

  To turn on Compatibility View, click the Compatibility View button to the make the icon change from an outline to a solid color.

Logging into NSP

Complete these steps to log into NSP.

- Using a Web browser, type the following URL: http://nspserver_IPAddress/nsp

Note: Contact your system administrator to find out the IP Address for NSP portal.
Note: Before using NSP, turn off the browser pop up blocker for the NSP site.
The login screen opens shown below.

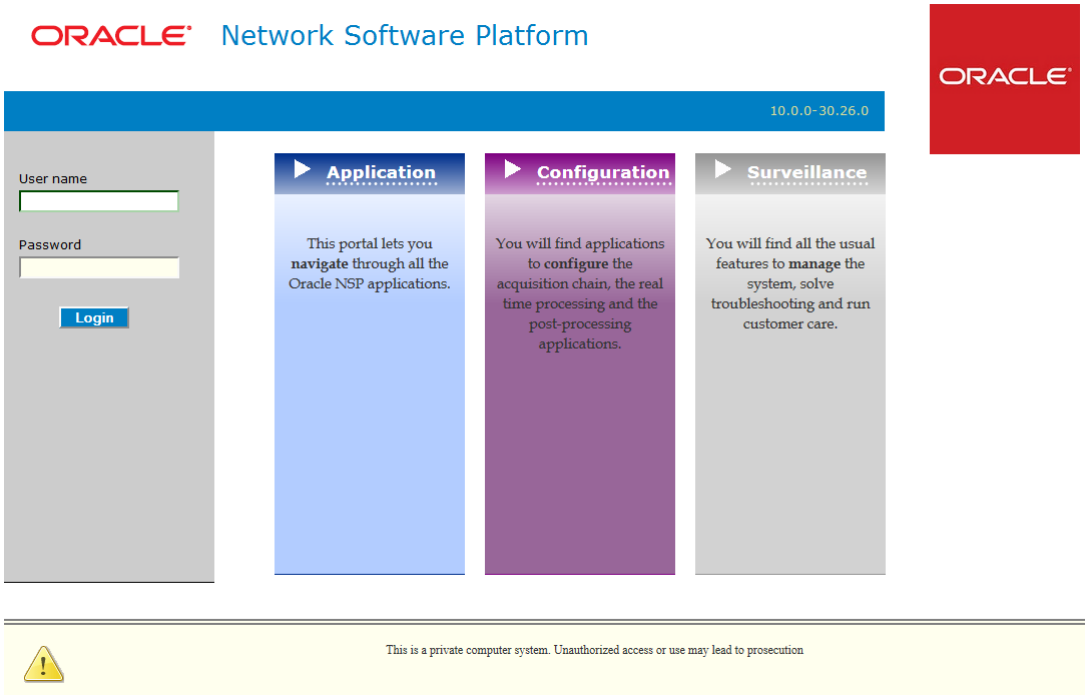

Figure 1: NSP Portal Screen

- Log into NSP by typing :
  - Your Userid

- Your Password

Note: Check with your system administrator for your userid and password.

The NSP Application Board opens with a top frame and a screen presenting all currently deployed applications.

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:

- Click **User Preferences** on the Application board. The User Preferences page is displayed.
- 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.

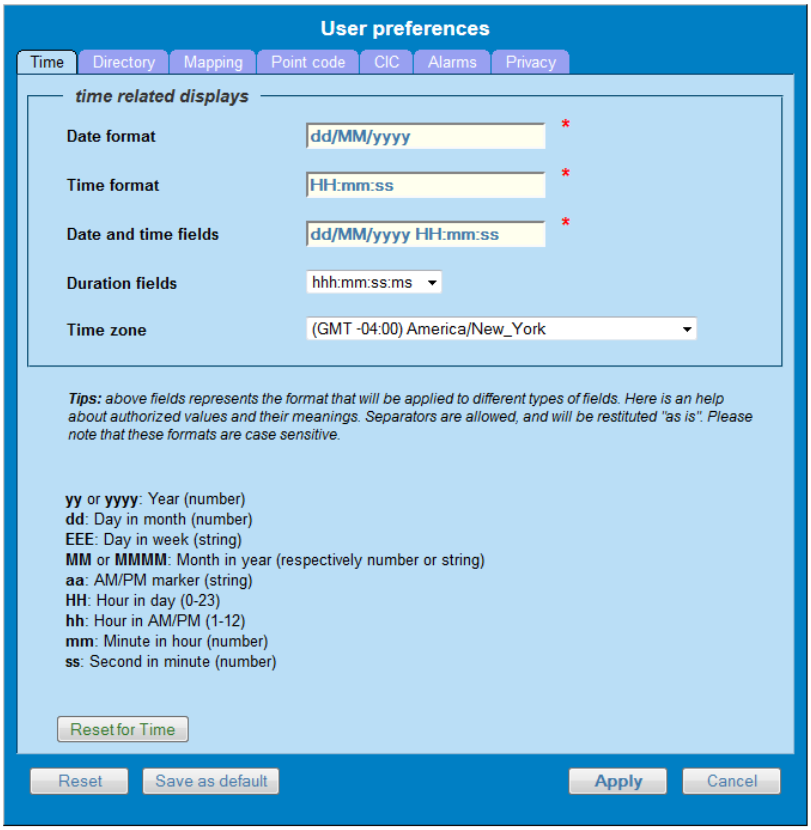

Figure 2: Date/Time Tab Screen

Field	Description
Date Format	Required field - Sets date format.
Time Format	Required field - Sets time format.
Date and time fields	Required field - Sets the date and time format.
Duration fields	Sets a duration format.
Time Zone	Pull-down list for selecting the desired time zone.
Reset Button	Resets all the tabs to default values.
Reset Tab Button (Reset for Time)	Resets to default values for the specific tab.
Apply Button	Applies any changes to the system.
Cancel Button	Exits the screen.

TABLE 2: TIME TAB SCREEN

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.

- Click User Preferences on the Application board.
  The User Preferences page is displayed.
- Click the Directory tab.
  The Directory page is displayed. The red asterisk denotes a required field.

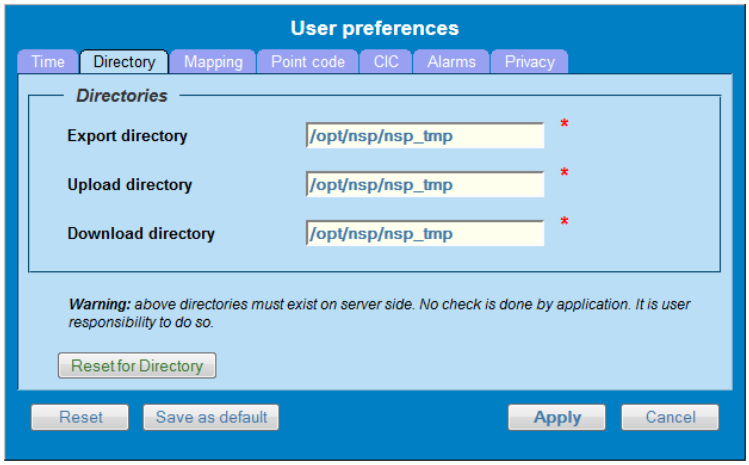

Figure 3: Directory Tab Screen

Field	Description
Export Directory	Enables you to set the default directory for exporting.
Upload Directory	Enables you to set the default directory for uploads.
Download Directory	Enables you to set the default directory for downloads.
Reset Button	Resets all the tabs to default values.
Reset Tab Button (Reset for Directory)	Resets to default values for the specific tab.
Apply Button	Applies any changes to the system.
Cancel Button	Exits the screen.

TABLE 3: DIRECTORY TAB SCREEN

Note: The directories must be present on the NSP server side. See *warning* at the bottom of the *Directory* tab screen.

Setting Mapping Preferences

You can set the Mapping settings using the User Preferences feature. Follow these steps to set Mapping preferences.

- Click User Preferences in the Application board. The User Preferences page is displayed.
- Click the Mapping tab . The Mapping page is displayed.

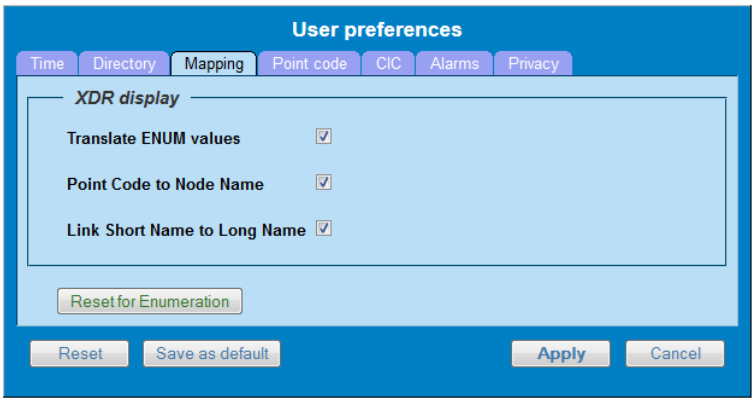

Figure 4: Mapping Tab Screen

Field	Description
Translate ENUM values	Selects whether ENUM values are translated or not Default is to select ENUM values translation.
Point Code to Node Name	Select this if you want to use the Node Name instead of the Point Code name in the xDR display. Default is to use Node Name.
Link Short Name to Long Name	Selects whether you can use long name (Eagle) for linksets. Default is to use Long Name.
Reset Button	Resets all the tabs to default values.
Reset Tab Button (Reset for Enumeration)	Resets to default values for the specific tab.
Apply Button	Applies any changes to the system.
Cancel Button	Exits the screen.

TABLE 4: MAPPING TAB

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.

- Click User Preferences in the Application board. The User Preferences page is displayed.
- Click the Point Code tab. The red asterisk denotes a required field.

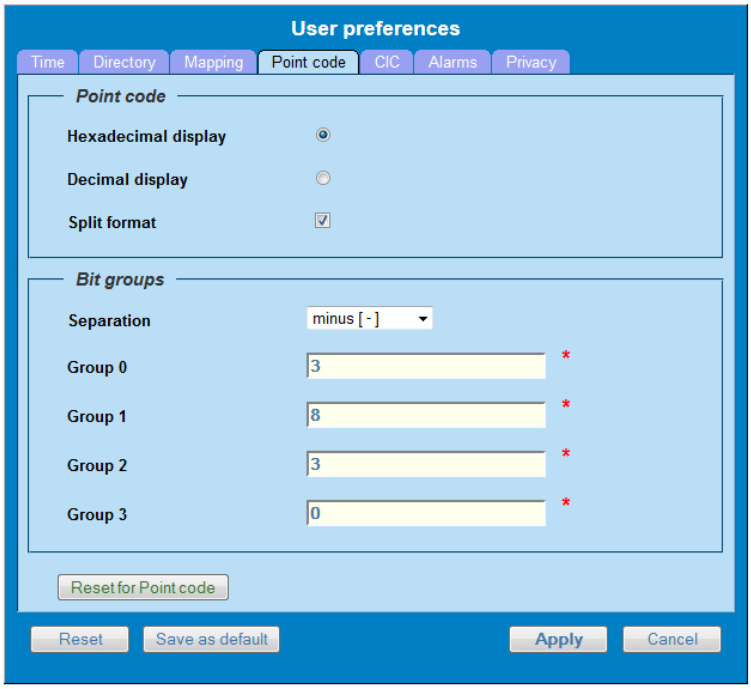

Figure 5: Point Code Tab Screen

Field	Description
Hexadecimal display	European defaults are hexadecimal and display with Group 0-3, Group 1-8, Group 2-3, Group 3-0.
Decimal display	North American defaults are decimal and display with Group 0-7 and Group 1-5.
Split format	Select or deselect Split format.
Separation	Select a Bit Group Separation.
Group 0	Type a value. (0-7 or 1-5 see hexadecimal or decimal display)
Group 1	Type a value. (0-7 or 1-5 see hexadecimal or decimal display)
Group 2	Type a value. (0-7 or 1-5 see hexadecimal or decimal display)
Group 3	Type a value. (0-7 or 1-5 see hexadecimal or decimal display)
Reset Button	Resets all the tabs to default values.
Reset Tab Button (Reset for Point Code)	Resets to default values for the specific tab.
Apply Button	Applies any changes to the system.
Cancel Button	Exits the screen.

TABLE 5: POINT CODE TAB

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:

- Click User Preferences in the Application board. The User preferences page is displayed.
- Click the CIC tab. The CIC page is displayed. The red asterisk denotes a required field.

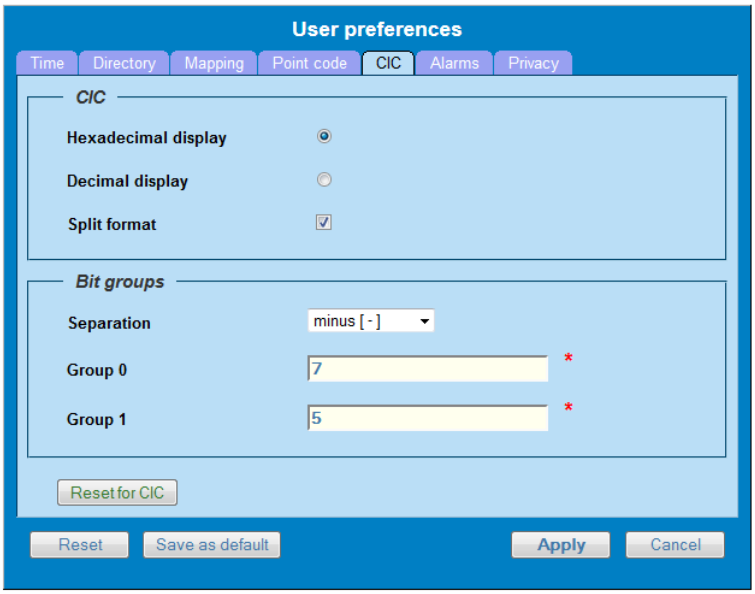

Figure 6: Formatting Rules (CIC) Screen

Field	Description
Hexadecimal display	European defaults are hexadecimal and display with Group 0-7 and Group 1-5.
Decimal display	European defaults are hexadecimal and display with Group 0-7 and Group 1-5.
Split format	Select or deselect Split format.
Separation	Select a Bit Group Separation: Group 0:8, Group 1:8 .
Group 0	Type a value. (0-7 or 1-5 see hexadecimal or decimal display)
Group 1	Type a value. (0-7 or 1-5 see hexadecimal or decimal display)
Reset Button	Resets all the tabs to default values.
Reset Tab Button (Reset for CIC)	Resets to default values for the specific tab.
Apply Button	Applies any changes to the system.
Cancel Button	Exits the screen.

TABLE 6: CIC TAB FIELD DESCRIPTIONS

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.
  Click User Preferences in the Application board. The User preferences page is displayed.
- Click the Alarms tab.
  The Alarms page is displayed. The red asterisk denotes a required field.

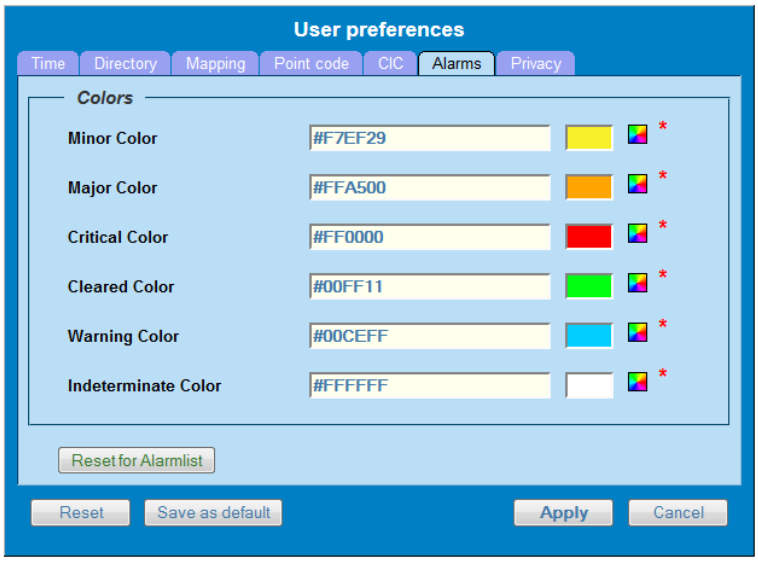

Figure 7: Alarm colors Screen

Field	Description
Minor Color	Color used for minor alarm in alarm display application
Major Color	Color used for minor alarm in alarm display application
Critical Color	Color used for minor alarm in alarm display application
Cleared Color	Color used for minor alarm in alarm display application
Warning Color	Color used for minor alarm in alarm display application
Indeterminate Color	Color used for minor alarm in alarm display application
Reset Button	Resets all the tabs to default values.
Reset Tab Button (Reset for Alarmlist)	Resets to default values for the specific tab.
Apply Button	Applies any changes to the system.
Cancel Button	Exits the screen.

TABLE 7: ALARM COLOR FIELD DESCRIPTIONS

Note: Click the color palette (icon on the right side of the screen) associated with the alarm status color(s) you want to modify or enter its RGB code

Note: This panel may not appears in some application

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:

- Click User preferences in the Application board menu.
  The User Preferences window is displayed. The Time tab is active by default.
- Click the Privacy tab .The Privacy page is displayed.

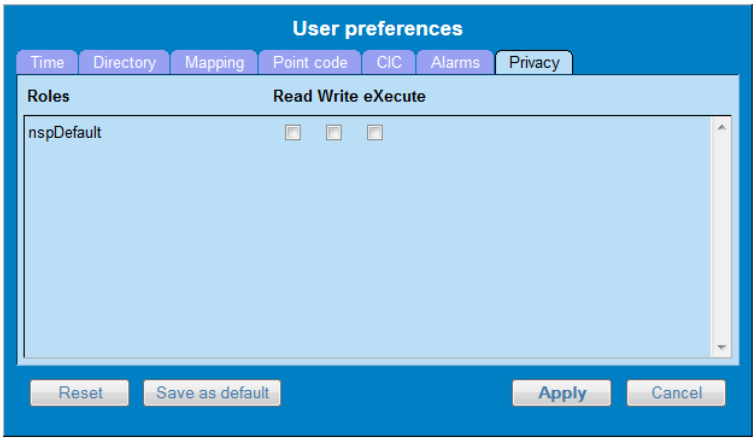

Figure 8: Default object Privacy Screen

Field	Description
Privileges	Default privileges given to corresponding privacy role (defined in Security Application). It allows action on objets when user is granted with role (see Security guide)
Reset Button	Resets all the tabs to default values.
Apply Button	Applies any changes to the system.
Cancel Button	Exits the screen.

TABLE 8: DEFAULT OBJECT PRIVACY FIELD DESCRIPTIONS

Note: This panel may not appears in some application

Setting traces period

Select the Default Period tab, for setting the default time period for beginning and ending time for traces (ProTrace only).

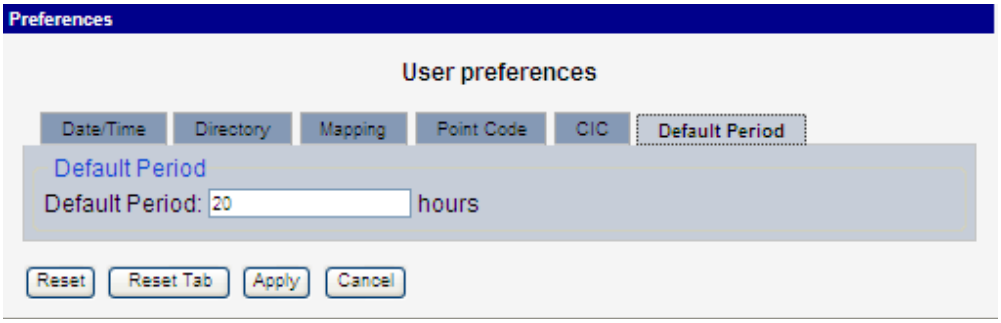

Figure 9: Default Period Tab Screen

Field	Description
Default Period (in hours)	Sets the default run time period for running traces. Default is 24 hours. Range 1-7200
Reset Button	Resets all the tabs to default values.
Reset Tab Button	Resets to default values for the specific tab.
Apply Button	Applies any changes to the system.
Cancel Button	Exits the screen.

TABLE 9: DEFAULT PERIOD TAB FIELD DESCRIPTIONS

Chapter 3: Setting Up a Basic System

Basic setup

This outline represents the main steps in configuring a basic PIC system with traffic. For detailed on configuring a PIC system, refer to the Centralized Configuration Manager (CCM) online help.

- Using the Security application, set up a user with NSPAdministrator privileges. (See Security online help for setting up users, groups and privileges.)

  Note: If setting up time format, directory and mapping preferences, point code format, CIC and alarm preferences is needed, see Setting User Preferences

  Note: In a typical initial PIC deployment, it is advisable to start the configuration effort by implementing the security scheme first. The reason is based on object manageability. As the configuration progresses more and more objects are created. A large system may eventually have over 12,000 objects. Each object has an owner and a privacy/privilege assignment. If changes have to be made at a later date on a large system, it is a considerable task to change owners or privacy settings on such a large number of objects.

- Configure sites and subsystems. You have to refer to PIC Centralized Configuration Manager Administrator's Guide at
  - Chapter 5: Equipment Registry Perspective

  Note: After a site is created, subsystems with their components are either discovered, as with IMF and IXP, or manually added as with PMF.

- Configure Network Elements: You have to refer to PIC Centralized Configuration Manager Administrator's Guide at
  - Chapter 6: Network Element configuration,
  - Chapter 7 Network view Configuration and

  Note: After this step, monitored network will be registered (along xMF coverture) and organized .

- Configure Acquisition: : You have to refer to PIC Centralized Configuration Manager Administrator's Guide at
  - Chapter 8: xMF Acquisition

  Note: After this step, monitored networked elements will be selected to filter and generate PDU dataflows. Additionnally network alarms (OAM, SLOR, Q752) will be selected

- Configure mediation You have to refer to PIC Centralized Configuration Manager Administrator's Guide at
  - Chapter 9: IXP Mediation

  Note: After this step, PDU dataflows will be processed to generate XDR according to some predefined dictionaries.

- Display XDRand PDU using Protrace and perform some trace. You have to refer to PIC Protrace User Guide.

Additional setup

This outline represents the main steps in configuring a advanced PIC system with realtime monitoring

- Configure KPI and custom alarms (based on threshold for each KPI) using ProTraq: You have to refer to PIC Protraq User Guide for more details

  Note: After this step, XDRs will be post-processed to generate KPIs and alarms on the flow. Those KPIs will be stored in dedicated session.

- Display KPIs using Protrace and perform some trace. You have to refer to PIC Protrace User Guide.
- Configure Dashoard with charts and tables with Properf Configuration. You have to refer to PIC Properf User Guide.
- Display live KPI in charts in Dashboard using ProPerf
- Configure Alarm maps using ProAlarm configuration (optional) You have to refer to PIC ProAlarm Configuration User Guide.

  Note: After this step, alarm could be displayed in dedicated graphical maps in addition to standard lists.

- Monitor alarms (from system and custom threshold) with ProAlarm. You have to refer to PIC ProAlarm Viewer User Guide.

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 Industries, click the link for Oracle Communications documentation.

   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.