Oracle® Communications Performance Intelligence Center

ProPerf Configuration User’s Guide

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

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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.

See more information on MOS in the Appendix section.

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Chapter 1: About this Manual

Overview

ProPerf Configuration is a specific-purpose application that is part of Tekelec's IAS system. The ProPerf Configuration application enables operators to view performance and quality indicators in real-time or using historical data, with a dynamic display of curves and graphs.

Performance or quality indicators, calculated with xDRs, are provided by the probes and/or defined with the ProTraq application. The data is stored into statistical sessions within remote applications such as IXP or DataServer and managed using Centralized Configuration Manager (CCM). The following indicators can be displayed in ProPerf Configuration:

- SS7 network performance indicators according to ITU Q.752
- Customer traffic indicators based on ISUP and links analysis in real-time
- Real-time indicators based on Traffic or IP service Quality monitoring
- Load indicators on IN-transactions (per link and reprocessed for all links per SCP)
- INAP, MAP, CAP transaction efficiency, duration, operation, and global title
- Volume, efficiency, split of cause values for GPRS Session Management, Mobility Management, SMS management

Using ProPerf Configuration enables you to see failures and overloads instantly. In addition, trends can be easily estimated according to the shape of the curve.

Scope and Audience

This user's manual provides information about the ProPerf Configuration application. It is designed to be both a beginners' guide to working with performance indicators as well as an intermediate and advanced user's reference to general concepts. This guide is designed around performing common tasks such as:

- Understanding ProPerf dashboard and panel layouts to create statistical sessions
- Working with dashboards and panels
- Creating line charts, pie charts and bar graphs
- Modifying privacy settings to share your information with other users

Take a few minutes to browse through these tasks and become acquainted with the layout of this guide to become familiar with the headings and subheadings that allow you to find the information you need.

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 Providersto 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.

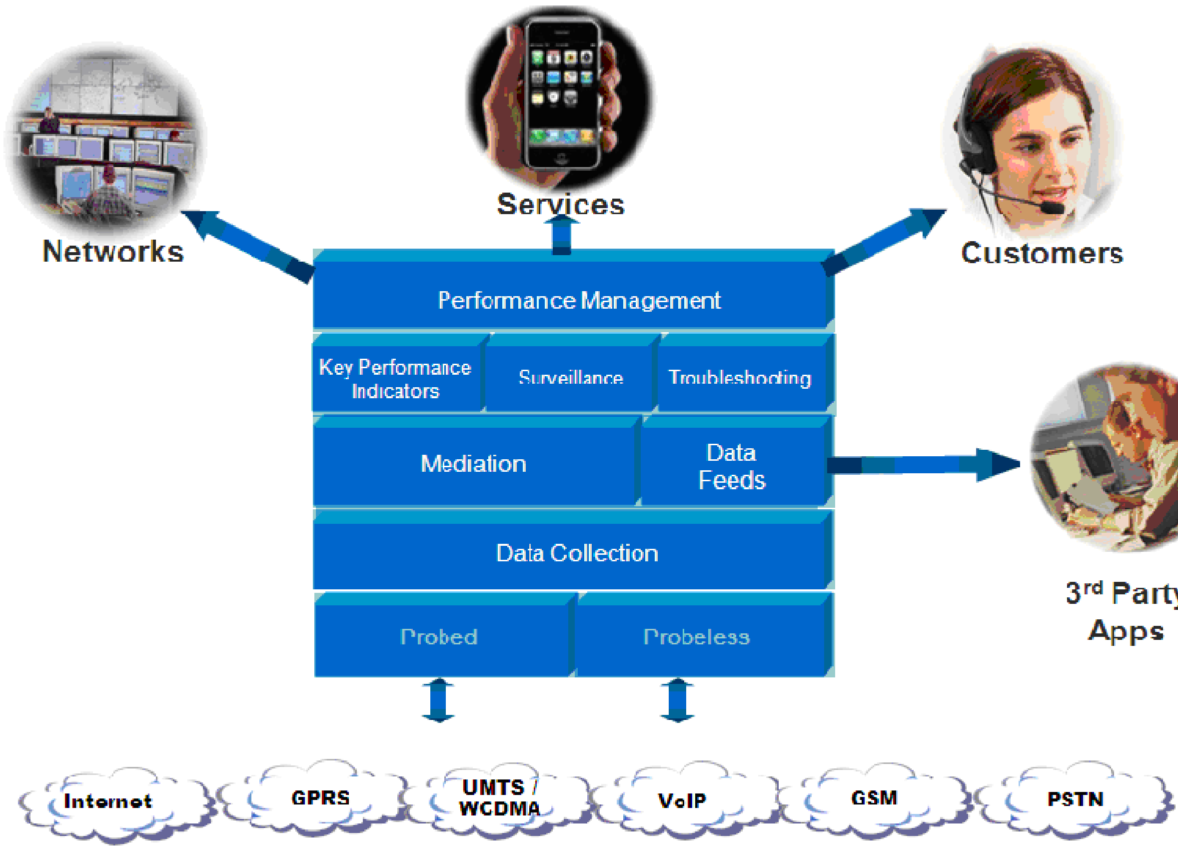

Figure 1: PIC Overview

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 ProPerf Configurations

Overview

ProPerf is a specific-purpose application that is part of Tekelec's IAS system.
ProPerf makes it possible for you to view performance indicators in real-time and from historical data with a display of curves and graphs. These indicators, calculated with message-based counters are provided by the probes and/or defined by the ProTraq application.
Data is stored in statistical sessions organized as matrix of column and line filter results. This matrix defines cells named KPI (Key Performance Indicators).
ProPerf is based on a dashboard concept, that is, a single-page display of multiple KPI's in associated charts and tables (set up in Panels), determined according to predefined layouts. *ProPerf* offers two main dashboard functions:

- Dashboard Editing - Allows you to configure a dashboard to display as an independent page and automatically refresh it in real-time.

Note: Accessible to users in the group NSPConfigPowerUser.

- Dashboard Display - Allows you to use global settings to display a dashboard, to specific properties of the KPI's used.

Note: Accessible to users in the group NSPBusinessUser.

Accessing and logging into NSP

To access and log into NSP, follow these steps:

- Open your Web browser.
- In the Address bar, type the following **Uniform Resource Locator (URL)** for NSP: **http://nspserver/nsp** , where the nspserver is the IP address of NSP.

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

- The NSP login screen opens.

Note: Before you can start NSP, you must first have a userid and password assigned to you by your NSP system administrator.

- Type your **username** assigned to you in the *Username* field.
- Type your **password** in the *Password* field.
- Click **OK.** The NSP *Application Board* opens.
- Click on the *ProPerf Configuration* icon to open the application.

ProPerf's Functionality

ProPerf has two major functions, they are:

- Editing - enables you to perform the following:
  - Create a dashboard
  - Create a panel (line chart, bar chart, pie chart or table)
  - Define xDRs to be displayed
  - Data source as source session, column and line
  - Display properties for a chart, like color, symbols, etc.
- Display - enables you to perform the following:
  - Leave a dashboard in a new page
  - Print or save a dashboard page
  - Zoom in or out to change the Reference Duration of the current view
  - View historical data for a given date and time
  - View the dashboard in real-time

Opening ProPerf

ProPerf is part of the NSP *Toolkit* and is opened from the NSP *Platform.*

Note: To log into ProPerf, you must first have an Network Software Platform (NSP) userid and password. For more information contact your network administrator.

Once you have logged into NSP, the NSP *Application Board* opens shown in *Figure 2: NSP Application Board with ProPerf And ProPerf Configuration Icons*.

There are two entry points into the ProPerf application, the **ProPerf** icon under the **Application** label and the **ProPerf Configuration** icon under the **Configuration** label. The ProPerf application only allows the user to display predefined dashboards and use the dashboard toolbar. The ProPerf Configuration application allows you to create and configure dashboards.

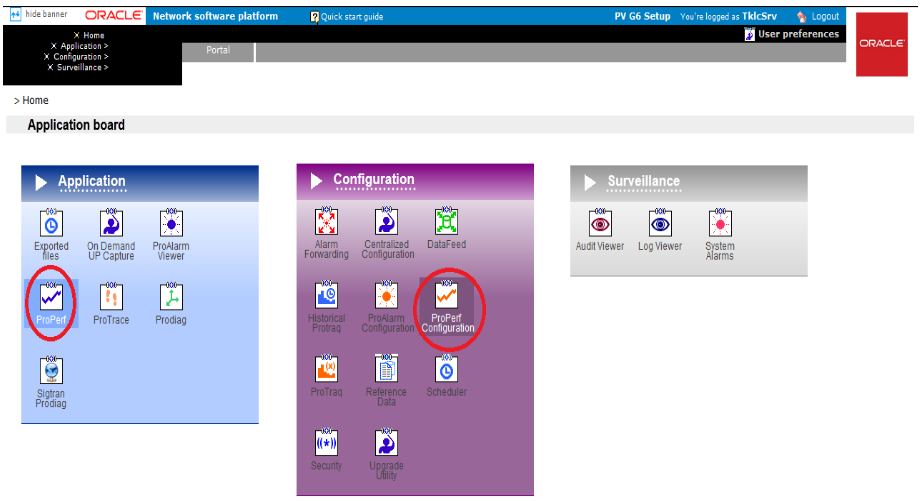

Figure 2: NSP Application Board with ProPerf And ProPerf Configuration Icons

To view a dashboard, click the **ProPerf** icon under the Application heading. To configure or create a dashboard clicks the **ProPerf Configuration** icon under the Configuration heading. The *ProPerf Main* page opens displaying the *Dashboard list* shown in *Figure 3: ProPerf Main Page*.

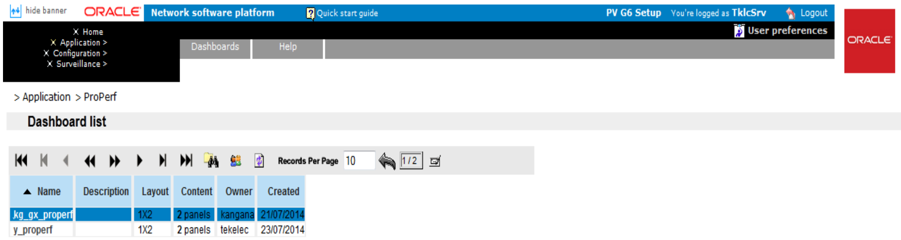

Figure 3: ProPerf Main Page

The ProPerf GUI

ProPerf has the same look and similar functionality as all applications in the NSP *Toolkit.* **Note:** Do not use the Function Keys (F1 through F12) when using the NSP. Function keys work in unexpected ways. For example, the F1 key will not open NSP help but will open help for the browser in use. The F5 key will not refresh a specific screen, but will refresh the entire session and will result in a loss of any entered information.

Page Layout

The page is divided into the following:

- Links to applications, configuration applications and surveillance - located in the top left-hand corner. Menu bar - contains two menus:
    - Your Dashboard - that shows dashboards you created or ones that you have been given access to.
    - Help - has two options
    - Help - that provides an online help system
    - About - that provides basic information about the current ProPerf release.
- Toolbar - that provides navigation and function buttons. **Note:** For other GUI features refer to the NSP Platform Guide.
- Dashboard list - a table that lists the configured xDR sessions (in panels). For more information on using the Dashboard, see ***Using the Dashboard Toolbar***..

Dashboard Layout

As mentioned in the section above, Dashboards are presented in table format. The table has seven columns.

Dashboard Columns

- Name - shows the name of the dashboard
- Description - shows the description, (if any), of the dashboard
- Layout - shows the panel configuration in *columns* and *rows,* for example, 1x3 means one column and three row layout. 1,2 means one row has one column and the second row has two columns. There are eight possible configurations.
- Content - shows how many panels are presently in the dashboard configuration Owner - shows who created the dashboard Created - shows when the dashboard was created

Dashboard and panel Links

The *Name* and *Panel* columns are links. Clicking on these links opens the *Dashboard configuration* and *Panel List* pages respectively.

Dashboard Display

Note: You can only view dashboards that you are authorized to view. For more information see the chapters on Privacy in the NSP Administrator's Guide.

To display a dashboard click the **Name.** The *Dashboard* opens in a separate page. An example of a dashboard with a 2,1 configuration is shown in *Figure 4: Dashboard Screen With 2,1 Configuration*.

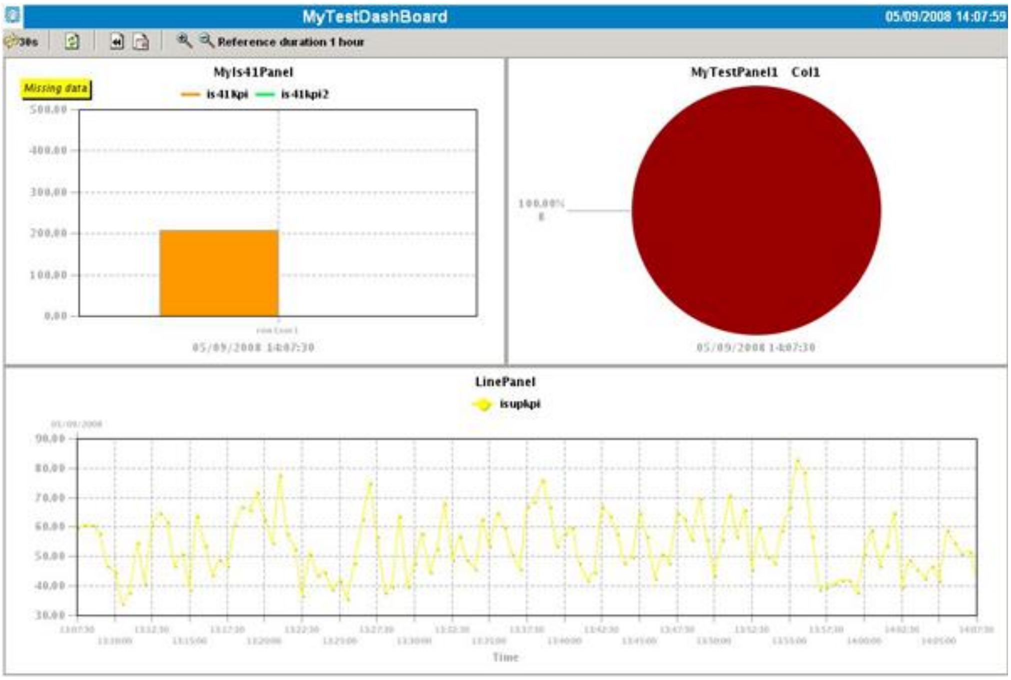

Figure 4: Dashboard Screen With 2,1 Configuration

Note: Real-time dashboards are automatically refreshed according to default settings.

Note: Resulting graph displays an exact value as tooltips when cursor is on a point of a curve.

ProPerf Configuration GUI

The ProPerf Configuration GUI has all of the functionality of the ProPerf application (viewing dashboards) as well as the dashboard configuration and panel functionality.

Panel List Display

The panel list page also has a GUI and table format similar to the *Dashboard* page shown in *Figure 5: Panel List Page*.

Note: The Panel List display can only be accessed using the ProPerf Configuration application.

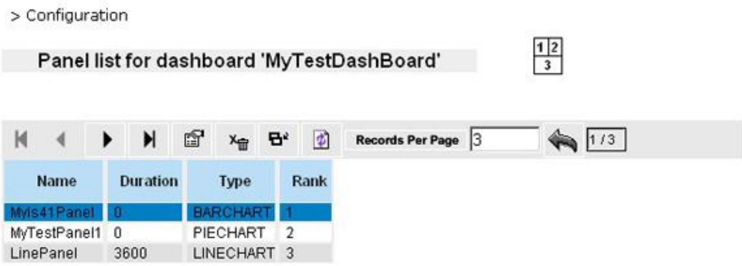

Figure 5: Panel List Page

Panel list configuration Symbol

The *Panel list* page shows the current panel configuration in the upper right half of the page. This icon will change if the panel configuration changes.

View children Button

The Panel list toolbar has a View Children button  that opens the sessions that belong to a record. Figure 6: Parent/Child Tables shows an example of the Panel list page with Parent/Child tables.

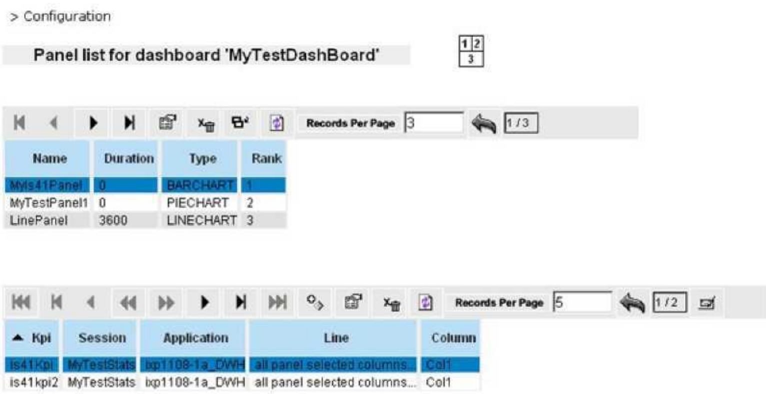

Figure 6: Parent/Child Tables

Panel list Table Layout

There are four columns in the *Panel* table.

- **Name** - that shows the name of the panel.
- **Duration** - shows the time that will be measured.
- **Type** - shows the layout (table, line chart, bar chart, pie chart).
- **Rank** - will show what order the panel is in the whole configuration.

Chapter 3: Using ProPerf Configuration

Overview

This section describes the procedures used in *ProPerf.* These descriptions include:

- Viewing dashboards in historical and real-time display
- Using the zoom function
- Using the previous and next view

Working with Dashboards

This section describes the procedures used in creating, modifying and deleting *ProPerf* dashboards.

Creating a Dashboard

To create a new dashboard follows these steps:

- In the dashboard list toolbar, click **Add record.**

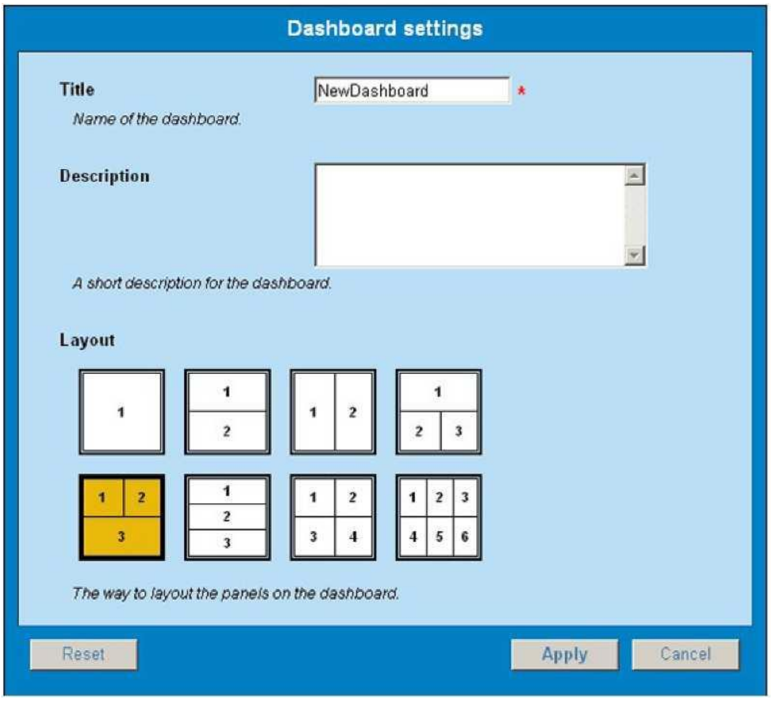

Figure 7: Add Dashboard Screen

The *Add dashboard* screen opens shown in *Figure 7: Add Dashboard Screen*.
The following table describes the attributes you choose on the Dashboard settings page:

- Type in the **Name** of the dashboard.

Note: Special characters are not allowed for title. Use only standard alphanumerical characters and "_" and "."

- (Optional) Type in a **Description** of the dashboard.
- Select the **Layout.**
- Click **Apply.** The dashboard record appears in the *Dashboard* page.

- Proceed to "***Panel display List***" in this new dashboard.

Modifying a Dashboard

Follow these steps to modify an existing dashboard.

- Select the **dashboard** to be modified.
- Click **Name** to open the *Dashboard Settings* screen.
- Make the necessary modifications.
- Click **Apply.**
  The changes are saved to the system.

Note: To view the changes in the table, click the Refresh button.

Deleting a Dashboard

Follow these steps to delete an existing dashboard.

- Select the **dashboard** to be deleted.
- Click **Delete.**
- Click **OK** at the prompt.
  The dashboard and all panels associated with that dashboard are deleted.

Using the Dashboard Toolbar

You can use the dashboard toolbar to zoom in and out (to change the reference duration), choose the display date, view previous and next time periods in historical data, and chose the real-time or historical view.

Choosing a Date

You can choose a date to display information from a historical record by doing the following:

- Select the **history** button. The date input screen appears.
- Enter the date and time or select it from the calendar tool.
- Click **OK.** The information in the chart is updated to display historical data for the new date.

Note: If the display period of a graph includes the time when there is a switch between Daylight Savings Time and Standard Time the data after the change may be offset by one hour.

Viewing in Real-time

If you are currently viewing historical data, you can switch to the real-time display by doing the following:

- Select the **real-time** button.
- The information in the chart is updated with the real-time data.

Note: When a dashboard is first opened its default viewing mode is real-time.

Note: If the display period of a graph includes the time when there is a switch between Daylight Savings Time and Standard Time the data after the change may be offset by one hour.

Using the Zoom function

When viewing data as a line chart, you can you can zoom in or out to change the time duration for the current view. You can zoom in to 1% of the current configured duration and out to 400% of the current configured duration. To use the zoom function does the following:

- Select the zoom in button to see shorter time duration, or the **zoom out** button to see a larger duration. Each successive click of the zoom in or out button will result in the view being updated one increment shorter or larger.
- The information in the chart is updated with the new time duration and the new reference duration is displayed in the toolbar.

- To reset the zoom factor to the configured duration select the "**reset zoom"** button. **Note:** The zoom function is only available with the line chart view.

Using the Previous and Next view

When viewing a dashboard, you can modify the view to show previous data or next data (in historical view). To use the previous and next function do the following:

- Select the **previous** button or **next** button to see the previous or next data.

Note: If you are currently in real-time mode selecting previous will change the view to historical mode and automatic refresh will not happen.

- For line chart views, the view will shift by 3/4 of the current time duration to display the previous or next data in the view. For Data Tables, Pie Charts and Bar charts, the view will shift to the previous or next period.
- To get back to the real-time view select the **real-time** button.

Note: If the new calculated date is greater than current time, the dashboard switch back to real-time mode, refreshing data automatically every period.

Working with Panels

Panel display List

Once you have created a dashboard, you can create panels to obtain the information from *xDR sessions*.

Note: xDR sessions are discovered using CCM. Refer to the *Centralized* Configuration *Manager User's Guide* for information on managing xDR sessions.

These panels will supply the data for you to view, organize, and report.

Note: Statistics sessions must already be created in ProTraq. Refer to the ProTraq User's Guide for information on managing statistics sessions.

Panels are the basic component of a dashboard. There are three types of panels available in *ProPerf:*

- Line charts (multiple session allowed)
- Bar chart (one session only)
- Pie chart (one session only)

Follow these steps to display a panel.

- Select the dashboard that will have the panel(s).
  Figure 8: Selected Dashboard shows a dashboard page with a dashboard selected.

Figure 8: Selected Dashboard

Note: New dashboards show "No Panel" in content column

- Click the **content link** in the *Content* column.
  The *Panel List* page opens shown in **Error! Reference source not found.**.

Figure 9: Panel List Page

- Click Add

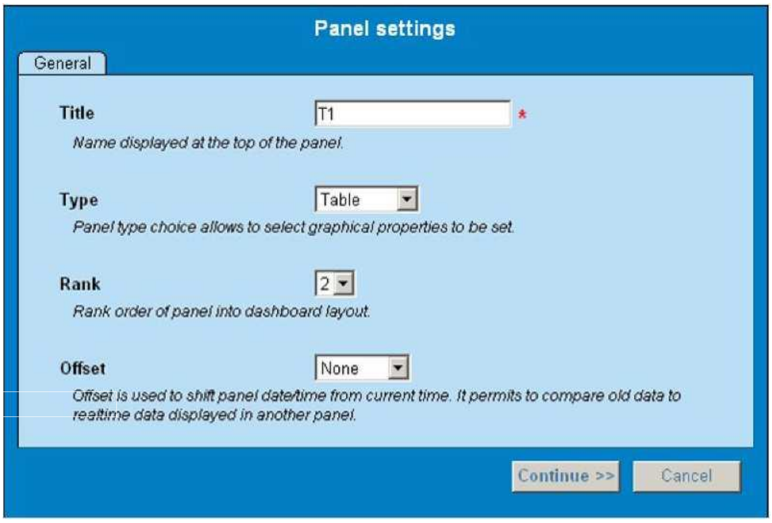

Figure 10: Panel Settings Screen-General Tab

The *Panel Settings* screen opens shown in Figure 3-4.
In this step you can begin to add panel records with different graphic layouts.

Using the Previous and Next view

When viewing a dashboard, you can modify the view to show previous data or next data (in historical view). To use the previous and next function do the following:

- Select the **previous** button or **next** button to see the previous or next data.

Note: If you are currently in real-time mode selecting previous will change the view to historical mode and automatic refresh will not happen.

- For line chart views, the view will shift by 3/4 of the current time duration to display the previous or next data in the view. For Data Tables, Pie Charts and Bar charts, the view will shift to the previous or next period.

- To get back to the real-time view select the **real-time** button.

Note: If the new calculated date is greater than current time, the dashboard switch back to real-time mode, refreshing data automatically every period.

Adding a line Chart Pane

Follow these steps to add a table panel record.

- Type in the **Name.**
- Select the graphic outlay to **Line Chart.**
- Select the **Rank.**
  This is the position where the Panel is located in the dashboard.
- Select the **Offset** time.
  This option is used to compare current data to past data in another panel.
- Click **Continue.**
  The screen changes to show the *Datasource* tab. This screen has the discovered xDR sessions that have been discovered using the *Centralized* Configuration *Manager* (CCM). For more information on discovering xDR sessions see *Centralized* Configuration *Manager User s Guide.*
- Select the **session.**
- Click **Use this session as datasource.**
  The screen changes to show the datasource on the bottom on the screen.
- Select the **X-axis** tab.
  The screen displays the x-axis parameters.
  - Select the **X grid** (vertical grid).
  - Select the **Time scale** (X duration).
  - Defines the time range of X-Axis for a line chart. Last date/time or Current date/time will be selected. The duration unit is one hours.
- Click the **Y Axis** tab to open the Y Axis screen.
- Set the **attributes** on the *Y axis* tab of the line chart panel configuration window.

Table 1: Y-Axis Attribute Descriptions

Attribute	**Description**
Y-grid	Displays a horizontal grid if checked
Scale name	Displays a title for the default (left) y-axis, and selects a scale by name if an optional scale is defined (default is "left")
Auto scale	Allows the software to calculate the default (left) y-axis range. Otherwise, minimum and maximum values should be filled in.
Minimum scale value	Defines the minimum value of the default (left) y-axis range.
Maximum scale value	Defines the maximum value of the default (left) y-axis range.
Second scale	Displays an optional right y-axis in the chart

Second scale name	Displays a title for the optional right y-axis and selects a scale by name (default is "right")
Auto scale	Allows the software to calculate the optional right y-axis range. Otherwise, minimum and maximum values should be filled in.
Minimum second scale value	Defines the minimum value of the optional right y-axis range.
Maximum second scale value	Defines the maximum value of the optional right y-axis range.

- Click the **Labels** tab to apply a label to the session. Labels are available if the session contains additional text fields for ProTraq TOP.
- Select the appropriate **data columns** and enter the **formatting string** that specifies how the values will be separated. The recommended syntax for the formatting string is **%n$s** and an invalid syntax may lead to no displayed values. If the formatting syntax is not defined, the values will be separated by spaces.

When entering the formatting string, use the syntax

%[col_index$][width][.precision]conversion

where:

- o The optional col_index is a decimal integer indicating the position of the argument in the selected column list. The first column is referenced by the second by "2$", and so on.
- o The optional width is a non-negative decimal integer indicating the minimum number of characters to be written to the output.
- o The optional precision is a non-negative decimal integer usually used to restrict the number of characters.
- o The required conversion is a character indicating how the argument should be formatted. A lowercase "s" returns the string as it is and an uppercase "S" returns the string in upper case letters.

- Click **Apply** to save changes. The panel appears in the *Panel list.*

Adding a bar Chart Pane

To set the display parameters for a bar chart, follow these steps:

- Type in the **Name.**
- Select the graphic outlay to **Bar Chart.**
- Select the **Rank.**
  This is the position where the Panel is located in the dashboard.
- Select the **Offset** time.
  This option is used to compare current data to past data in another panel.
- Click **Continue.**
  The screen changes to show the *Datasource* tab. This screen has the discovered xDR sessions that have been discovered using the *Centralized* Configuration *Manager* (CCM).
- Select the **session.**
- Click **Use this session as datasource.**
  The screen changes to show the datasource on the bottom on the screen.
- To add more sessions, repeat previous steps.
- Click the **X-Axis** tab to open the *Panel Settings* screen.
- Set the **X-grid** attributes on the screen.
  - o Select **x grid.**
    If selected a vertical grid is displayed.
- Select Values

- Select **Lines** (fields) that display the X-Axis values as the line selection in the statistics session.
- Select **Columns** that display the X-Axis values as the column selection in the statistics session-with simple count

Note: The X axis selections are defined in discrete values. The legend items are applied to each value in the selection.

- Click the **Y-Axis** tab to open the attribute screen.
- Select the **attributes** for the Y-axis.
- Click the **Labels** tab to apply a label to the session. Labels are available if the session contains additional text fields for ProTraq TOP.
- Select the appropriate **data columns** and enter the **formatting string** that specifies how the values will be separated. The recommended syntax for the formatting string is **%n$s** and an invalid syntax may lead to no displayed values. If the formatting syntax is not defined, the values will be separated by spaces.
  When entering the formatting string, use the syntax
  %[col_index$][width][.precision]conversion
  where:
    - The optional col_index is a decimal integer indicating the position of the argument in the selected column list. The first column is referenced by the second by "2$", and so on.
    - The optional width is a non-negative decimal integer indicating the minimum number of characters to be written to the output.
    - The optional precision is a non-negative decimal integer usually used to restrict the number of characters.
    - The required conversion is a character indicating how the argument should be formatted. A lowercase "s" returns the string as it is and an uppercase "S" returns the string in upper case letters.
- Click **Apply** to save your settings. The panel record is saved to show a bar chart.

Setting Pie Chart Parameters

To set the display parameters for a bar chart, follow these steps:

- Click **Add** in the *Panel List* page.
- Type in the **Name.**
- Select the graphic outlay **Pie** as the type.
- Select the **Rank.**
  This is the position where the Panel is located in the dashboard.
- Select the **Offset** time.
  This option is used to compare current data to past data in another panel.
- Click **Continue.**
  The screen changes to show the *Datasource* tab. This screen has the discovered xDR sessions that have been discovered using the *Centralized* Configuration *Manager* (CCM).
- Select the **session.**
- Click **Use this session as datasource.**
  The screen changes to show the datasource on the bottom on the screen.
- To add more sessions, repeat steps 7-8.
- Select the **Values** tab.
  The screen changes to show the columns for the panel.
- Set the **line** or **column** values.
    - Line values define the pie slices as columns for a line to be selected in the line list of the statistics session.
    - Column values define pie slices as lines for a column to be selected in the column list of the statistics session.

- Click the **Labels** tab to apply a label to the session. Labels are available if the session contains additional text fields for ProTraq TOP.
- Select the appropriate **data columns** and enter the **formatting string** that specifies how the values will be separated. The recommended syntax for the formatting string is **%n$s** and an invalid syntax may lead to no displayed values. If the formatting syntax is not defined, the values will be separated by spaces.
- When entering the formatting string, use the syntax

  %[col_index$][width] [.precision] conversion

  where:
    - The optional col_index is a decimal integer indicating the position of the argument in the selected column list. The first column is referenced by the second by "2$", and so on.
    - The optional width is a non-negative decimal integer indicating the minimum number of characters to be written to the output.
    - The optional precision is a non-negative decimal integer usually used to restrict the number of characters.
    - The required conversion is a character indicating how the argument should be formatted. A lowercase "s" returns the string as it is and an uppercase "S" returns the string in upper case letters.
- Click **Apply.**

  The settings are saved to the panel list.

Unselecting (deleting) Data Sources

You can *unselect* an *xDR session* in a Panel record by follow these steps.

- Select the **Panel record** to be modified.
- Click **Modify.**
- Click the **Datasource** tab.
- Click **unselect** but the *xDR session* you want to delete.
- Click **Apply.**

The changes are saved to the system.

Modifying a Panel Record

Follow these steps to modify a panel record.

- Select the **Panel record** to be modified.
- Click **Modify.**
- Make the appropriate changes.
- Click **Apply.**

The changes are saved to the system.

Deleting a Panel Record

Follow these steps to delete a panel record.

- Select the **Panel record** to be modified.
- Click **Delete.**
- Click **OK** at the prompt. The record is deleted.

Creating legend Items

For a charting panel, some legend items need to be defined in order to apply graphic properties specific to that item, such as color, symbol, etc.

These properties are applied to these two items:

- A precise KPI (line chart or pie chart) - which is a key point indicator identified by a column and a line in the selected statistics session (in panel definition)

- A KPI set (bar chart) - which are *key point indicators* identified by a line or a column and respectively selected columns or lines of a session (in panel definition)

Displaying a legend item List

Each charting panel has children records associated with it. To display an item list, follow these steps:

- Select the **record.**
- Click **Show child** to open the child list screen shown in *Figure 11: Child Records List Screen*.

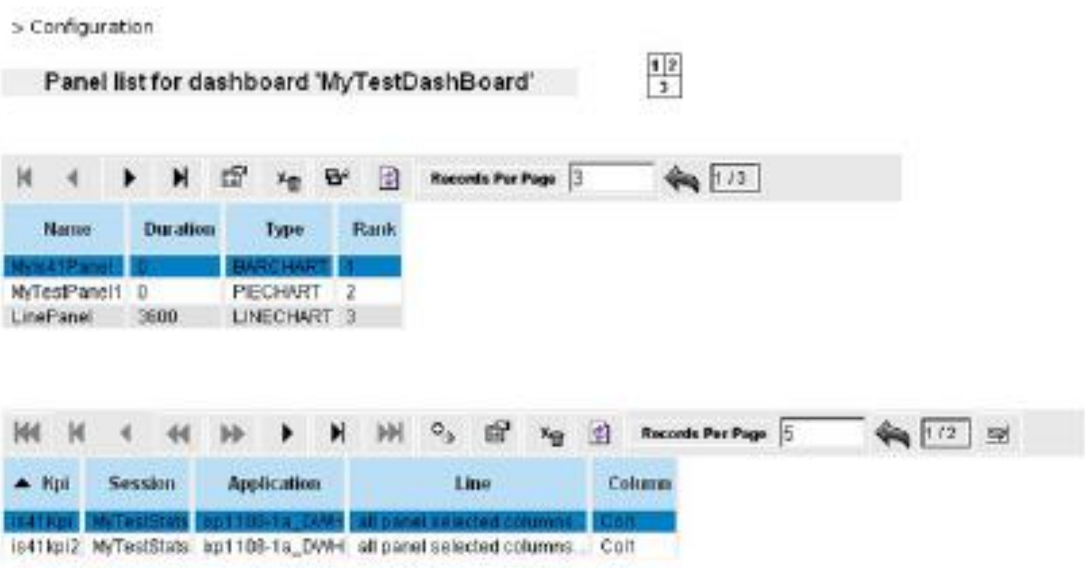

Figure 11: Child Records List Screen

Defining KPI Data Sources

Follow these steps to define a KPI data source.

- In a child record, click **Add record** to open the KPI *configuration* screen shown in *Figure 12: KPI Configuration Screen*.

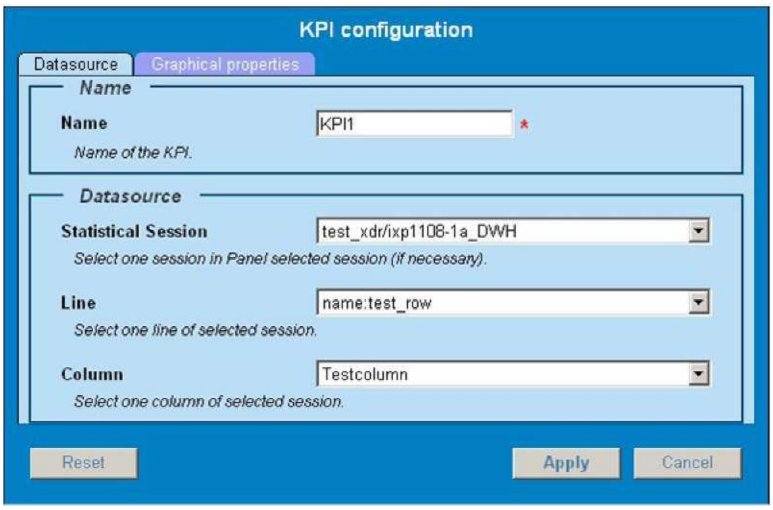

Figure 12: KPI Configuration Screen

Note : Only the numerical KPI field will be listed here , for example IMEI type (which can contains 'A','B',..) will not appear here

- Select the **Datasource** tab and set the following attributes that are described in *Table 2: Xdr Configuration Settings.*

Table 2: Xdr Configuration Settings

Attribute	**Description**
Name	Name to be displayed in the legend for this KPI
Statistical Session	Selects a statistical session if multiple sessions have been selected in the panel settings (only for a line chart)
Line	Selects a line in the statistical session. This attribute does not appear for bar charts or pie charts if the line values have been defined in the panel settings.
Column	Selects a column in the statistical session. This attribute does not appear for bar charts or pie charts if the column values have been defined in the panel settings

Note: Special characters are not allowed for name. Use only standard alphanumerical characters and "_" and "."

- Select Graphical properties tab to open this screen shown in Figure 13: Graphical Properties Tab.

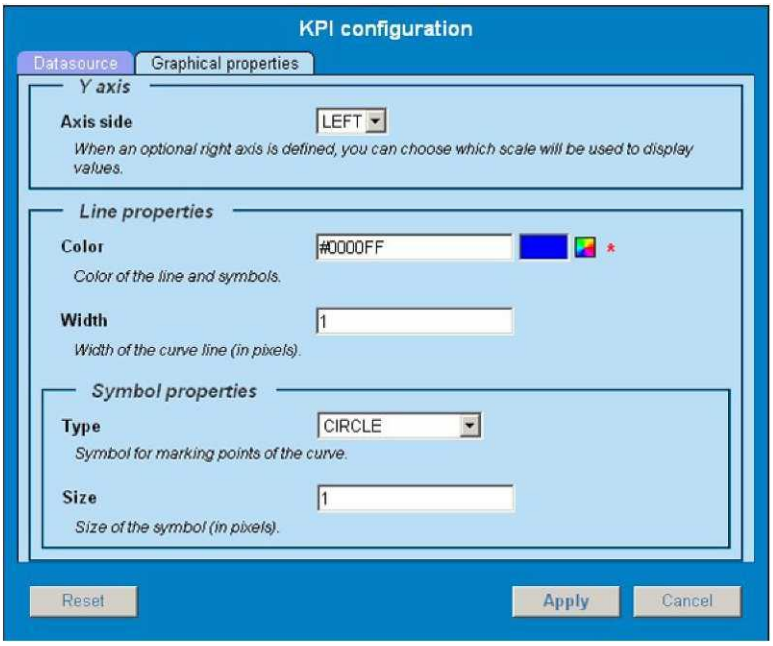

Figure 13: Graphical Properties Tab

- Select the **graphic attributes** for the datasource described in *Table 3: Attribute Descriptions*.

Table 3: Attribute Descriptions

Attribute	Description
Axis side	If an optional second Y axis has been defined (only for bar charts or line charts), you may select which axis to use.
Color	Selects color
Width	Defines line thickness (only for line charts)
Symbol type	Defines the symbol used at the value location
Symbol size	Defines the symbol size in pixels

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

Modifying the panel Order

If you would like the information of a specific record organized differently, you can modify the panel order. In this way the most pertinent information is presented first. To change the panel order, follow these steps.:

- Select the **record** you want by using the *Navigation* buttons.
- Click **Edit record** to open the panel shown in *Figure 14: Panel Settings Screen*.

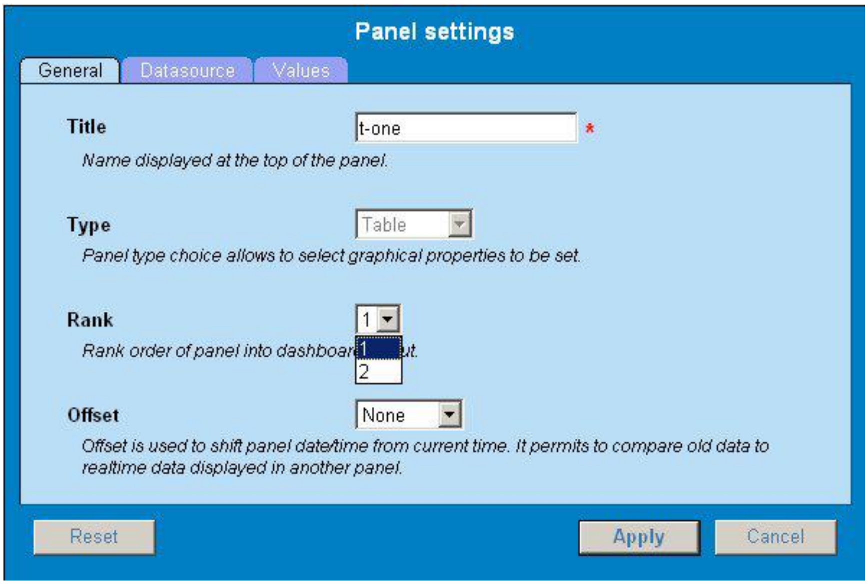

Figure 14: Panel Settings Screen

- Select the **new position** of the panel by using the corresponding attribute.
- Click **Apply** to save your settings.

Note: If the new rank is below the old one, every panel in between will be automatically shifted up. Otherwise, panels between these ranks will be automatically shift down.

Modifying privacy Settings

In order to modify access rights of a dashboard, follow these steps:

- Select the **record** you want by using the *Navigation* buttons.
- Click **Roles,** the *Change Privacy* page opens.
- Give the following **access privileges** according registered roles.
    - x : allows to display dashboard
    - w : allows to modify settings
    - r: allows to view dashboard in list and corresponding settings lists

Note: A user belongs to one or more groups, each of these being mapped to one or more roles (by default one group=one role).

Printing the Dashboard

To print dashboard:

- Select the web browser **Print menu** (right click for context menu).
- Follow the web browser standard instructions for printing a document.

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.