# Oracle® Communications Performance Intelligence Center

ProPerf User's Guide

Release 10.1.5

E56986 Revision 1

August 2015



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

Copyright © 2003, 2015, Oracle and/or its affiliates. All rights reserved.

This software and related documentation are provided under a license agreement containing restrictions on use and disclosure and are protected by intellectual property laws. Except as expressly permitted in your license agreement or allowed by law, you may not use, copy, reproduce, translate, broadcast, modify, license, transmit, distribute, exhibit, perform, publish, or display any part, in any form, or by any means. Reverse engineering, disassembly, or decompilation of this software, unless required by law for interoperability, is prohibited.

The information contained herein is subject to change without notice and is not warranted to be error-free. If you find any errors, please report them to us in writing.

If this is software or related documentation that is delivered to the U.S. Government or anyone licensing it on behalf of the U.S. Government, the following notices are applicable:

U.S. GOVERNMENT END USERS: Oracle programs, including any operating system, integrated software, any programs installed on the hardware, and/or documentation, delivered to U.S. Government end users are "commercial computer software" pursuant to the applicable Federal Acquisition Regulation and agency-specific supplemental regulations. As such, use, duplication, disclosure, modification, and adaptation of the programs, including any operating system, integrated software, any programs installed on the hardware, and/or documentation, shall be subject to license terms and license restrictions applicable to the programs. No other rights are granted to the U.S. Government.

This software or hardware is developed for general use in a variety of information management applications. It is not developed or intended for use in any inherently dangerous applications, including applications that may create a risk of personal injury. If you use this software or hardware in dangerous applications, then you shall be responsible to take all appropriate fail-safe, backup, redundancy, and other measures to ensure its safe use. Oracle Corporation and its affiliates disclaim any liability for any damages caused by use of this software or hardware in dangerous applications.

Oracle and Java are registered trademarks of Oracle and/or its affiliates. Other names may be trademarks of their respective owners.

Intel and Intel Xeon are trademarks or registered trademarks of Intel Corporation. All SPARC trademarks are used under license and are trademarks or registered trademarks of SPARC International, Inc. AMD, Opteron, the AMD logo, and the AMD Opteron logo are trademarks or registered trademarks of Advanced Micro Devices. UNIX is a registered trademark of The Open Group.

This software or hardware and documentation may provide access to or information about content, products, and services from third parties. Oracle Corporation and its affiliates are not responsible for and expressly disclaim all warranties of any kind with respect to thirdparty content, products, and services unless otherwise set forth in an applicable agreement between you and Oracle. Oracle Corporation and its affiliates will not be responsible for any loss, costs, or damages incurred due to your access to or use of third-party content, products, or services, except as set forth in an applicable agreement between you and Oracle.

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

# **Table of Contents**

Table of Contents	iii
List of Figures	v
Chapter 1: About this Manual	1
Overview	1
Scope and Audience	1
About the Performance Intelligence Center	1
PIC Documentation Library	2
Common instructions	3
Chapter 2: Understanding ProPerf	4
Overview	4
Accessing and logging into NSP	4
ProPerf's Functionality	4
Opening ProPerf	5
The ProPerf GUI	6
Page Layout	6
Dashboard Layout	6
Dashboard Columns	6
Dashboard and panel Links	7
Dashboard Display	7
Chapter 3: Using ProPerf	8
Overview	8

#### ProPerf User's Guide

Using the Dashboard Toolbar 8	
Choosing a Date8	
Viewing in Real-time8	
Using the Zoom function8	
Using the Previous and Next view8	
Appendix A: My Oracle Support (MOS) 10	
Appendix B: Locate Product Documentation on the Oracle Technology Network Site 11	

# **List of Figures**

Figure 1: PIC Overview	2
Figure 2: NSP Application Board with ProPerf and ProPerf Configuration Icons	5
Figure 3: ProPerf Main Page	<i>6</i>
Figure 4: Dashboard Screen with 2, 1 Configuration	7

# **Chapter 1: About this Manual**

#### Overview

ProPerf is a specific-purpose application that is part of Tekelec's IAS system. The ProPerf 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:

- 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 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 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.

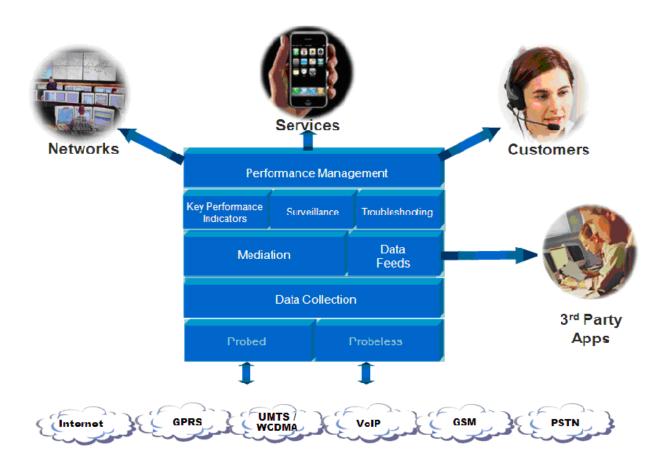


Figure 1: PIC Overview

## **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**

#### 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 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
  - o Create a panel (line chart, bar chart, pie chart or table)
  - Define xDRs to be displayed
  - o data source as source session, column and line
  - o display properties for a chart, like color, symbols, etc.
- Display enables you to perform the following:
  - o Leave a dashboard in a new page

- o 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 below

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.

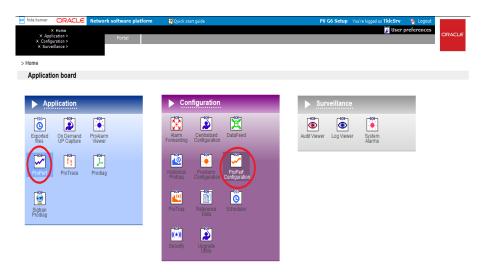


Figure 2: NSP Application Board with ProPerf and ProPerf Configuration Icons

The ProPerf application only allows the user to display prefedefined dashboards and use the dashboard toolbar. The ProPerf Configuration application allows you to create and configure dashboards.

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.

#### The ProPerf GUI

ProPerf has the same look and similar functionality as all applications in the NSP *Toolkit*.



Figure 3: ProPerf Main Page

**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
  - o 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.

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 below.

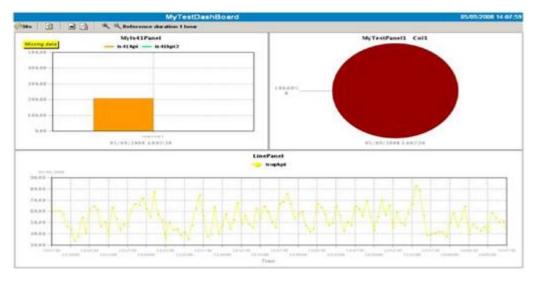


Figure 4: Dashboard Screen with 2, 1 Configuration

**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.

#### 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

#### 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 it's 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.

# **Appendix A: My Oracle Support (MOS)**

MOS (<a href="https://support.oracle.com">https://support.oracle.com</a>) 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 <a href="http://www.oracle.com/us/support/contact/index.html">http://www.oracle.com/us/support/contact/index.html</a>. 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, <a href="http://docs.oracle.com">http://docs.oracle.com</a>. You do not have to register to access these documents. Viewing these files requires Adobe Acrobat Reader, which can be downloaded at <a href="https://www.adobe.com">www.adobe.com</a>.

- 1. Log into the Oracle Technology Network site at <a href="http://docs.oracle.com">http://docs.oracle.com</a>.
- 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.