Oracle® Communications Performance Intelligence Center

Scheduler User's Guide

Release 10.1.5

E56991 Revision 1

August 2015

ORACLE®

Oracle Communications Performance Intelligence Center Scheduler 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

Topics:

This guide is designed around common tasks that you will perform, with headings and subheadings that allow you to scan the pages easily and zoom in on the information you are interested in. Take some time to browse through these tasks. You may discover things that will make your work with the Scheduler application more efficient and effective.

Scope and Audience

This guide is designed to assist the user, with roles NSPConfigUser (read only), NSPConfigPowerUser, NSPConfigManager and Administrator, in working with the Scheduler application. Beginners and experienced users alike should find the information they need to cover important administration activities required to manage the Scheduler application.

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.

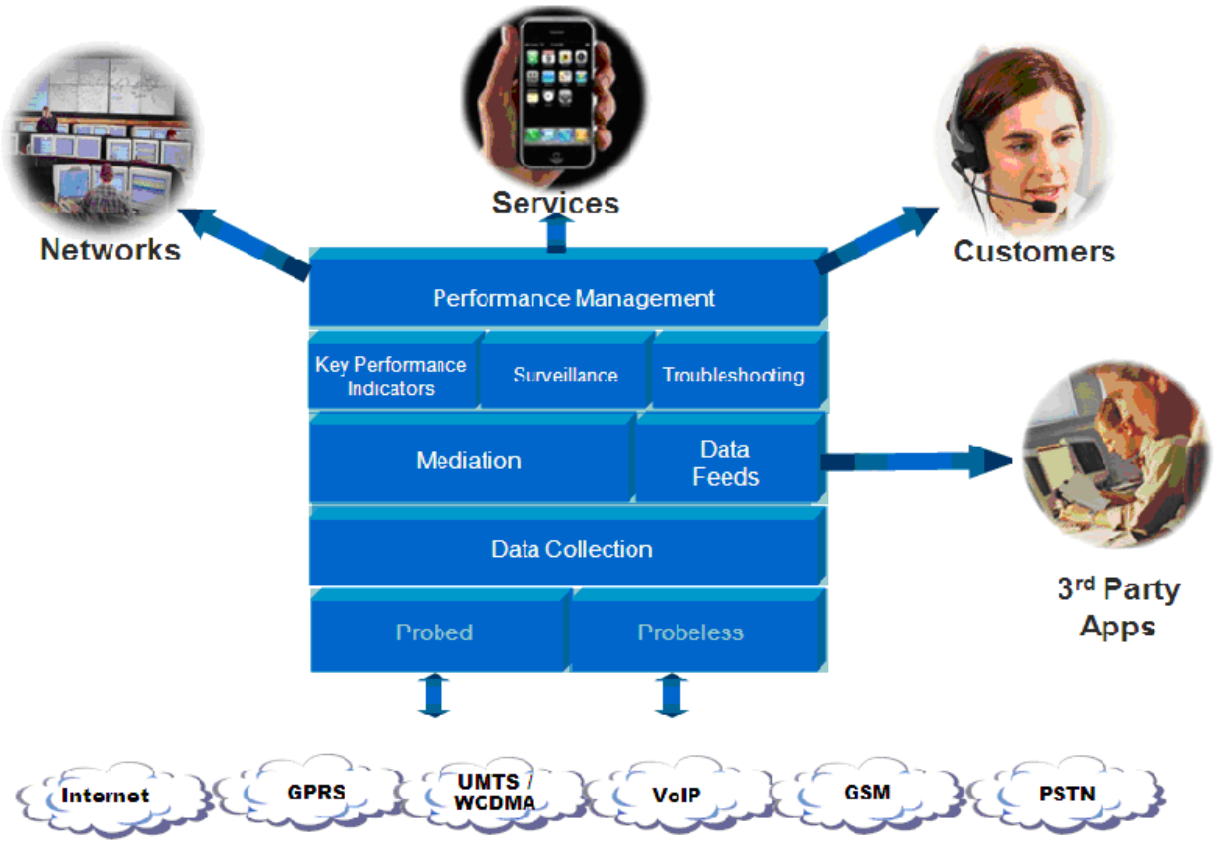

Figure 1: PIC Overview

User Preferences

All applications that query xDRs use a specific User Preferences option. The description outlined goes over the formatting screens.

Note: All screen shots presented here show default values.

Date/Time tab screen Format the time parameters.

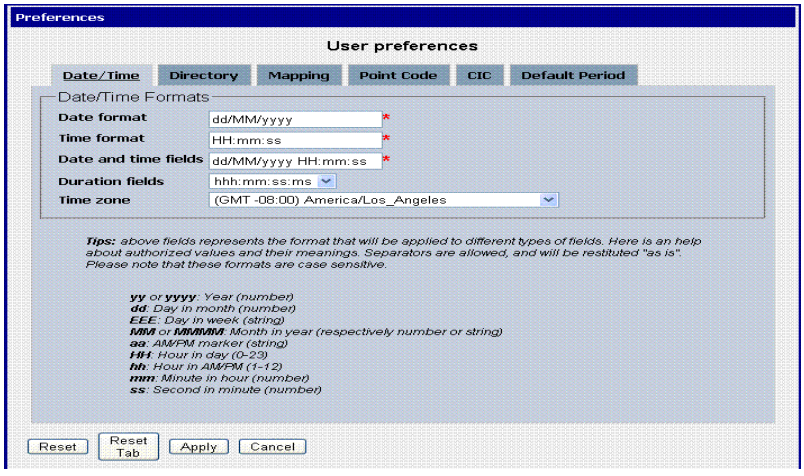

Figure 2: Date/Time Tab Screen

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	Resets to default values for the specific tab.
Apply Button	Applies any changes to the system.
Cancel Button	Exits the screen.

Table 1: Time Tab

Directory tab

Select the **Directory** tab to set the defaults directories used in transport screen.

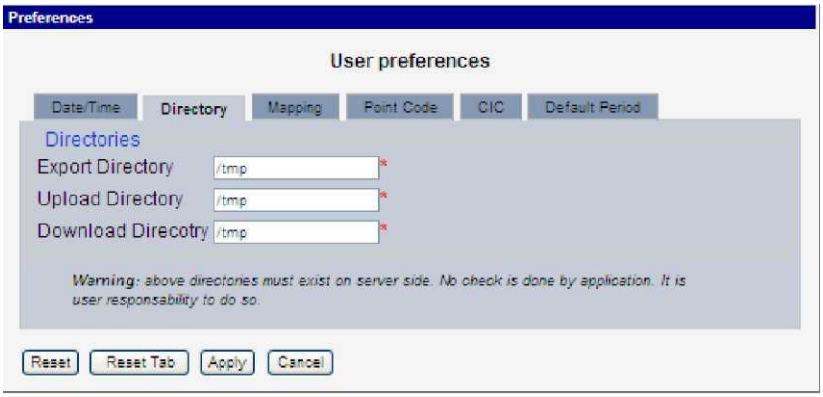

Figure 3: Directory Tab Screen

Table 2: Directory Tab Field Description

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	Resets to default values for the specific tab.
Apply Button	Applies any changes to the system.
Cancel Button	Exits the screen.

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

Mapping tab

Select the **Mapping** tab to set the xDR display parameters.

Table 3: Mapping Tab

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	Resets to default values for the specific tab.
Apply Button	Applies any changes to the system.
Cancel Button	Exits the screen.

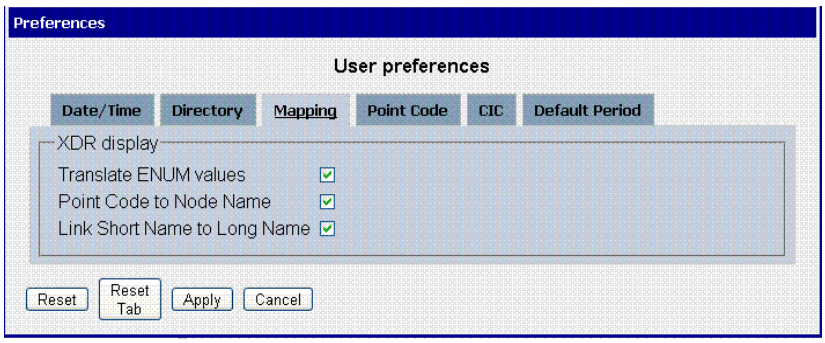

Figure 4: Mapping Tab Screen

Point Code tab

Select the Point Code tab, shown and described in the figure and table.

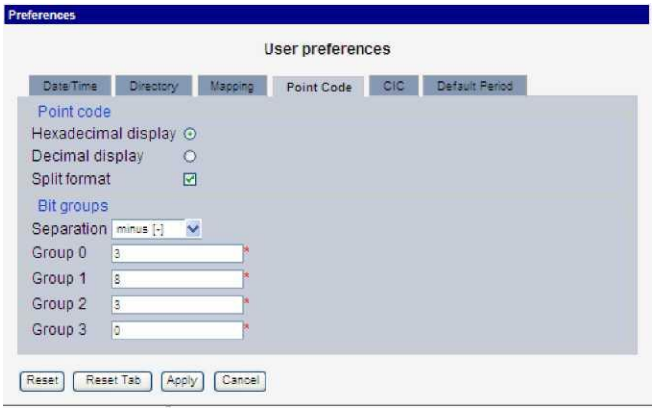

Figure 5: Point Code Tab Screen

Note: if Session Point Code feature is enabled the Point Code tab will look like

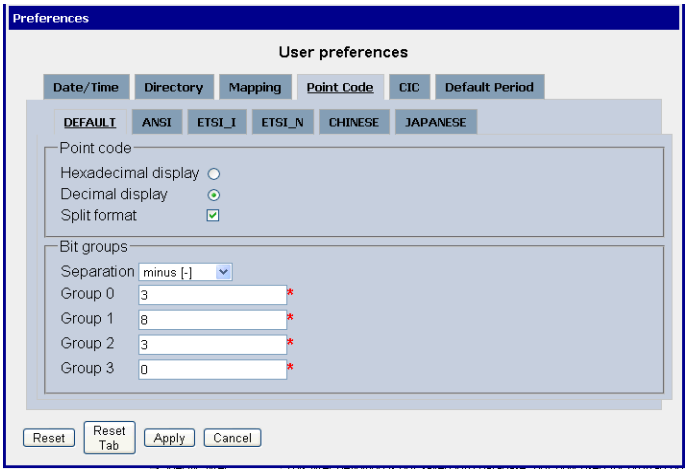

Figure 6: Point Code Tab with Session Point Code Enabled

Table 4: Point Code Tab

Field	Description
Hexadecimal display	European defaults are hexadecimal and display with Group 0-3, Group 1-8, Group 2-3, and 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	Resets to default values for the specific tab.

Apply Button	Applies any changes to the system.
Cancel Button	Exits the screen.

CIC tab

Select the **CIC** tab to set the parameters for CIC and Bit groups.

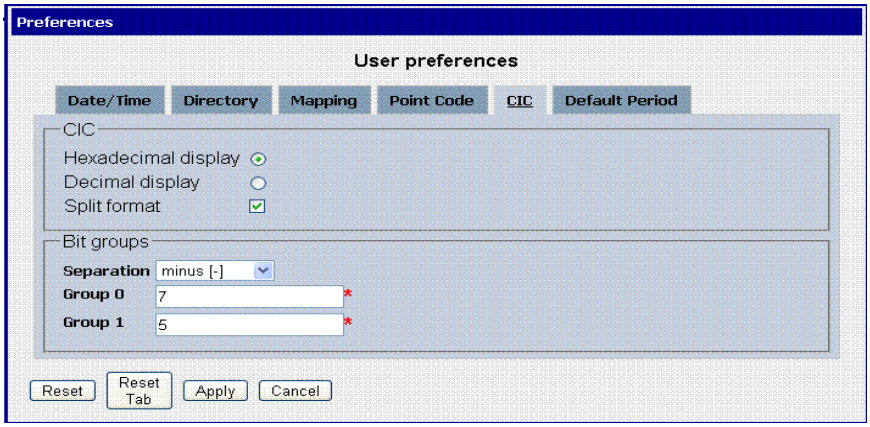

Figure 7: Formatting Rules (CIC) Screen

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	Resets to default values for the specific tab.
Apply Button	Applies any changes to the system.
Cancel Button	Exits the screen.

Table 5: CIC Tab Field Descriptions

Default Period tab

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

Figure 8: Default Period Tab Screen (ProTrace only)

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 6: Default Period Tab Field Descriptions

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: Understanding Scheduler Application

Topics:

About Scheduler Functionality

Scheduler app enables you to manage scheduler tasks. You can browse, create, modify and delete tasks. The current release of Scheduler only supports xDR export tasks. Scheduler enables you to export xDRs retrieved by using selected queries from either a Session or Network View. You can specify a specific task period such as an hour, day, week, month or only one time. When the result is stored into the database you can browse the files using the Exported Files application. The application utilizes a wizard to guide you through the export process using the navigation buttons (previous / next) on the bottom of each screen. The type of export can be in a variety of formats such as: XML, XLS, CSV, HTML, TXT or ZIP. In addition each export can also be exported using FTP transfer.

Note: On the initial screen the previous button is not functional (grayed out).

Opening the Scheduler Application

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.

Note: To log into NSP, you must have a NSP userid and password provided by your system administrator.

Once you have logged into *NSP*, the Application Board opens.

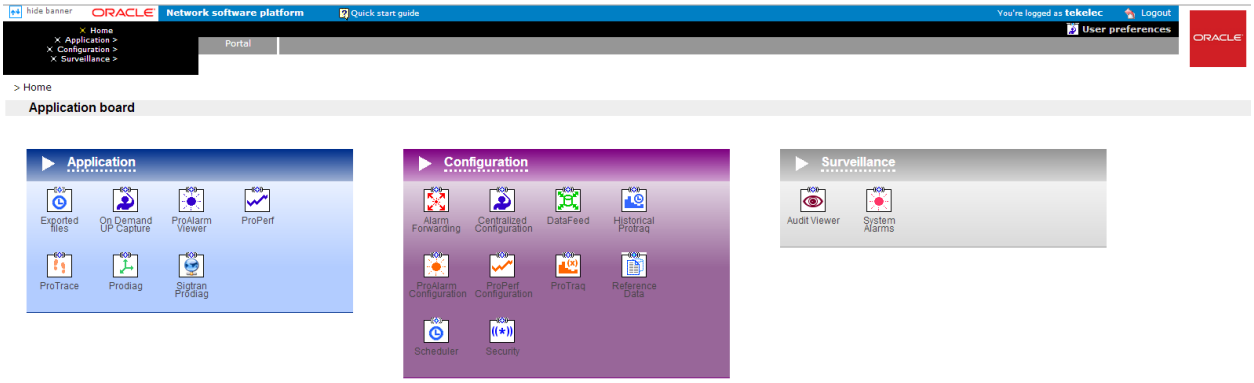

Figure 9: Main Screen

To open the Scheduler application, click on the **Scheduler** Icon, in the Configuration section of the page. The Main screen opens showing exported files.

Scheduler Main Screen

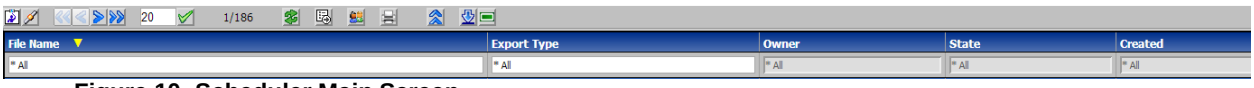

Figure 10: Scheduler Main Screen

- Menu bar - that has two menus
- Toolbar - that provides a variety of feature buttons and filtering options
- Task list table - that lists, in table format, scheduled tasks

Disposition: / Status:

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.

Menu Bar

The menu bar provides two menus for exporting xDR sessions.

Note: Both the Exported Files and the Scheduler applications can have two menu options under the Schedule menu depending on the role that is accessing the application. For the purposes of this help topic, only the Exported Files option is discussed (for the user who has a role of either NSPBusinessPowerUser or NSPBusinessManager)

Note: Only users with the roles NSPBusinessPowerUser or NSPBusinessManager can export files.

- Exported Files - opens the list of xDR sessions that have been exported from ProTrace. From this screen you can manage the sessions.
- Help - provides information about Exported Files and opens online help.

Note: The online help also opens when you press **F1** key.

Tool Bar

Figure 11: Scheduler Toolbar

The tool bar has the following function buttons:

Filter - enables you to create filters for scheduled tasks to make searches convenient

First page - clicking this icon takes you to the first screen of task list table (in a multi-page list)

Previous - clicking this icon opens the previous page of the task list table (in a multi-page list)

Next - clicking this icon opens next page of the task list table (in a multi-page list)

Last page - clicking this icon opens the last page of the task list table (in a multi-page list)

Refresh - enables you to refresh the current screen to see all recent changes. Schedule - enables you to schedule tasks.

RECORDS PER PAGE -- Can show up to 500 records on a page.

Create Task - Opens the task wizard that enables you to create a scheduled task.

Modify Task - Opens the modify wizard that enables you to modify an existing task.

Delete Task - Deletes an existing task.

Record Table

The record table provides several columns that you can organize your data records.
Note: The tables that show the tasks are the same and so in these descriptions the term "task" is used. The columns are:

- Task Name - shows the name of the scheduled task (this column can be sorted in ascending or descending order)
- Group - type of task (export of xDRs which is abbreviated SCN)
- Next Fire Time -shows the time that the task will be next initiated.
- Previous Fire Time - shows the time that the task was previously initiated.
- Owner - shows the owner/creator of the task
- Creation Time - shows the date and time when the task was created

Chapter 3: Using Scheduler Application

Topics:

Creating Table Filters for Exported Files and Scheduler Tasks

You can create filters to use with your files or tasks. Filters enable you to quickly sort through large numbers of files or tasks. Complete these steps to create a filter to be used with a file or task.

1. Select a **file** or **task** from the interface.

The figures show Exported Files and Scheduler screens at the first file record highlighted.

Note: The only files that you can view are those that fit your privacy role. For more information on privacy, contact your System Administrator.

2. Click the **Filtering** icon on the tool bar.

The System Query Dialog screen opens. With the name of the query in the Name field.

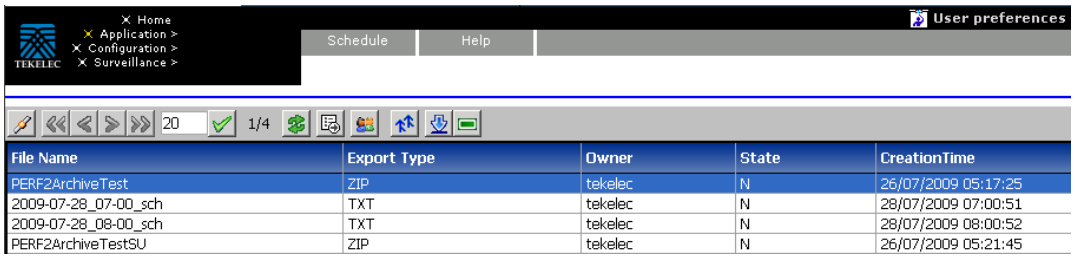

Figure 12: Exported Files Interface with File List

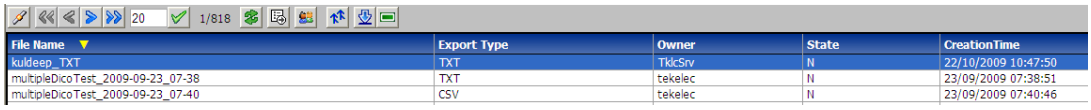

Figure 13: Scheduler Task Interface With Task List

3. (Optional) Enter a **Description.**

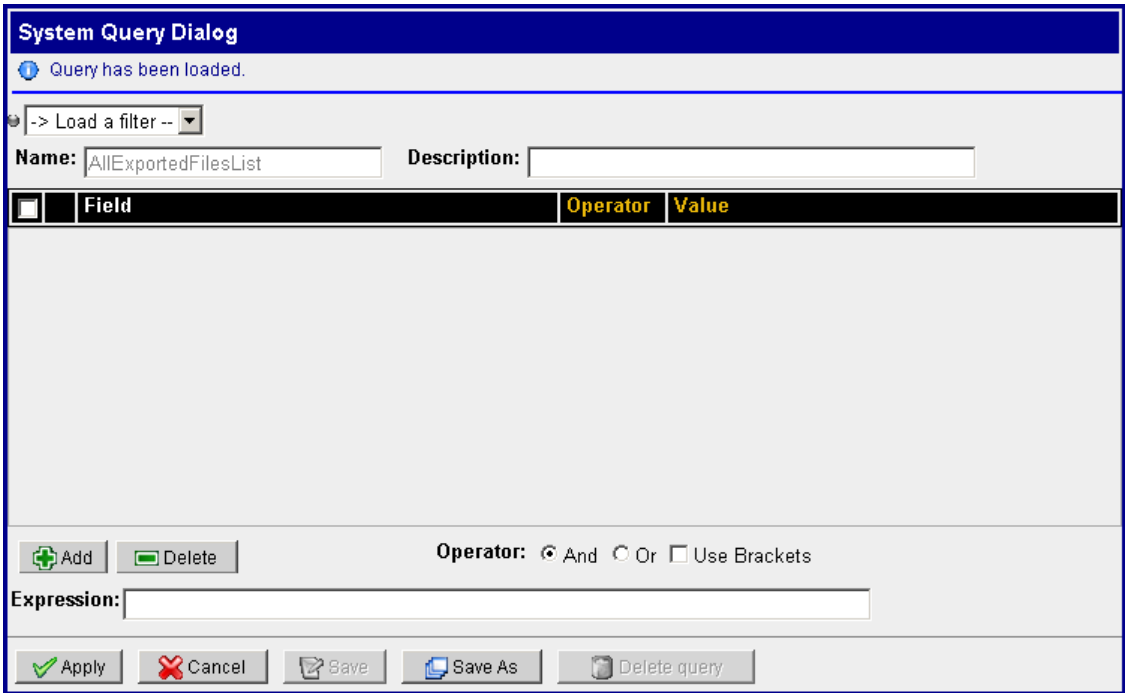

Figure 14: Query Dialog Screen

4. Click **Add** to create a condition.

The filter field changes to Modified and the condition parameters appear shown in the figure.

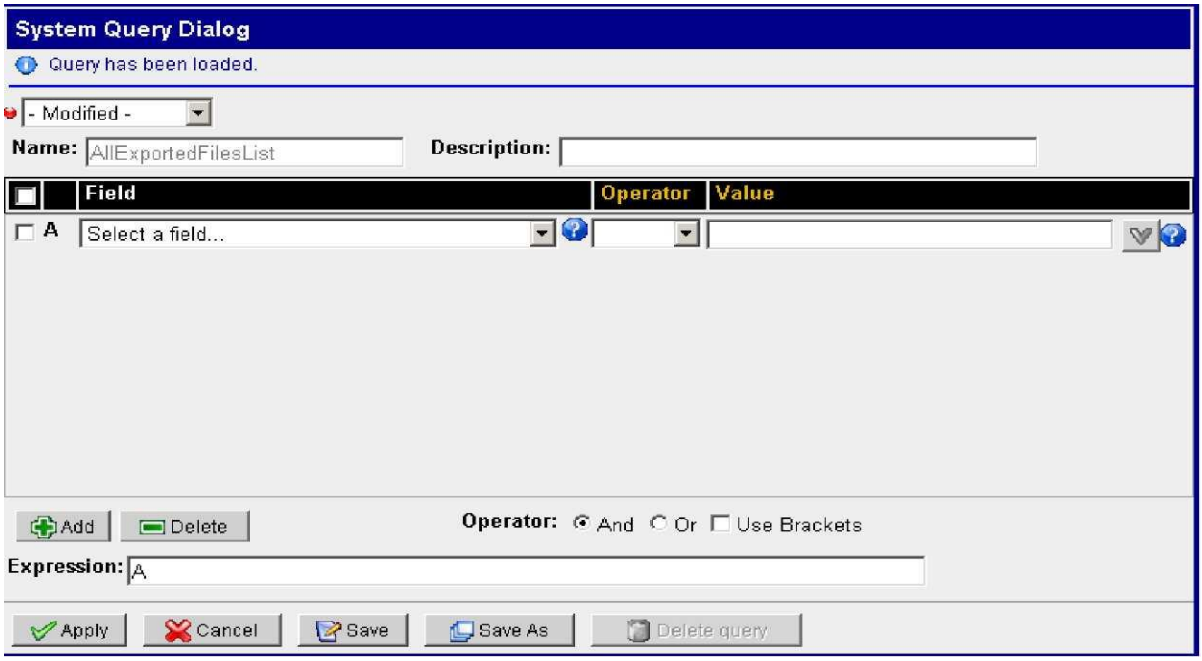

Figure 15: Query Dialog with Filter Parameters

Note: The condition will be added to the expression with the operator "And" or "Or" selected in the radio buttons.

5. Select a **Field, Operator** and **Value** for the condition.
   Repeat steps 4-5 to create multiple conditions.
6. If needed, manually edit the **expression** in the expression field.
7. To save the filter to be used with files, click **Save As.**

Note: To use the filter for immediate use without saving, click Apply.

Renaming a query

When you rename an existing query, a new query is created. As a result, two queries will exist. One with the old name and one with the new name.

Modifying a Query

Complete these steps to modify a query.

1. Click **filtering** on the tool bar.

The System Query Dialog Screen opens..

2. Select the query from the query drop-down list

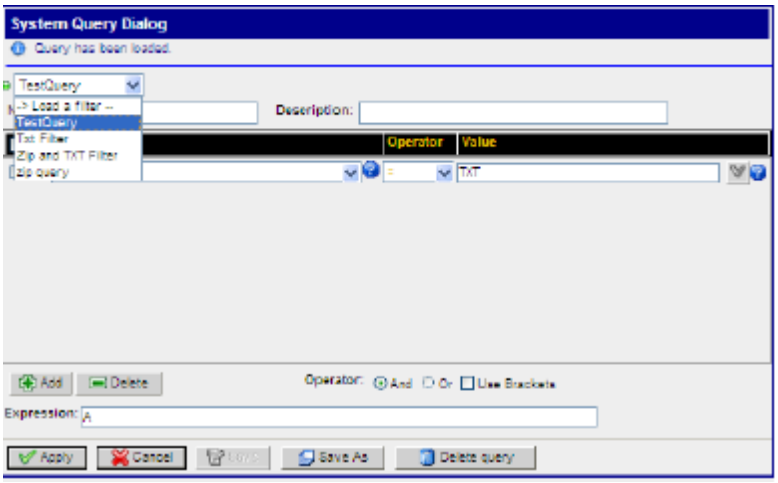

Figure 16: System Query Dialog Screen with drop-down list

3. Make the necessary modifications.
4. Click **Save Query.**

   The query is modified.

Scheduling a Task

Scheduler enables you to schedule tasks and download results of those programs so that you can schedule xDR exports at defined intervals including hourly intervals.

Note: One user can schedule up to a maximum of 10 tasks. You are prompted if you exceed the number of allowed tasks.

Note: The privacy settings associated with your role dictate which created tasks are displayed.

Creating a Scheduled Task

The Scheduler application enables you to schedule tasks for specific times. Complete these steps to create a scheduled task.

1. From the main page that shows the tasks, click the **Create Task** icon located on the tool bar. The Scheduling screen appears.

   Note: A red x beside the field signifies that the field is not filled in correctly. **General**

2. Type in the **Name** of the Task

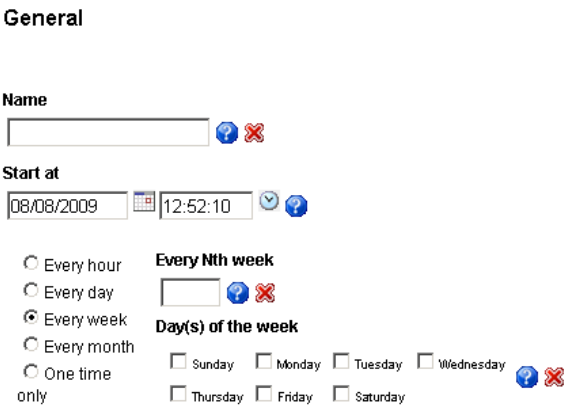

Figure 17: Scheduling Screen

3. In the Start at section, select the **Date** and **Time** when the task will be initiated.

   Note: The start time and date can be selected by clicking on the calendar and the clock icons to the right of each field.

   Note: The time the task is initiated must be newer than the current time.

4. Select the time interval (hour, day, week, month or one time only)

   Note: The export folder must be maintained. If the folder gets too full, random results can occur when scheduling a task for "every hour."

   Note: The screen changes for each interval selected.

5. Click the Next

The session screen appears

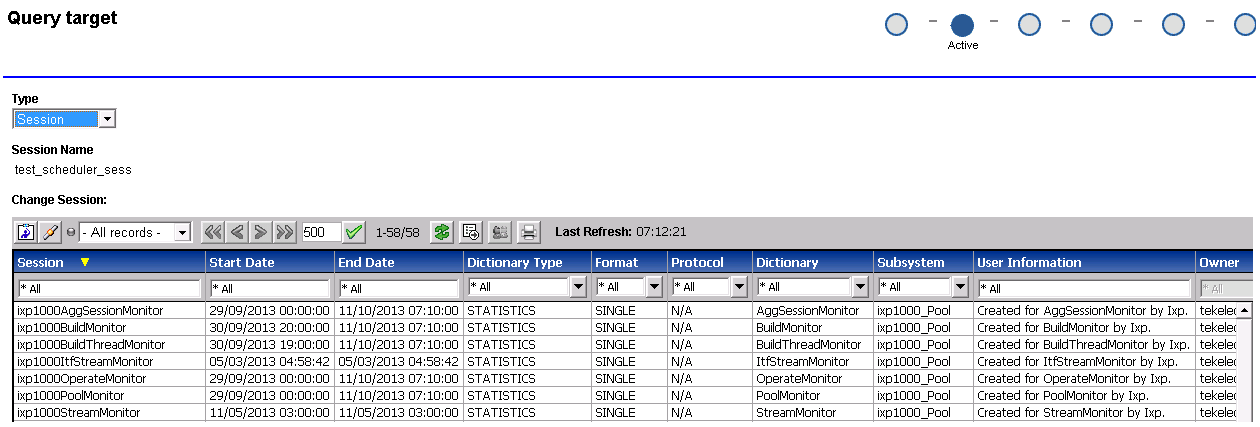

Figure 18: Session Screen

Note: 1. Last calculated time shown as a tooltip for Start date, End date columns denotes the last update time from IXP

2. Last refresh in the toolbar displays the last refresh time of the list

6. Select a **Session.**

7. Click **Next**

The session query screen opens. Where you select the filter query for the task. At this step you can also create a new filter query by clicking the Filter icon on the tool bar.

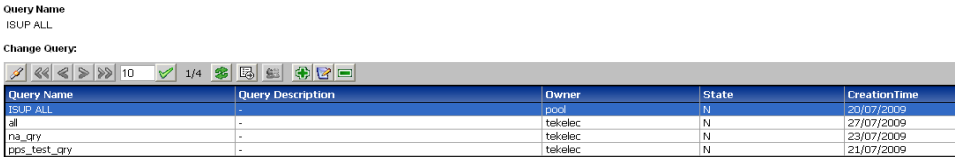

Figure 19: Session Query Screen

8. Select the **Query** to be used.

   Note: If the selected query result is huge then the export may take time. Exported File would be visible only when the export is complete.

9. Click **Next.**

   The Export data and format selection screen appears.

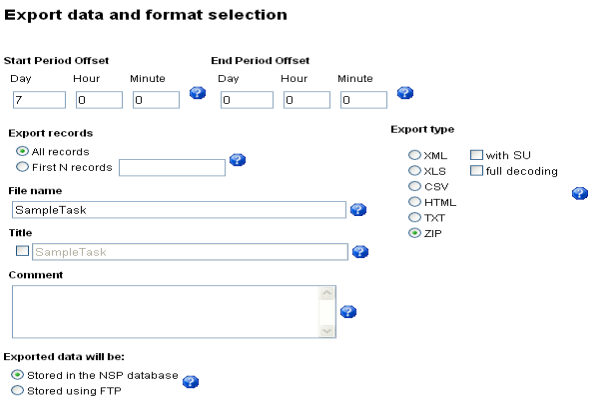

Figure 20: Export Data and Format Selection Screen

Note:

- ZIP is only available for users with NSP Business Power User role.
- ZIP is not available for the current page option.
- ZIP is available for single dictionary queries only.
- The SU and Full Decoding options are only available for users with NSP business Manager Role.
- The Stored in the NSP database option is only available for users with NSP Business Power User role.

10. Select **Start Period Offset** and **End Period Offset** for the task.
    The start time must be greater than the end time.
    The values must be between 0-365, 0-23 and 0-59.
11. Select the Export records option.
    All records to be included or enter a number for the first "N" records to be included.
    Note: The number of records is limited by system constraints (see system constraints).
12. Enter or keep the **File Name.**
13. (Optional) Select if you want the **title** name to appear at the beginning of the file (depending on the format used).
14. (Optional) You can enter a **comment** to provide extra information about the file. (It can also appear in the file result depending on the format used.)
15. Select where you want the task **stored.** NSP

    Database or to a particular site (FTP)

    Note: When you select *the Stored in the NSP database* option with the ZIP format an xDR session is created which can be viewed in ProTrace.

16. Select the **Export type (format). Note:** ZIP format is not available form queries with

    multiple dictionaries.

    Note: SU and full decoding options are available only with the text (TXT) or ZIP format. For ZIP format when SU is chosen, the full decoding option is automatically selected.

    Note: SU and full decoding options are only available for users with NSPConfigManager privileges.

17. Click **Finish.**

    The task appears in the task table.

If the database option is selected and is successfully executed, the task is stored in the NSP database with the date and time in the suffix of the file name.

Configuring FTP Settings for a Scheduled Task

The Scheduler application enables you to export tasks using FTP. Complete these steps to configure the settings for FTP export.

1. From the Export data and format selection screen, select **Stored using FTP** . To a particular site (FTP)
2. Click **Next.**

   The FTP Settings screen appears.
3. Click **Finish.** The task appears in the task table.

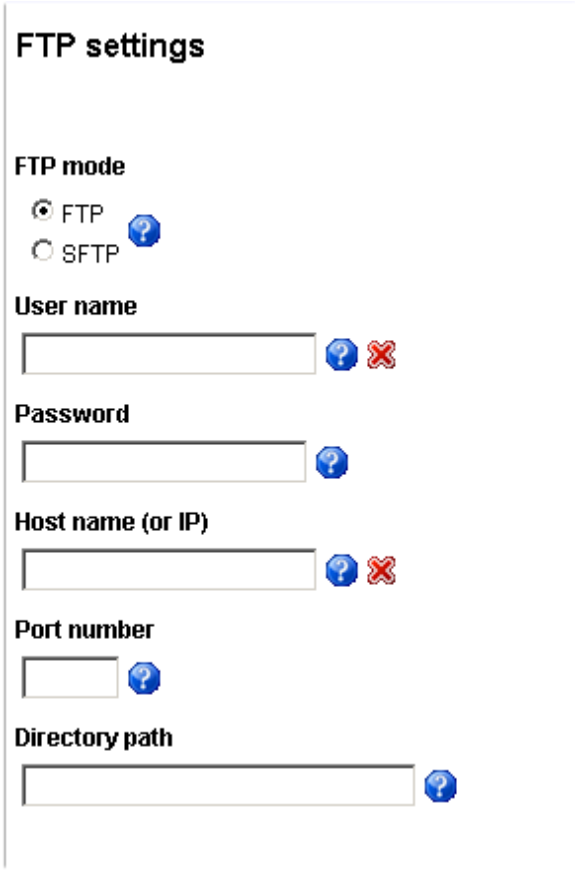

Figure 21: FTP Settings Screen

4. Select **FTP mode.**

   FTP or SFTP

   Note: When choosing a sftp server, if you need to configure it, see the installation document.
5. Enter the **User Name** for login.

6. Enter the **Password** for the login.
7. Enter the **Host Name** or an **IP Address.**
8. Enter the **Port Number** if there is one.
9. Enter the **Directory Path** (if needed).
10. Click **Next.**

The result of the export is sent to the FTP or SFTP with the Suffix of the date and time. For example: *yyyy-mm-dd_hh_mm_Name.*

Modifying a Task

Complete these steps to modify a task.

1. Select the **task** to be modified from the *Task List.*
2. Click **Modify.**
3. Make the necessary modifications.
4. Click **Apply.**
   The changes are saved.

Deleting a Task

Complete these steps to delete a task from a *Task List*

1. Select the **task** to be modified from the *Task List.*
2. Click **Delete.**
3. Click **OK.**
   The query is deleted.

   The results are stored in the database.

Exporting the Content of the Task List

Complete these steps to export the content of a task list.

1. Click **Export** on the tool bar.
2. Select the **Choice of data** to be exported. You can choose:
   a) Current page
   b) All results
   c) First records

   Note: If you select *First records* type in a number for the number of records that will be exported. For example, entering the number 100 designates that only the first 100 records are to be exported.

Note: The export folder must be maintained. If the folder gets too full, random results can occur when scheduling a task for "every hour."

Note: Any session name created for this file is greater than 30 characters is truncated.

3. (Optional - dependent on export format) Select "**Enter"** a title and enter the **title** of the export.
4. (Optional-dependent on export format) You can select whether to have the title **inserted at the beginning of the exported file** by selecting the option by the Title field.
5. (Optional-dependent on export format) You can type a **comment or description** in the *Comments* field.

Note: The file is saved in the same extension type as in the list.

6. Select the format type in the *Choose an Export Type* section: Formats are listed here:
   a) XML
   b) XLS
   c) CSV
   d) HTML
   e) TXT
7. Click **Export** to make the export effective.

System Export Constraints

The table shows the system export limits for each format for one task.

Format	Max. # of xDRs for Scheduled Exports
ZIP	1,000,000
TXT	100,000
XML	10,000
HTML	10,000
CSV	1, 000,000
XLS	65,535

Table 7: System Export Format Limits

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.

Glossary

F

FTP File Transfer Protocol

A client-server protocol that allows a user on one computer to transfer files to and from another computer over a TCP/IP network.

N

Network Software Platform

NSP

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.

P

Performance Intelligence Center

PIC

The Performance Intelligence Center (PIC) system monitors a network to collect PDUs for correlation and storage.