



IBM Tivoli Netcool Performance Manager for Wireless 9.1.2

*Using the optional extended functions menu
to create a non-stored busy hour report*

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IBM Tivoli Netcool® Performance Manager for Wireless 9.1.2

Using the optional extended functions menu to create a Non-Stored busy hour report

Assumptions

Before attempting this module, you should already know how to use IBM Tivoli Netcool Performance Manager for Wireless 9.1.2 software to perform the following tasks:

- ▶ Log into the Tivoli Netcool Performance Manager for Wireless (TNPMW) server
- ▶ Create and run a basic report definition
- ▶ Navigate to and open TNPMW documents



Before attempting this module, you should already know how to use IBM Tivoli Netcool Performance Manager for Wireless 9.1.2 software to perform the following tasks:

- Log into the Tivoli Netcool Performance Manager for Wireless (TNPMW) server
- Create and run a basic report definition
- Navigate to and open TNPMW documents

Assumptions (continued)

If you can not perform the previous tasks, you can learn how to do them by taking an IBM Tivoli Netcool Performance Manager for Wireless 9.1.2 User course titled IBM Tivoli Netcool Performance Manager for Wireless 9.1.2 User:

http://www.ibm.com/software/tivoli/education/edu_prd.html#X916845N81075L22



If you can not perform the previous tasks, you can learn how to do them by taking an IBM Tivoli Netcool Performance Manager for Wireless 9.1.2 User course.

Objectives

Upon completion of this module, you should be able to:

- ▶ Understand what is represented by the term busy hour
- ▶ Explain the difference between a stored busy hour and a non-stored busy hour
- ▶ Navigate to and use the Type, Repository, and Folder menus to bring up an existing report definition
- ▶ Understand the Optional Extended Functions fields used in defining a non-stored busy hour report definition

Upon completion of this module, you should be able to:

- Understand what is represented by the term busy hour
- Explain the difference between a stored busy hour and a non-stored busy hour
- Navigate to and use the **Type**, **Repository**, and **Folder** menus to bring up an existing report definition
- Understand the **Optional Extended Functions** fields used in defining a non-stored busy hour report definition

Busy hour definition

A busy hour represents the period with the greatest value for any performance metric for a defined period of time.

Busy Hour: A busy hour represents the period with the greatest value for any performance metric for a defined period of time.

Non-stored busy hour definition

A non-stored busy hour is a newly computed calculation. This calculation is performed with data not found in prior aggregations or stored reports. Non-stored busy hour measurements yield a single busy hour determination for a current day, week, or month.

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Selecting a report definition for editing

Tivoli Netcool Performance Manager for Wireless

Help

MyFavoritesReportingAlarmBrowseMonitorPreferencesTools

define reportmanage reportnew schedulemanage schedulereporting help

Report Name:
None Selected

Step 1: DataSource Selection
None Selected

Step 2: Focal Entity Type
None Selected

Step 3: Field Selections
None Selected

Step 4: Date-Time Selection
None Selected

Step 5: Filtering
None Selected

Optional: Extended Functions
None Selected

Please select a report

Type: Report Definition

Repository: personal documents

Folder: sysadm

Ericsson Busy Hr

Nokia-Cell-Attempts-D

PMW_Fundamentals_ILO_Test_Report

opendelete

Click the **open** button

Using the optional extended functions menu to create a non stored busy hour report

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In this example we choose an existing report named **Nokia-Cell-Attempts-D**. We will edit this report definition to add the optional extended function parameters. These parameters are needed for a non-stored busy hour report definition. We first select the desired report definition. Next, we click the **open** button.

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Loading an existing report definition

Tivoli Netcool Performance Manager for Wireless

[MyFavorites](#)
[Reporting](#)
[Alarm](#)
[Browse](#)
[Monitor](#)
[Preferences](#)
[Tools](#)

[Help](#)
[About](#)
[Bookmark](#)

[define report](#)
[manage report](#)
[new schedule](#)
[manage schedule](#)
[reporting help](#)

Report Name

Nokia-Cell-Attempts-D

(personal documents) : /Users/syaadm

Step 1: DataSource Selection

student138.ibm.com-rs

edit

Step 2: Focal Entity Type

Cell

edit

Step 3: Field Selections

Cell.CallsAttempted, Cell.CallsSucc, Cell.CallsFail

edit

Step 4: Date-Time Selection

edit

Selected Date-Times

5/4/08 00:00-24:00

Start Of Week: Default (Sunday)

Step 5: Filtering

None Selected

edit

Optional: Extended Functions

edit

Busy Hour

None Selected

Group by

None selected

Ranking

None selected

FILTERED N-HIGH

None selected

REHOMING

true

Using the optional extended functions menu to create a non stored busy hour report

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The existing report definition named **Nokia-Cell-Attempts-D** is now loaded. The name of the report we loaded is shown displayed under the **Report Name** heading. Notice that the first four steps are filled in on an existing report definition. Of major importance is the entry selected in **Step 2: Focal Entity Type**.

Cell as the focal entity type

<i>Report Definition Section</i>	<i>Guideline</i>
FOCAL ENTITY TYPE	Cell
FIELD SELECTION	Cell.CallAttmp
DATE-TIME SELECTION	<ul style="list-style-type: none">• Date: 11/16-11/22• Time: 00:00-24:00
FILTERING	101
BUSY HOUR	<ul style="list-style-type: none">• Non-Stored Busy Hour• Cluster Entity: Cell• Criterion field: Cell.CallAttmp• Group by: Day
GROUP BY	Attribute and Time: Cell_ID, Day, Hour

In the table example presented here **Cell** is the chosen **Focal Entity Type**. This choice dictates what can be chosen in **Step 3: Field Selections**.

Step 3: Some options for focal entity type cell

The screenshot displays a software interface for defining a report. It is divided into two main sections: "Step 2: Focal Entity Type" and "Step 3: Field Selections".

In the "Step 2: Focal Entity Type" section, the value "Cell" is selected and circled. An arrow points from this selection to the "Entity:" dropdown in the "Step 3: Field Selections" section.

In the "Step 3: Field Selections" section, the "Entity:" dropdown is open, showing a list of options: "Cell", "CDMA_Channel", "Cell_Connection_Type", "Cell_DFCA", and "Cell_TRX_Type". The "Cell" option is highlighted and circled. To the right of the dropdown is a "Find Entity" button.

Below the "Entity:" dropdown, the "Technology:" field is also set to "Cell" and circled. The "Filter:" field is empty.

The bottom of the slide features a red banner with the text: "Using the optional extended functions menu to create a non stored busy hour report" and "© 2009 IBM Corporation". The number "10" is visible in the bottom right corner of the banner.

This slide shows a report definition with a **Step 2: Focal Entity Type** set to **Cell**. Also shown are some of the many **Step 3: Field Selections Entity** options available to **Cell**. The primary fixed point of a non-stored busy hour report definition is always the focal entity type selected. **Step 3: Field Selections** options change when we change the **Step 2: Focal Entity**.

STEP 3: All options for focal entity type HLR

The screenshot displays a two-step configuration process. The top section, 'Step 2: Focal Entity Type', has a dropdown menu with 'HLR' selected and circled. An arrow points from this selection to the 'Entity:' field in the 'Step 3: Field Selections' section below. In Step 3, the 'Entity:' dropdown also shows 'HLR'. The 'Technology' dropdown is open, showing a list with 'HLR' at the top (highlighted in blue), followed by 'AUC' and 'D_Link'. A circle is drawn around the 'Technology' dropdown list, and an arrow points from the 'HLR' option in the list to the 'Entity:' field.

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This slide shows a totally different report definition with a **Step 2: Focal Entity Type** set to **HLR**. The **Focal Entity Type** selection is central to the non-stored busy hour report definition. Notice that **HLR** has only three **Entity** options available.

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Opening the optional extended functions section

Tivoli Netcool Performance Manager for Wireless

Help About Bookmark

MyFavorites Reporting Alarm Browse Monitor Preferences Tools

define report **manage report** new schedule manage schedule reporting help

Report Name

Nokia-Cell-Attempts-0

Folder

[personal documents] /Users/syaadm

Step 1: DataSource Selection

student138.ibm.com-rs

edit

Step 2: Focal Entity Type

Cell

edit

Step 3: Field Selections

Cell CallsAttempted, Cell CallsSucc, Cell CallsFail

edit

Step 4: Date-Time Selection

Selected Date-Times

5/4/08 00:00-24:00

Start Of Week: Default (Sunday)

edit

Step 5: Filtering

Optional: Extended Functions

edit

Busy Hour

None Selected

Group by

None selected

Ranking

None selected

FILTERED N-HIGH

None selected

REHOMING

None selected

Click the **edit** button

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With the prior slides in mind, we will begin demonstrating modifying an existing report definition. We will do this by opening the **Optional: Extended Functions** section. This section is currently blank. We click the **edit** button to the far right of the **Optional: Extended Functions** heading in order to begin.

The optional extended functions subsections

Optional: Extended Functions

BUSY HOUR: None Selected	<input type="button" value="edit"/>
GROUP BY: None selected	<input type="button" value="edit"/>

Click the **edit** button

The **Optional: Extended Functions** section has two subsections which we will edit. They are **BUSY HOUR** and **GROUP BY**. We start by editing the **BUSY HOUR** subsection. To do this we click the **edit** button to the far right of **BUSY HOUR**.

Optional extended functions busy hour menu options

Optional: Extended Functions

The screenshot shows a software interface with two dropdown menus. The first menu, labeled 'BUSY HOUR:', has 'Non Stored Busy Hour' selected. The second menu, labeled 'Group by', has 'Day' selected. A list of options (Year, Month, Week, Day) is visible for the 'Group by' menu. Two black arrows point to the 'Non Stored Busy Hour' and 'Day' options respectively.

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The **Busy Hour**:field only accepts **Non Stored Busy Hour**. **Group by** gives the option of choosing between **Day**, **Week**, **Month**, and **Year**. In this example **Day** is selected. If the user selects a **Group by** value of **Month** then one busy hour will be returned per focal entity for each month in the report. **Group by** is usually left with the default value of **Day**.

More BUSY HOUR field menu selections

Select the field marked by circles

Optional: Extended Functions

BUSY HOUR: Non Stored Busy Hour Group by Day

Field Selection

By Selection

Cluster Entity Cell Browse Cluster

Field Filter * apply

Cell Browse Entity CallsAttempted

Click the set button

unset set

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For this demonstration we select the following field menu items to complete the **BUSY HOUR** subsection:

- Field Selection: By Selection
- Cluster Entity: Cell
- Field Filter: * (wildcard asterisk)
- Entity: Cell, CallsAttempted

Next, we click the **set** button.

Opening the GROUP BY subsection

Optional: Extended Functions

BUSY HOUR:	edit
Non Stored Busy Hour: Cluster Entity Cell and Cell.CallsAttempted group by Day	

GROUP BY:	edit
-----------	------

Click the **edit** button

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Next, we click the **GROUP BY** subsection **edit** button.

This uppercase **GROUP BY** subsection is not to be confused with the **Group by** day, week, month selection menu viewed prior under the **BUSY HOUR** subsection.

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Editing the GROUP BY subsection

Optional: Extended Functions

BUSY HOUR: edit

Non Stored Busy Hour: Cluster Entity Cell and Cell.CallsAttempted group by Day

GROUP BY: Attribute and Time unset set

Group by Time

☐ Year ☐ Month ☐ Week ☒ Day ☒ Hour ☐ 30 min

Group by Attribute

Entity List: Cell Browse Entities

Cell.BSC_Id
Cell.BVC_Id
Cell.Cell_Description
Cell.Cell_Id

add delete move move

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The **GROUP BY** subsection is now opened. The following modifications have been made for non-stored busy hour reporting on the network cells:

GROUP BY menu is set to **Attribute and Time**

Group by Time is set to **Day**

Group by Attribute is set to **Cell**

We click on **Browse Entities** and select **Cell.BSC_Id**. This will cause the report to monitor and output data on the busiest traffic hour of the day selected for network cells by their BSC identification number.

Next, we click the **set** button.

Finalizing the group by attribute selection

GROUP BY: Attribute and Time

unset set

Group by Time

☐ Year ☐ Month ☐ Week ☒ Day ☒ Hour ☐ 30 min

Group by Attribute

Entity List: Cell

Browse Entities

Cell.BCH_Power
Cell.Id
Cell.BV
Cell.Cell_Description

add delete

Cell.BSC.Id

move move

First, we click the **add** button to designate **Cell.BSC.Id** as our **Group by Attribute** selection.

Next, we click the **set** button located to the far right.

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Optional: Extended functions sections

Optional: Extended Functions

BUSY HOUR:

Non Stored Busy Hour: Cluster Entity Cell and Cell.CallsAttempted group by Day

edit

GROUP BY:

Attribute And Time: Cell.BSC_Id, Cell.Cell_Id, Day, Hour

edit

RANKING:

None selected

edit

FILTERED N-HIGH:

None selected

edit

REHOMING:

☐ Include re-homed data

CONFIDENCE FACTOR:

☐ Confidence Factor

save

run

cancel

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The non-stored busy hour report definition now shows set information contained in both the **BUSY HOUR** and **GROUP BY** sections. We can now save and run the report definition.

Summary

You should now be able to:

- ▶ Understand what is represented by the term busy hour.
- ▶ Explain the difference between a stored busy hour, and non-stored busy hour.
- ▶ Navigate to and use the **Type, Repository, and Folder** menus to bring up an existing report definition.
- ▶ Understand the **Optional Extended Functions** fields used in defining a non-stored busy hour report definition.

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You should now be able to:

Understand what is represented by the term busy hour.

Explain the difference between a stored busy hour, and non-stored busy hour.

Navigate to and use the **Type, Repository, and Folder** menus to bring up an existing report definition.

Understand the **Optional Extended Functions** fields used in defining a non-stored busy hour report definition.

Training roadmap for IBM Tivoli Netcool Performance Manager for Wireless

- Click this link to the training page

http://www-01.ibm.com/software/tivoli/education/edu_prd.html

- Click this link for the section on IBM Tivoli Netcool Performance Manager for Wireless:

http://www.ibm.com/software/tivoli/education/edu_prd.html#X916845N81075L22



Click the upper link to see the IBM Tivoli Netcool Performance Manager for Wireless training page.

Click the lower link for more IBM Tivoli Netcool Performance Manager for Wireless information.

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