



IBM Tivoli Netcool Performance Manager for Wireless 9.1.2

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

Tivoli. software



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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

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Busy hour definition

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

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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

The screenshot shows the Tivoli Netcool Performance Manager for Wireless interface. The main menu includes MyFavorites, Reporting, Alarm, Browse, Monitor, Preferences, and Tools. The Reporting menu is expanded, showing options: define report, manage report, new schedule, manage schedule, and reporting help. The 'manage report' option is selected.

On the left, there are several configuration steps, each with a 'None Selected' button:

- 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

The 'Optional: Extended Functions' step is circled in red. A yellow callout box with a speech bubble points to the 'open' button in the 'Please select a report' dialog box, containing the text: "Click the open button".

The 'Please select a report' dialog box has the following fields:

- Type: Report Definition
- Repository: personal documents
- Folder: sysadm

The list of reports includes:

- Ericsson Busy Hr
- Nokia-Cell-Attempts-D (highlighted)
- PMW_Fundamentals_IL0_Test_Report

Buttons for 'open' and 'delete' are located at the bottom right of the dialog box.

At the bottom of the screenshot, there is a red banner with the text: "Using the optional extended functions menu to create a non-stored busy hour report" and "© 2009 IBM Corporation".

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.

Loading an existing report definition

The screenshot displays the Tivoli Netcool Performance Manager for Wireless interface. The top navigation bar includes 'MyFavorites', 'Reporting', 'Alarm', 'Browse', 'Monitor', 'Preferences', and 'Tools'. The 'Reporting' tab is active, showing sub-tabs for 'define report', 'manage report', 'new schedule', 'manage schedule', and 'reporting help'. The main content area shows the report definition for 'Nokia-Cell-Attempts-D'. The 'Report Name' field is circled in red. Below it, the 'Focal Entity' is set to 'Cell', which is highlighted with a black arrow. The 'Step 1: DataSource Selection' is 'student138.ibm.com-rs'. 'Step 2: Focal Entity Type' is 'Cell'. 'Step 3: Field Selections' includes 'Cell.CallsAttempted', 'Cell.CallsSucc', and 'Cell.CallsFail'. 'Step 4: Date-Time Selection' shows 'Selected Date: Times' as '5/4/08' and 'Start Of Week: Default (Sunday)'. 'Step 5: Filtering' is 'None Selected'. The 'Optional: Extended Functions' section includes 'Busy Hour' (None Selected), 'Group by' (None selected), 'Ranking' (None selected), 'FILTERED N-HIGH' (None selected), and 'REORDERING' (true). The footer contains the text 'Using the optional extended functions menu to create a non-stored busy hour report' and '© 2009 IBM Corporation'.

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

Step 2: Focal Entity Type

Cell

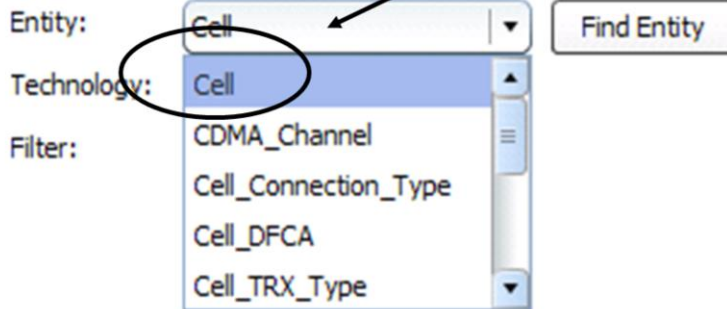
Step 3: Field Selections

Entity: Cell Find Entity

Technology: Cell

Filter:

- CDMA_Channel
- Cell_Connection_Type
- Cell_DFCA
- Cell_TRX_Type



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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. Step 2, titled 'Step 2: Focal Entity Type', shows a dropdown menu with 'HLR' selected and circled. An arrow points from this selection to Step 3, 'Step 3: Field Selections'. In Step 3, the 'Entity:' dropdown is also set to 'HLR'. Below it, a list of available options is shown, with 'HLR' highlighted. The other options in the list are 'AUC' and 'D_Link'. A circle is drawn around the 'HLR' option in the list, and an arrow points to it from the 'Entity:' dropdown.

Field	Value
Entity:	HLR
Technology:	HLR
Filter:	AUC
	D_Link

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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.

Opening the optional extended functions section

The screenshot displays the Tivoli Netcool Performance Manager for Wireless interface. The top navigation bar includes 'MyFavorites', 'Reporting', 'Alarm', 'Browse', 'Monitor', 'Preferences', and 'Tools'. The 'Reporting' tab is active, showing options for 'define report', 'manage report', 'new schedule', 'manage schedule', and 'reporting help'. The main content area shows a report configuration form with the following steps:

- Report Name: Nokia-CellAttempts-0
- Folder: [personal documents] \users\sysadm
- Step 1: DataSource Selection: student138.ibm.com-rs
- Step 2: Focal Entity Type: Cell
- Step 3: Field Selections: Cell.CallsAttempted, Cell.CallsSucc, Cell.CallsFail
- Step 4: Date-Time Selection: Selected Date: Times 5/4/08 00:00-24:00, Start Of Week: Default (Sunday)
- Step 5: Filtering
- Optional: Extended Functions

The 'Optional: Extended Functions' section is currently blank. A yellow callout box with a black border points to the 'edit' button located to the right of the section heading. The text inside the callout box reads: '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

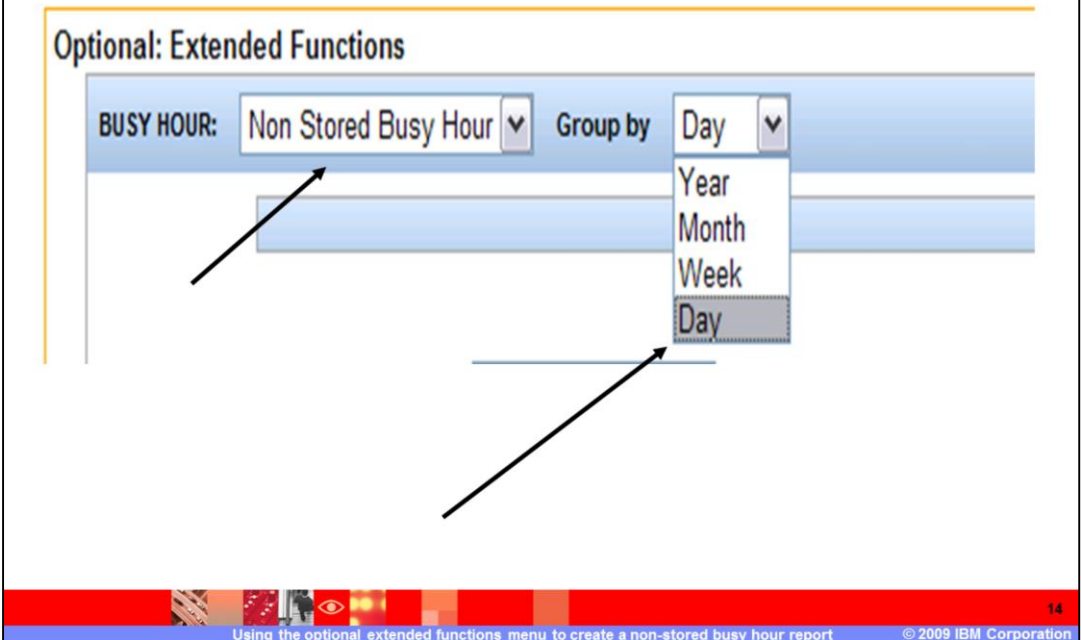
GROUP BY:
None selected

Click the **edit** button

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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



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

Cluster Entity: Cell

By Selection

Entity: Cell CallsAttempted

Click the **set** button

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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:

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

GROUP BY:

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.

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

Entry List: Cell

Cell.BCH Power

Cell.BSC.Id

Cell.BSC.Id

Cell.Cell_Description

add delete

Cell.BSC.Id

move

move

Click the add button

Click the set button

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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.

Optional: Extended functions sections

Optional: Extended Functions

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

GROUP BY: edit
Attribute And Time: Cell.BSC_Id, Cell.Cell_Id, Day, Hour

RANKING: edit
None selected

FILTERED N-HIGH: edit
None selected

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.

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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