



## 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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Updated July 7, 2009

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:

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- 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](http://www.ibm.com/software/tivoli/education/edu_prd.html#X916845N81075L22)

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## 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:

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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

Tivoli Netcool Performance Manager for Wireless

MyFavorites Reporting Alarm Browse Monitor Preferences Tools Help

define report **manage report** new schedule manage schedule reporting 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\_IL0\_Test\_Report

open delete

Click the open button

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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.

## Loading an existing report definition

The screenshot displays the Tivoli Netcool Performance Manager for Wireless interface. The main heading is "Loading an existing report definition". The interface shows a report definition for "Nokia-Cell-Attempts-D". The report name is circled in red. The report is defined in five steps:

- Step 1: Data Source Selection: student138.ibm.com-rs
- Step 2: Focal Entity Type: Cell (indicated by a black arrow)
- 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: None Selected

Optional: Extended Functions menu includes:

- Busy Hour: None Selected
- Group by: None selected
- Ranking: None selected
- FILTERED N-HIGH: None selected
- REHOMING: true

At the bottom of the interface, 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".

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"><li>• Date: 11/16-11/22</li><li>• Time: 00:00-24:00</li></ul>
FILTERING	101
BUSY HOUR	<ul style="list-style-type: none"><li>• Non-Stored Busy Hour</li><li>• Cluster Entity: Cell</li><li>• Criterion field: Cell.CallAttmp</li><li>• Group by: Day</li></ul>
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:** A dropdown menu is shown with the word "Cell" selected and circled. An arrow points from this dropdown to the "Entity:" field in the next section.
- Step 3: Field Selections:** This section contains three dropdown menus: "Entity:", "Technology:", and "Filter:". The "Entity:" dropdown is also circled and has an arrow pointing to it from the "Cell" in Step 2. The "Technology:" dropdown is currently open, showing a list of options: "Cell", "CDMA\_Channel", "Cell\_Connection\_Type", "Cell\_DFCA", and "Cell\_TRX\_Type". The "Cell" option in this list is highlighted. To the right of these dropdowns is a "Find Entity" button.

At the bottom of the slide, there is a red banner with the text: "Using the optional extended functions menu to create a non stored busy hour report © 2009 IBM Corporation" and the number "10".

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 technologies is shown: 'HLR', 'AUC', and 'D\_Link'. The 'HLR' option in this list is highlighted with a blue background and circled. An arrow points from the 'HLR' selection in Step 2 to this highlighted option in Step 3.

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 main content area is divided into several steps for configuring a report:

- Report Name:** Nokia-Cell-Attempts-0
- Folder:** [personal documents]: /users/syaadm
- Step 1: Data Source 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:** (This section is currently blank)

Below the filtering step, there is a section titled "Optional: Extended Functions". This section is currently blank and has an "edit" button to its right. A yellow callout bubble with the text "Click the edit button" points to this button. A black circle highlights the "Optional: Extended Functions" heading.

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

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

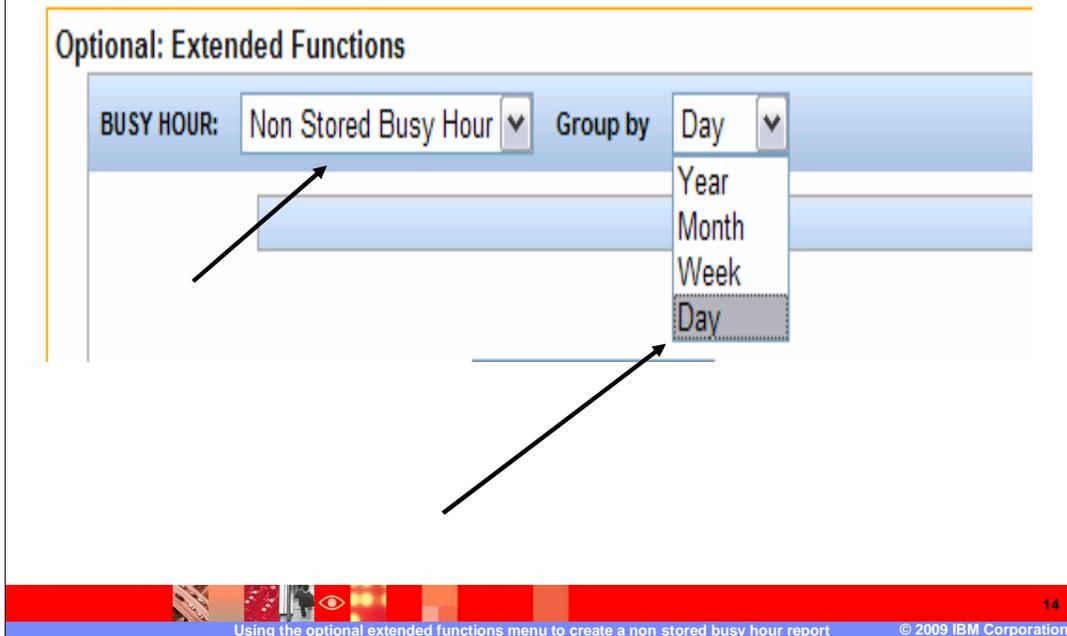
**GROUP BY:**  
None selected

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

By Selection

Cluster Entity Cell Browse Cluster Field Filter \* apply

Cell Browse Entity 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

Group by Time

Year  Month  Week  Day  Hour  30 min

Group by Attribute

Entity List: Cell

Cell.BCH\_Power  
Cell.BSC.Id  
Cell.BW  
Cell.Cell\_Description

Cell.BSC.Id

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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:**

**GROUP BY:**

**RANKING:**

**FILTERED N-HIGH:**

**REHOMING:**  
 Include re-homed data

**CONFIDENCE FACTOR:**  
 Confidence Factor

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

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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](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](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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