IBM Tivoli Netcool Performance Manager
for Wireless 9.2.1

Understanding busy hour reporting

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IBM Tivoli® Netcool® Performance Manager for Wireless version 9.2.1

Understanding busy hour reporting

Assumptions

You have basic knowledge of the wireless telecommunications industry

You have basic knowledge of the wireless telecommunications industry

Objectives

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

Describe both IBM Tivoli Netcool Performance Manager for Wireless (ITNPMW) stored and ITNPMW non-stored busy hour reporting.

Describe the advantages and disadvantages of stored and non-stored busy hour reporting and when it is preferred to use one busy hour report type instead of the other.

Describe where to get information on creating ITNPMW busy hour reports.

Module outline

Definition of a busy hour

Sliding and Non-Sliding busy hour definitions

Busy hour measurement usage

ITNPMW busy hour reporting capabilities

ITNPMW busy hour reporting types

ITNPMW stored busy hour reporting

ITNPMW non-stored busy hour reporting

ITNPMW stored and non-stored busy hour report type usage scenarios

Summary

Links to information on creating ITNPMW busy hour reports

Definition of a busy hour

- Definition of a **busy hour**
- The four busy hour time periods
- Computing **busy hour**

Definition of a busy hour

A **busy hour** represents the period with the greatest value for any performance metric as represented by a field for a defined period of time.

The time period can be daily, weekly, monthly, or yearly.

When a **busy hour** is computed, it yields a single busy hour value for the defined period.

Sliding and non-sliding busy hour definitions

- Sliding busy hour
- Non-sliding busy hour

Sliding and non-sliding busy hour definitions

Sliding busy hour

> A busy hour that is calculated based on the busiest hour of the day across intervals other than hourly boundaries.

> The default interval for a sliding busy hour is 15 minutes. Using this interval a sliding busy hour can start at any 15 minute interval of an hour and extend thereafter for 60 minutes. For example, 10:15 to 11:15 or 10:30 to 11:30

Non-sliding busy hour

> A busy hour that is calculated based on the busiest hour of the day only across intervals on the hour boundaries only. For example, 1:00 to 2:00 to 3:00 to 4:00.

Busy hour measurement usage

- The analysis of busy hour measurements is important
- Busy hour measurements are used by traffic engineers and network operations personnel

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Busy hour measurement usage

The analysis of busy hour measurements is important. The busy hour is the time when the greatest number of customers use the resources of either a particular wireless network element, a cluster of wireless network elements, or the entire wireless service provider network.

Traffic engineers and network operations personnel often focus on data collected during the busiest hours because that is the time when the system is most stressed and therefore most likely to:

behave abnormally

Indicate usage trends

Busy hour reporting capabilities

- IBM Tivoli Netcool Performance Manager for Wireless busy hour reports can display wireless service provider network traffic volume and other KPI measurements
- IBM Tivoli Netcool Performance Manager for Wireless can compute and store data for the busiest hour of the day, week, or month based on a designated busy hour determiner
  - Stored busy hour computations
  - Non-stored busy hour computations

ITNPMW busy hour reporting capabilities

IBM Tivoli Netcool Performance Manager for Wireless (ITNPMW) busy hour reports can display wireless service provider network traffic volume and other KPI measurements for either an individual network element, a group of network elements, or the entire wireless service provider network.

ITNPMW can compute and store data for the busiest hour of the day, week, or month based on a designated busy hour determiner.

Stored busy hour computations can be based on either sliding or non-sliding definitions

Non-stored busy hour computations can only be based on non-sliding definitions.

Busy hour reporting types

- IBM Tivoli Netcool Performance Manager for Wireless contains the functionality to create two types of busy hour reports:
    - Stored busy hour reports
    - Non-stored busy hour reports

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ITNPMW busy hour reporting types

ITNPMW contains the functionality to create two types of busy hour reports:

Stored Busy Hour Reports

Non-Stored Busy Hour Reports

Stored busy hour reporting

- **IBM Tivoli Netcool Performance Manager for Wireless stored busy hour reports**
- Most efficient way to run busy hour reports
- Only way to obtain long term busy hour trending information

ITNPMW stored busy hour reporting

ITNPMW stored busy hour reports are calculated and updated, usually nightly, for a designated period of time, and stored in the ITNPMW system database.

This is the most efficient way to run busy hour reports because the report accesses dedicated stored busy hour tables rather than calculating the busy hour during report generation.

Based on data retention policy, this may be the only way to obtain long term busy hour trending information.
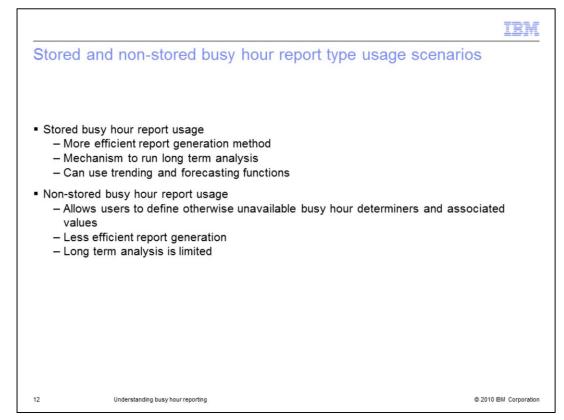
Non-stored busy hour reporting

- **Non-stored busy hour reports** calculation
- Gives current up-to-the hour information
- Used when configured busy hour definitions do not meet the user's specific needs

Understanding busy hour reporting

ITNPMW non-stored busy hour reporting

Non-stored busy hour reports are calculated at the time that the report is generated.

Non-stored busy hour reports give current up-to-the hour information to network operations personnel.

Non-stored busy hour reporting is used when configured busy hour definitions do not meet the ITNPMW user's specific needs.

Stored and non-stored busy hour report type usage scenarios

- Stored busy hour report usage
  - More efficient report generation method
  - Mechanism to run long term analysis
  - Can use trending and forecasting functions
- Non-stored busy hour report usage
  - Allows users to define otherwise unavailable busy hour determiners and associated values
  - Less efficient report generation
  - Long term analysis is limited

ITNPMW stored and non-stored busy hour report type usage scenarios

Stored busy hour report usage

More efficient report generation than non-stored because specific tables of stored information are accessed.

Provides the mechanism to run long term analysis of busy hours.

Provides the mechanism to use trending and forecasting functions.

Non-stored busy hour report usage

Allows users to define the busy hour determiner and associated values where current busy hour definitions do not meet their needs.

Less efficient report generation because the busy hour is calculated at the time of report generation.

Long term analysis is limited by the raw data retention policy.
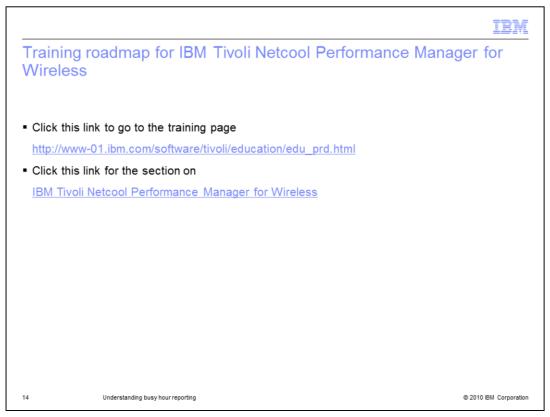
Summary

Now that you have completed this module, you should be able to:

Describe both ITNPMW stored and ITNPMW non-stored busy hour reporting.

Describe the advantages and disadvantages of stored and non-stored busy hour reporting and when it is preferred to use one busy hour report type instead of the other.

Describe where to get information on creating ITNPMW busy hour reports.

Training roadmap for IBM Tivoli Netcool Performance Manager for Wireless

Click this link to go to the training page.

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

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