CHAPTER 9

Working with MWTM Statistics Reports

Once every hour, MWTM gathers critical information from all known network objects. MWTM then uses that information to calculate statistics, and generates reports based on those statistics.

MWTM enables you to:

- View and export detailed RAN utilization statistics summary reports.
- Create, view, and export custom statistics reports.
- Change the way MWTM displays information in reports.

By default, MWTM stores all report data in the database.

Viewing RAN Backhaul Utilization Statistics Report

MWTM enables you to view the RAN Backhaul Utilization statistics report. You can also export the report.

To view the report, select **RAN Backhaul Utilization** from the MWTM Server Home Page.

The following table describes the additional menu options provided by the RAN Backhaul Utilization Statistics page:

Menu Command	Description
Home	Displays the MWTM Server Home Page.
RAN Backhaul Utilization	Displays the RAN Backhaul Utilization Statistics page.
RAN Data Export	Exports the RAN Backhaul Utilization summary data (for capacity planning) or the 15-minute statistics data in Excel file format. Displays a File Download window to open the export file or save it to your computer.
Help	Displays the MWTM online help system.

The RAN Backhaul Utilization Statistics Report provides statistical data in two formats:

- Capacity Planning Report—Summary data that is derived from the raw data and provides summaries of GSM and UMTS traffic utilization on the backhaul links. This data can be displayed on a yearly, monthly, daily, and hourly basis and can be used for capacity planning.

- View 15 Minutes Statistics Report—Raw backhaul performance data collected in 15 minute intervals that can be displayed on a yearly, monthly, daily, or hourly basis. This data can be used for detailed analysis of traffic utilization on the backhaul links.

The RAN Backhaul Utilization Statistics Report table displays the following information:

Field or Column	Description
Title	Title of the MWTM report and the name of the server.
Node	The node from which the data is collected. Clicking on the node name displays the summary data for the selected year for use in capacity planning.
Capacity Planning: Year	Displays the summary data for the selected year for use in capacity planning.
Capacity Planning: Month	Displays the summary data for the selected month for use in capacity planning.
Capacity Planning: Day	Displays the summary data for the selected day for use in capacity planning.
Capacity Planning: Hour	Displays the summary data for the selected hour for use in capacity planning.
View 15 Minutes Statistics: Year	Displays raw data collected in 15-minute intervals for the selected year.
View 15 Minutes Statistics: Month	Displays raw data collected in 15-minute intervals for the selected month.
View 15 Minutes Statistics: Day	Displays raw data collected in 15-minute intervals for the selected day.
View 15 Minutes Statistics: Hour	Displays raw data collected in 15-minute intervals for the selected hour.

Capacity Planning Report

The Capacity Planning Report table has two sections:

- Capacity Planning Section—Displays summary data for all traffic, GSM traffic, and UMTS traffic on the backhaul interface.
- Backhaul Utilization Statistics Section—Displays summary data for a specific traffic protocol (GSM, UMTS, or All) on the backhaul interface.

Capacity Planning Section

The Capacity Planning section is at the top of the Capacity Planning report and displays the following information:

Field or Column	Description
Title	Title of the MWTM report, the name of the server, the name of the node, and whether the report is yearly, monthly, daily, or hourly.
Protocol: Interface	The name of the backhaul interface for which statistics are displayed.
Protocol: Direction	The direction of the traffic (send or receive) on the backhaul interface.
Protocol: Available Bandwidth (KBits/sec)	The maximum available bandwidth on the backhaul interface.
All	Click this link to display the Backhaul Utilization Statistics Section of the report for *all* protocols (GSM and UMTS).
All: Peak Traffic (KBits/sec)	The peak traffic for all protocols on the backhaul interface.
All: % Peak Utilization	The percentage of peak traffic utilization for all protocols on the backhaul interface.
GSM	Click this link to display the Backhaul Utilization Statistics Section of the report for GSM traffic.
GSM: Peak Traffic (KBits/sec)	The peak GSM traffic on the backhaul interface.
GSM: % Peak Utilization	The percentage of peak GSM traffic utilization on the backhaul interface.
UMTS	Click this link to display the Backhaul Utilization Statistics Section of the report for UMTS traffic.
UMTS: Peak Traffic (KBits/sec)	The peak UMTS traffic on the backhaul interface.
UMTS: % Peak Utilization	The percentage of peak UMTS traffic utilization on the backhaul interface.

Backhaul Utilization Statistics Section

The Backhaul Utilization Statistics section follows the Capacity Planning section of the Capacity Planning report and displays the following information:

Field or Column	Description
Interface	The name of the backhaul interface for which statistics are displayed.
Protocol	The protocol of the traffic on the backhaul interface. This value can be **GSM**, **UMTS**, or **All**.
Backhaul Utilization	Displays 10 backhaul utilization percentage ranges from 00-09% to 90-100%. Used with the Time in Range data, you can determine the length of time during which the backhaul utilization is between 0 and 9%, or between 10 and 19%, and so on.
Send: Time in Range	The length of time in which send traffic falls into a specific percentage range.
Send: % Time in Range	The percentage of the total time in which send traffic falls into a specific percentage range.

Field or Column	Description
Receive: Time in Range	The length of time in which receive traffic falls into a specific percentage range.
Receive: % Time in Range	The percentage of the total time in which receive traffic falls into a specific percentage range.
Peak Utilization (%)	The percentage of time that is utilized by peak traffic on the backhaul interface for send and receive traffic.
Peak Timestamp	The timestamp (date and time) when the peak traffic occurred on the backhaul interface.

View 15 Minutes Statistics Report

The View 15 Minutes Statistics Report displays the following information:

Field or Column	Description
Title	Title of the MWTM report, the name of the server, the name of the node, and whether the report is yearly, monthly, daily, or hourly.
Node	The node from which the data is collected.
Interface	The name of the backhaul interface for which statistics are displayed.
Protocol	The protocol of the traffic (GSM Abis, UMTS Iub, or All) on the backhaul interface.
Direction	The direction of the traffic (receive or transmit) on the backhaul interface.
Percentage Ranges	Ten backhaul utilization percentage ranges from 00-09% to 90-100%.
Peak Util	The percentage of peak traffic utilization on the backhaul interface.
Peak Timestamp	The timestamp (date and time) when the peak traffic occurred on the backhaul interface.
Bandwidth (KBits/sec)	The maximum available bandwidth on the backhaul interface.