# WAN Utilisation Distribution Report: 95th Percentile Calculation 

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WAN Utilisation Distribution Report

- Checking Accuracy of the WAN Utilisation Distribution Report


## Example 95th Percentile Calculation

Note: Excel spreadsheets are used for demonstration purposes, however, there is a slight difference in the opReports percentile() formula and the Excel percentile() formula:

- opReports truncates to an integer to get index at 95th percentile, for example: $95 \%$ of 276 records $=262.2$
opReports determines the 95th percentile to be INT(262.2)=262nd record, with records sorted ascending.
- Excel use a ratio based on value at that index opReport uses and the value at next index to account for the fractional part of the index, for example:
95\% of 276 records = 262.2
Excel calculates a final 95th percentile being a ratio of the 262 nd and 263 rd records, with records sorted ascending. The ratio that Excel uses is not a simple ratio:
reverse engineering an actual Excel 95th percentile result provides that the ratio used for 276 records is '262.25' and not the '262.2' that is the exact result of the equation ' $95 \%$ of 276 '.

See spreadsheet http://dl-omk.opmantek.com/jira/WAN-Utilisation-Distribution-Report-95th_percentile_calc_20210305-1.xIsx which contains an opReports WAN Utilisation Distribution Report on first sheet and data and 95th percentile calculation on second sheet.

See newer example spreadsheet http://dl-omk.opmantek.com/jira/WAN-Utilisation-Distribution-Report-95th_percentile_calc_20210421-1.xlsx which also contains an opReports WAN Utilisation Distribution Report on first sheet and data and 95th percentile calculation on second sheet.

## Related Topics

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