

# Grouped Availability Report

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## Grouped Availability Report

### New in version 3.1.10

#### `opreports_availability_average_packetloss`

A new configuration setting '`opreports_availability_average_packetloss`' in `/path/to/omk/conf/opCommon.nmis`, controls whether the previous '**Packet Loss %**' (now renamed '**Count Packet Loss %**') or '**Average Packet Loss %**' is displayed in this report for each group. '`opreports_availability_average_packetloss`' => '`false`', the default setting, causes '**Count Packet Loss %**' to be displayed: This can be interpreted as 'percentage of readings with some amount of packet loss (Count readings with any packet loss / Number of readings)'. '`opreports_availability_average_packetloss`' => '`true`' causes '**Average Packet Loss %**' to be displayed: This can be interpreted as 'Average Packet Loss (Sum of packets lost / Number of readings)'.

### New in version 3.1.5

#### `opreports_availability_strict` (default: true)

- If missing or 'true', then the normal behaviour for nodata-or-normal is used (ie. if reachability isn't present, it counts as nodata).
  - **no data = 'down' when `opreports_availability_strict=true`**
- If set to 'false', then records with missing reachability but existing response time are fudged up so that the reachability = 100 (and loss = 0 if that's also missing) and therefore such a record does NOT count as nodata.
  - **no data = 'up' when `opreports_availability_strict=false`**

In both cases, if reachability is missing but response time is present, a debug3 about the inconsistency is logged. This applies to both availability report data and availability report graphs.

### New in version 3.1.4

#### Reachability Statistics

The Grouped Availability Report computes reachability statistics similar to the Node Availability Report, but devices are then categorised based on their overall availability metric; the report shows these results spread over various summary table sections (for HTML output) or work sheets (for XLSX output). Both business days and business hour filtering are supported. The availability categories can be configured flexibly by adjusting thresholds and settings.

#### Total Availability

A combined total availability metric for all nodes is computed and presented in a summary section, and similar metrics and categorisation device counts for both grouping by Customer and Group (ie. NMIS configuration properties `customer` and `group`) are computed and presented. Finally the detailed availability stats are shown for all devices, in order of the devices' group memberships. Instead of determining an individual devices availability as the Node Availability Report does, the Grouped Availability Report is based on the overall availability metric and gives a summary of the availability of all the devices within a specific group. The summary section displays the number of devices within that group, the number customers within the group, the number of groups and the overall availability of them. The summary section will display devices with availability of 100%, 99 < 100%, 98 < 99%, and < 98% to easily understand if any group of devices has had unexpected downtime. The Grouped Availability Report also displays the Down%, Packet Loss %, No Data %, Uptime, and Downtime for a quick look at overall network health.

### `report_groupedavailability_levels`

The Grouped Availability Report can be configured flexibly by adjusting the threshold settings of `report_groupedavailability_levels` in `/usr/local/omk/conf/opCommon.nmis`

```
'report_groupedavailability_levels' => {
  'default' => {
    'good' => {
      'color' => '',
      'description' => '100%',
      'threshold' => 100
    },
    'high' => {
      'color' => '#ffff00',
      'description' => '99 < 100%',
      'threshold' => 99
    },
    'low' => {
      'color' => '#ff8900',
      'description' => '98 < 99%',
      'threshold' => 98
    },
    'lowest' => {
      'color' => '#ff0000',
      'description' => '<98%',
      'threshold' => -1
    }
  }
},
```

## Example

A full example of a Grouped Availability Report with default settings can be downloaded and viewed [HERE](#)

Grouped Availability Report

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Summary						
Generated	2018-07-16T16:32:33					
Coverage	7 day(s), from 2018-07-09T16:32:31 to 2018-07-16T16:32:31 AEST					
Nr. of Nodes	50					
Nr. of Customers	3					
Nr. of Groups	12					
Overall Availability	100.00%					

Customer Summary						
Customer	Overall Availability %	Total Nr. of Devices	Devices with Availability 100%	Devices with Availability 99 < 100%	Devices with Availability 98 < 99%	Devices with Availability <98%
Corporate	100.00%	7	7	0	0	0
Opmantek	100.00%	41	41	0	0	0
Sales	100.00%	2	2	0	0	0

Group Summary						
Group	Overall Availability %	Total Nr. of Devices	Devices with Availability 100%	Devices with Availability 99 < 100%	Devices with Availability 98 < 99%	Devices with Availability <98%
Branches	100.00%	5	5	0	0	0
Brisbane	100.00%	3	3	0	0	0
Charlotte	100.00%	3	3	0	0	0
DataCenter	100.00%	7	7	0	0	0
Melbourne	100.00%	1	1	0	0	0
MexicoCity	100.00%	3	3	0	0	0
NMIS8	100.00%	3	3	0	0	0
Open-Audit	100.00%	2	2	0	0	0
Oxford	100.00%	3	3	0	0	0
San_Francisco	100.00%	3	3	0	0	0

opReports 3.1.4

Devices in Group Branches							
Device	Available %	Down %	Packet Loss %	No Data %	Uptime	Downtime	No Data
gc-router1	100.00%	0.00%	0.99%	0.05%	7d		5m
gc-switch1	100.00%	0.00%	0.99%	0.05%	7d		5m
meatball	100.00%	0.00%	0.10%	0.05%	7d		5m
midgard	100.00%	0.00%	1.29%	0.05%	7d		5m
vienna-server1	100.00%	0.00%	0.00%	0.05%	7d		5m

Devices in Group Brisbane							
Device	Available %	Down %	Packet Loss %	No Data %	Uptime	Downtime	No Data
bne-router1	100.00%	0.00%	1.04%	0.00%	7d		
bne-server1	100.00%	0.00%	0.50%	0.00%	7d		
bne-switch1	100.00%	0.00%	1.14%	0.00%	7d		

Devices in Group Charlotte							
Device	Available %	Down %	Packet Loss %	No Data %	Uptime	Downtime	No Data
char-router1	100.00%	0.00%	3.22%	0.00%	7d		
char-server1	100.00%	0.00%	0.79%	0.00%	7d		
char-switch1	100.00%	0.00%	3.12%	0.00%	7d		