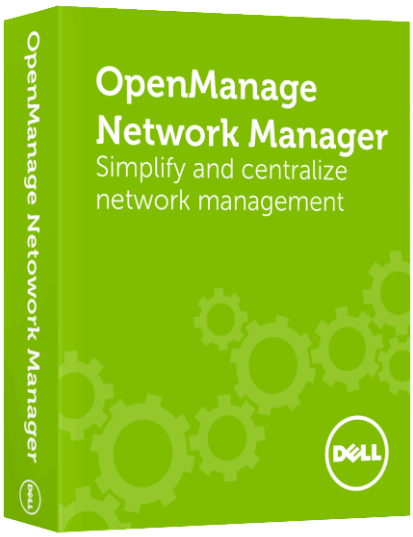
Dell OpenManage Network Manager Version 6.0

Sizing for Standalone Installations



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Sizing for Standalone Installations

The following are suggested sizing guidelines for your Dell OpenManage Network Manager system.[1]

64-bit Operating System: Disks / RAM / Hardware	Max. Concurrent Users	Max. Managed Devices[2]	Performance Monitor Max. Targets[3]	Max. Traffic Flow Exporters[3]	Installation Changes to Heap Memory Settings
8GB[5] RAM, single disk, consumer level PC	5	25	2500	5	Use defaults: (2GB application server heap, 512M database, 2G Synergy Web Server[4])
10 GB RAM, single disk, consumer level PC	8	50	5000	5	3-6 GB application server heap, 512M database buffer, 2G Synergy Web Server
12 GB RAM, single disk, consumer level PC	10	100	10000	10	4-7GB application server heap, 1GB database buffer, 3GB Synergy Web Server
14GB RAM, single disk, business level PC	15	250	25000	25	4-9 GB application server heap, 1GB database buffer, 3GB Synergy Web Server
16GB RAM, single disk, business level PC	25	500	50000	50	5-10GB application server heap, 2GB database buffer, 3GB Synergy Web Server
18 GB RAM, multi-disk, server level PC	50 (Medium-large network)	1000	100000	100	8-12GB application server heap, 3GB database buffer, 5GB Synergy Web Server
32GB RAM, multi-disk, server level PC. Recommend fast disk array or SSD drive array for the large number of database actions.	100 (Large network)	2000	200000	100	10-14GB application server heap, 8GB database buffer, 8GB Synergy Web Server

Footnotes:

1 Servers are assumed to have at least four cores (3.0GHz or better) and are no more than four years old. As memory and usage increases, the number of CPU cores needs to increase. Dual core CPUs can work for the most basic installations, but such configurations are not recommended.

2 Each device mentioned here is equivalent to a L2 or L3 switch with a total of 48 interfaces per device being monitored. For each device not being monitored for 48 interfaces, you can add another 50 devices to the overall inventory for ICMP-only monitoring. Maximum monitor targets assumes

a 5 minute or longer polling interval. It assumes each monitor is polling the default number of attributes or less.

[3] Application Constraints are most relevant to Traffic Flow Analysis, Performance Management, and Event Management. Refer to the performance monitor Section of the user guide to best practices. In general, no single monitor should exceed 10000 targets. This is primarily for performance reasons. Actual physical hardware and monitor configuration will determine your system capacity for targets and overall system performance. The Maximum Exporters assumes your Traffic Flow configuration does not exceed the capacity of the physical hard drive(s). refer to the Performance section of the Traffic Flow chapter.

Traffic Flow Analysis ratings map to constant throughput divided by sample rate, as in bandwidth / sample rate. 20G / 2000 is easier to manage than 20G / 1000. 20G / 1 is a thousand times more demanding than 20G / 1000. Best practice is to avoid such high sample rates. The bandwidth the hardware your Dell OpenManage Network Manager installation can support is dramatically lower in such cases. Best practice is to sample a maximum of one traffic flow for every 1000 (1:1000). Higher sampling rates degrade database performance and increase network traffic without adding any significant statistical information.

Performance Management can support 600 inserts per second using a single disk (SSD) Drive. 1 insert = 1 monitored attribute. Expect better performance as you add more drives (and worse performance with slower drives).

Event Management can support a sustained 1200 traps /sec using a single (SSD) drive. Expect better performance as you add more drives (and worse performance with slower drives).