



Goverlan Reach Server

Hardware & Operating System Guidelines

System Requirements – General Guidelines

The system requirement for a Goverlan Reach Server is calculated based on its potential average load from the services exposed by it. The two primary services exposed are the Global Policy distribution and the Goverlan Reach Gateway Services.

The system requirement disclosed in this document assume that both services will be used, with a primary focus on the Goverlan Reach Gateway Services. They also are targeting a Primary Goverlan Reach Server (secondary servers have very light system requirements).

This document uses the following metrics to define the average load of your server:

Number of client machines under management

The number of machines that are equipped with the Goverlan Client Agent and are within the scope of influence of the Goverlan Reach Server. The client machines can be located on the internal network or outside of the private network and connectable via Goverlan Reach.

Average number of simultaneous Connections to Reach Nodes

The average number of concurrent active connections between an operator and a Goverlan Reach node (that is a client machine located outside of the private network). Note that a single operator may have more than one active connection to a Reach node during a remote assistance session.

To calculate this metric, consider what Goverlan will be used for.

One on One Remote Assistance

Goverlan is used to perform remote management and troubleshooting tasks on remote clients, via the Goverlan Remote Control, Goverlan Administration & Diagnostics, Task Manager, File Manager ... In such context, count 3 active connections per Goverlan Operator per Assistance Session

One on All Remote Management

Goverlan is used to perform global management actions on your sets of nodes via the Goverlan Scope Action. Since the Goverlan Scope Action engine processes up to 64 concurrent nodes at a time, then up to 64 active connections should be considered for maximal performance.

Operating System Requirement

The Goverlan Reach Server runs on Windows Server (64 bit). It is recommended to use a Windows Server 2012 operating system.

Database Requirement

The Goverlan Reach Server requires a database back end. It supports the following databases:

- Local file-based MSSQL (default)
- Microsoft SQL Express
- Microsoft SQL Server

The database type to choose depends on the load expected on the server:

Number of client machines under management	Database type
< 200	Local file-based database or MS SQL Express
200 ~ 600	MS SQL Express or MS SQL Server
More than 600	MS SQL Server

Disk space Requirement

The Goverlan Reach Server software requires 300MB of free disk space. However external dependencies may be required during the installation. It is recommended to allow for **750MB of free disk space** on the server.

CPU Requirements

The Goverlan Reach Server is not very CPU intensive. However, it is multi-threaded.

For optimal performance, it is recommended to match the number of cores to the number of simultaneous active operator connections to a Reach node. If physical cores cannot be used, then hyper threading should be enabled to double the number of cores.

Processor Specifications

Average number of simultaneous Connections to Reach Nodes	Recommended / Low end				Recommended / High end			
	Speed	#CPU	Cores / Hyper threading	Example	Speed	#CPU	Cores / Hyper threading	Example
< 6	2.20GHz or more	1	4 / ON	Intel® Xeon® E5-1630 v3 or comparable processor	2.20GHz or more	1	6 / OFF	Intel® Xeon® E5-2620 v3 or comparable processor
6 ~ 12	2.20GHz or more	1	6 / ON	Intel® Xeon® E5-2620 v3 or comparable processor	2.20GHz or more	1	12 / OFF	Intel Xeon E5-2650 v3 or comparable processor
12 ~ 24	2.20GHz or more	1	12 / ON	Intel® Xeon® E5-2650 v3 or comparable processor	2.20GHz or more	2	12 / OFF	Intel® Xeon® E5-2650 v3 or comparable processor
24 ~ 48	2.20GHz or more	1	16 / ON	Intel® Xeon® E5-2683 v4 or comparable processor	2.20GHz or more	2	16 / OFF	Intel® Xeon® E5-2683 v4 or comparable processor
48 and greater	2.20GHz or more	2	16 / ON	Intel® Xeon® E5-2683 v4 or comparable processor	2.20GHz or more	2	22 or greater / ON	Intel® Xeon® E5-2699 v4 or comparable processor

Memory Requirements

The following server memory is recommended based on the server load:

Number of simultaneous Connections to Reach Nodes	Memory
< 6	4GB
6 ~ 12	4GB
12 ~ 24	4GB
24 ~ 48	8GB
48 and greater	8GB

Network Bandwidth Requirements

The network bandwidth accessible through the network interface configuration of your server directly affect the time-to-completion of data transfer intensive operations (such as software distribution) to all your Reach nodes.

Available bandwidth consumption is dictated by both the bandwidth of your server and the bandwidth of your Reach nodes. Therefore, the maximum server bandwidth required is the number of average simultaneous active connections times the average accessible bandwidth to a Reach node.

Network bandwidth availability on your server can be configured via a single NIC that answers the minimum bandwidth requirement or using NIC Teaming.

Network Configuration

Average number of simultaneous Connections to Reach Nodes	Remote Control & low-bandwidth management tasks	Software distribution & File transfer
< 6	1 Gbps	1 Gbps
6 ~ 12	1 Gbps	1 Gbps
12 ~ 24	2 Gbps	3 Gbps
24 ~ 48	3.6 Gbps	5 Gbps
48 and greater	5.6 Gbps	6.5 Gbps

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