
Data sheet A: Locally Hosted Solution – Overview & System Requirements

Overview

The Locally Hosted Solution allows an installation of the Snap Server software to be run in-house.

The Snap Server application runs on Windows Server, .NET Framework, Internet Information Services (IIS) and SQL Server.

Architecture Overview

The architecture of the Snap Server application allows any number of web/application servers to run in a distributed manner with each application server connecting to a central SQL server database. This allows flexibility to deploy the web/application server and SQL server on the same or on separate machines, and in larger installations it allows multiple web/application servers to be configured in a load balanced configuration for high availability.

- **Database** - All application data is stored in the central SQL database.
- **Application Servers** - Each application server runs an identical set of ASP.NET web applications and web services in Internet Information Services (IIS).
- **Caching** - Caching is implemented at the application server so that commonly accessed items from the central SQL server database are cached to reduce load on the SQL server and enhance performance. Some elements are cached in memory whilst other elements are cached on the file system on the application server.
- **Load balancing support[†]** - The application is designed to support load balancing of web server requests across multiple application servers. The applications do not require session affinity - i.e. the application supports requests from the same user being routed to different application servers without compromising application state.

[†] The actual load balancing mechanism is external to Snap Server and can be a software solution such as Microsoft Windows Network Load Balancing (NLB) or a dedicated hardware load balancing switch.

- **Database clustering support[‡]** - The application database is able to be clustered across multiple SQL Servers.

[‡] The actual clustering mechanism is external to Snap Server and is configured within SQL Server using either SQL Server Clustering or SQL Server Database Mirroring.

Software Requirements

Web/Application Server

- Windows Server 2003 / 2008 (All editions, x86 or x64)
- .NET Framework 3.5 with Service Pack 1
- IIS 6.0 / 7
- ASP.NET 2.0
- IIS 6.0 Metabase Compatibility (on Windows Server 2008)

Database Server

- Windows Server 2003 / 2008 (All editions, x86 or x64)
- SQL Server 2005 / 2008 (All editions[†], x86 or x64)

[†] SQL Server Standard Edition or higher is recommended. SQL Server Express edition is not recommended for production use.

Hardware and Disk space Requirements

Web/Application Server – Typical Requirements (NB actual requirements will depend on a number of factors)

Number of users	0 – 5,000	5,000 – 10,000	10,000 – 20,000	20,000 – 50,000
Processor speed	1GHz	3GHz or higher	3GHz or higher	3GHz or higher
Memory (RAM)	1GB	2GB or higher	4GB or higher	4GB or higher
Hard Disk Space				
- Installation files	100MB	100MB	100MB	100MB
- Cache and log files†	1 – 2 GB	2 – 4 GB	4 – 8 GB	8 – 20 GB
Snap Client Poll frequency‡	60 seconds	60 seconds	60 – 120 seconds	120 – 300 seconds

† The actual disk space required for cache and log files created by the Snap Server application and the web server log files created by IIS can vary depending on usage patterns and on how often log files are deleted.

‡ For more than 10,000 users the poll frequency between Snap Client and Snap Server is increased to allow a higher number of users to be handled effectively.

Database Server – Typical Requirements (NB actual requirements will depend on a number of factors)

Number of users	0 – 5,000	5,000 – 10,000	10,000 – 20,000	20,000 – 50,000
Processor speed	1GHz	3GHz or higher	3GHz or higher	3GHz or higher
Memory (RAM)	1GB minimum 2GB recommended	2GB minimum 4GB recommended	4GB minimum 6GB recommended	6 GB minimum 8 GB recommended
Hard Disk Space†	1 – 5 GB	5 – 10 GB	10 – 20 GB	20 – 50 GB
Hard Disk Speed	10,000 rpm	10,000 rpm	15,000 rpm	15,000 rpm

† Hard Disk Space requirements refer to the size of the SQL database files and does not include space consumed by the SQL database transaction log or backup files. The actual disk space required for the database can vary depending on usage patterns and other factors.

Compatibility with Virtualization Products

Snap Server is known to be compatible with running on guest Windows operating systems using the following virtualization products:

- Microsoft Hyper-V
- Microsoft Virtual Server
- Microsoft Virtual PC
- VMWare ESX Server
- VMWare Server