Small Network Deployment, 1–500 Users

Websense software can be deployed in different configurations, depending on the size and characteristics of the network, and the organization's filtering needs. Filtering components can be installed on a single machine, or distributed across multiple machines. See the *Deployment Guide* for more information about the components.

This supplement provides system and deployment recommendations for a small network (fewer than 500 users). On average, a small network has between 1 and 25 requests per second (RPS).

Additional supplements discuss larger networks:

◆   Medium (500–2,500 users)

◆   Large (2,500–10,000 users)

◆   Enterprise (10,000–25,000 users)

◆   Very large enterprise (25,000+ users)

These network ranges are intended as general guidelines, given that the optimum deployment depends on the operating systems used, the size of the network, and the volume of Internet requests.

This manual provides system recommendations that maximize Websense component performance. You can also improve performance by using more powerful machines for resource intensive components, such as reporting.

Some components may be able to run with smaller processors or less RAM, depending on the number of users, volume of Internet requests (requests per second), and network topology.

> **Note**
> Network Agent can be deployed with other filtering components or on a separate machine for improved performance. Network Agent should **not** be deployed on the same machine as response-critical components. See *Deploying Network Agent* in the *Deployment Guide*.

Small network overview

In a small network, Websense filtering components can be installed on a single Windows machine. Most components can also be installed on a Linux machine, though there are Windows-only components. These recommendations describe both options.

Reporting components typically require a separate machine.

As the network grows and the amount of traffic increases, additional machines may be needed to run certain components. More powerful machines may be needed in a higher traffic network.

> **✓ Note**
>
> Dedicated machines are recommended for running some Websense components. The tables in this section list possible configurations for these dedicated machines. Only Websense components and required supporting applications are installed on the machine.

Windows deployment recommendations

Although Websense, Inc., recommends placing filtering components on one machine and reporting components on a second machine, it is possible in a Windows environment to install filtering and reporting components on a single, dedicated machine with the attributes detailed in Table 1.

Figure 1, page 5, provides an overview of a small Windows network deployment.

See *System Recommendations* in the *Deployment Guide* for a complete list of supported operating systems and other component requirements.

Table 1 Windows deployment (small network)

Machine	Software	Hardware Recommendations
One, dedicated machine	• All components. See the components listed below for both dedicated machines 1 and 2.	**Windows** • Quad-Core Intel Xeon processor, 2.5 GHz or greater • 4 GB RAM • 100 GB free disk space
—or (recommended)—		
Dedicated Machine #1	• Policy Broker • Policy Server • Filtering Service – Websense Master Database • Network Agent[1] • Transparent ID agent:[2] – DC Agent – eDirectory Agent – Logon Agent – RADIUS Agent • Usage Monitor • User Service	**Windows** • Quad-Core Intel Xeon processor, 2.5 GHz or greater • 2 GB RAM • 10 GB free disk space Free space must comprise at least 20% of the total disk space.
Dedicated Machine #2	• Websense Manager – Requires Internet Explorer 7 or Firefox 2 • Log Database[3] • Log Server • Microsoft SQL Server 2005/2000, MSDE 2000	**Windows** • Quad-Core Intel Xeon processor, 2.5 GHz or greater • 4 GB RAM • 80 GB free disk space

Filtering Service, the transparent identification agents, and Network Agent can be installed on multiple machines to improve processing. These additional installations do not require dedicated machines.

Table 1 Windows deployment (small network)

Machine	Software	Hardware Recommendations
Additional Machine (*optional*)	• Filtering Service – Websense Master Database	**Windows** • Quad-Core Intel Xeon processor, 2.5 GHz or greater • 2 GB RAM • 10 GB free disk space Free space must comprise at least 20% of the total disk space.
Additional Machine (*optional*)	• Network Agent[1]	**Windows** • Quad-Core Intel Xeon processor, 2.5 GHz or greater • 2 GB RAM

Additional Machine (*optional*)	• Transparent ID Agent[2]
	  – DC Agent
	  – eDirectory Agent
	  – Logon Agent
	  – RADIUS Agent
		Windows
		• Quad-Core Intel Xeon processor, 2.5 GHz or greater
		• 1 GB RAM

1. Network Agent can be installed with the other filtering components, or separately on a machine in the network segment that is assigned to monitor. For more information, see *Chapter 3. Deploying Network Agent*, of the *Deployment Guide*.

2. Transparent identification agents can be deployed alone or in certain combinations. For more information, see the *Deployment Guide*.

3. The Log Database also can be created on an existing database server.

Figure 1 illustrates the distribution of the Websense components in a small Windows network. This drawing is not a required configuration; the components may be deployed differently or in multiple network segments.
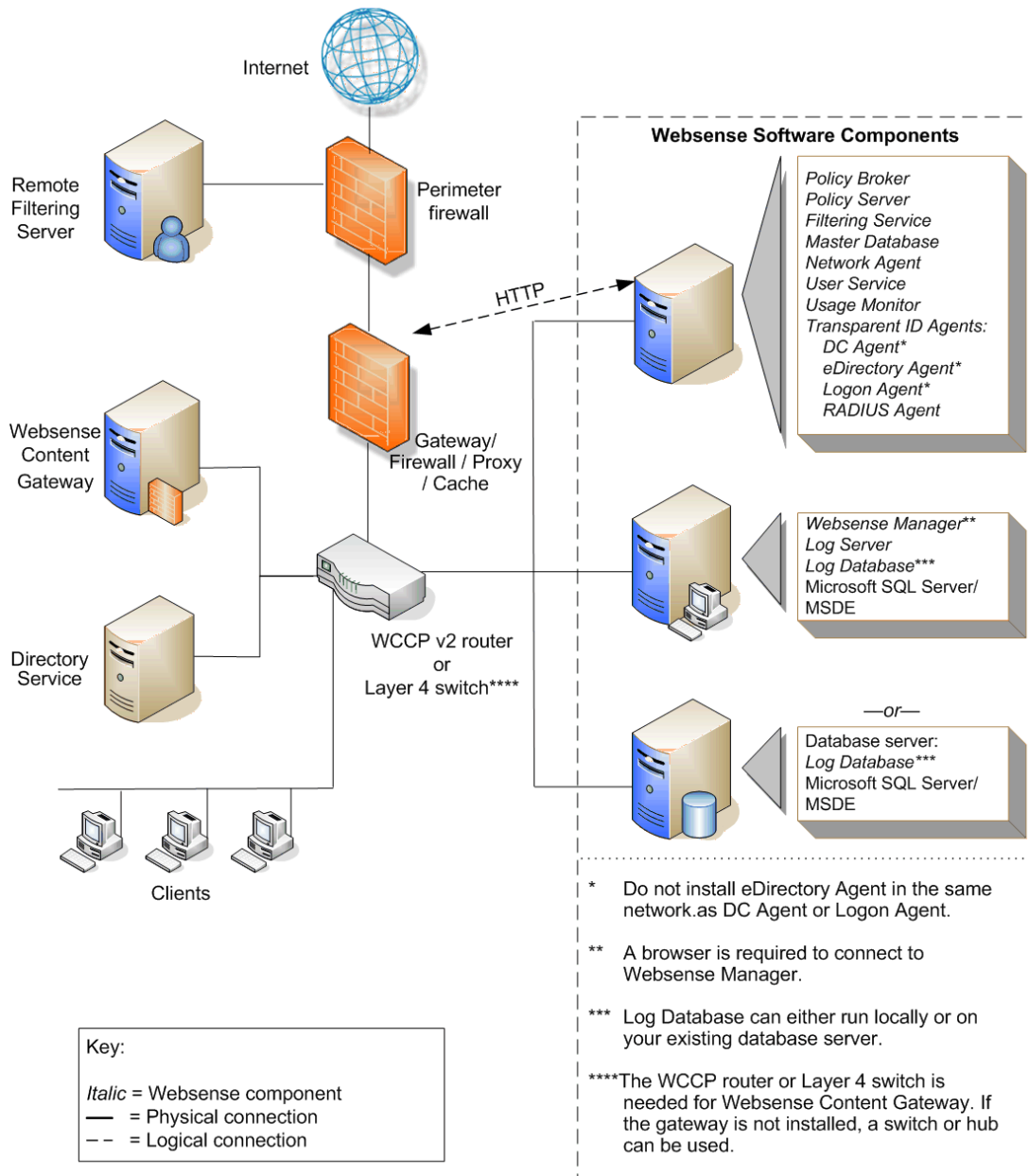

Figure 1 Overview of Windows deployment (small network)

Linux deployment recommendations

Most Websense components can run on either Windows or Linux. Full access to all reporting features, however, requires at least one Windows machine.

◆ Table 2 provides deployment recommendations.

◆ Figure 2, page 8 provides an overview of a Linux deployment in a small network.

See *System Recommendations* in the *Deployment Guide* for a complete list of supported operating systems and other component requirements.

Table 2 Linux deployment (small network)

Machine	Software	Hardware Recommendations

Dedicated Machine #1	• Policy Broker
	• Policy Server
	• Filtering Service
	  – Websense Master Database
	• Network Agent[1]
	• Transparent ID agent:[2]
	  – Logon Agent
	  – eDirectory Agent
	  – RADIUS Agent
	• Usage Monitor
	• User Service
		Linux
		• Quad-Core Intel Xeon processor, 2.5 GHz or greater
		• 2 GB RAM
		• 10 GB free disk space Free space must comprise at least 20% of the total disk space.

Dedicated Machine #2 (*Windows option*)	• Websense Manager – Requires Internet Explorer 7 or Firefox 2 • Log Server • Log Database[3] • Microsoft SQL Server 2000/2005, or MSDE 2000	**Windows** • Quad-Core Intel Xeon processor, 2.5 GHz or greater • 4 GB RAM • 100 GB free disk space
Dedicated Machine #2[4] (*Linux option*)	• Websense Manager • Websense Explorer for Linux – Requires Apache HTTP Server • Log Server for Linux • Log Database[3] • MySQL 5.0	**Linux** • Quad-Core Intel Xeon processor, 2.5 GHz or greater • 2 GB RAM • 80 GB free disk space

Table 2 Linux deployment (small network)

Machine	Software	Hardware Recommendations
Optional Machine (not dedicated)	• DC Agent (only if transparent identification is needed for Windows clients via a domain controller.)	**Windows** • Quad-Core Intel Xeon processor, 2.5 GHz or greater • 2 GB RAM
Filtering Service, the transparent identification agents, and Network Agent can be installed on multiple machines to improve processing. These additional installations do not require dedicated machines.		
Additional Machine (*optional*)	• Filtering Service – Websense Master Database	**Linux** or **Windows** • Quad-Core Intel Xeon processor, 2.5 GHz or greater • 2 GB RAM • 10 GB free disk space Free space must comprise at least 20% of the total disk space.
Additional Machine (*optional*)	• Network Agent[1]	**Linux** or **Windows** • Quad-Core Intel Xeon processor, 2.5 GHz or greater • 2 GB RAM

Additional Machine (*optional*)	• Transparent ID Agent[2]
	  – DC Agent (Windows only)
	  – eDirectory Agent
	  – Logon Agent
	  – RADIUS Agent
		Linux or **Windows**
		• Quad-Core Intel Xeon processor, 2.5 GHz or greater
		• 1 GB RAM

1. Network Agent can be installed with the other filtering components, or separately on a machine in the network segment that is assigned to monitor. For more information, see *Chapter 3. Deploying Network Agent*, of the *Deployment Guide*.

2. Transparent identification agents can be deployed alone or in certain combinations. DC Agent is deployed on a separate Windows machine only if transparent identification is needed for Windows clients via a domain controller. For more information, see the *Deployment Guide*.

3. The Log Database also can be created on an existing database server running a supported database engine.

4. Linux-based reporting is available using Websense Explorer for Linux. This component requires Log Server for Linux and a MySQL database (a licensed install of v4.0x or v4.1). The Linux and Windows reporting components are not cross-platform compatible.

Figure 2 illustrates the distribution of the Websense components in a small Linux network. This drawing is not a required configuration; the components may be deployed differently or on multiple segments.
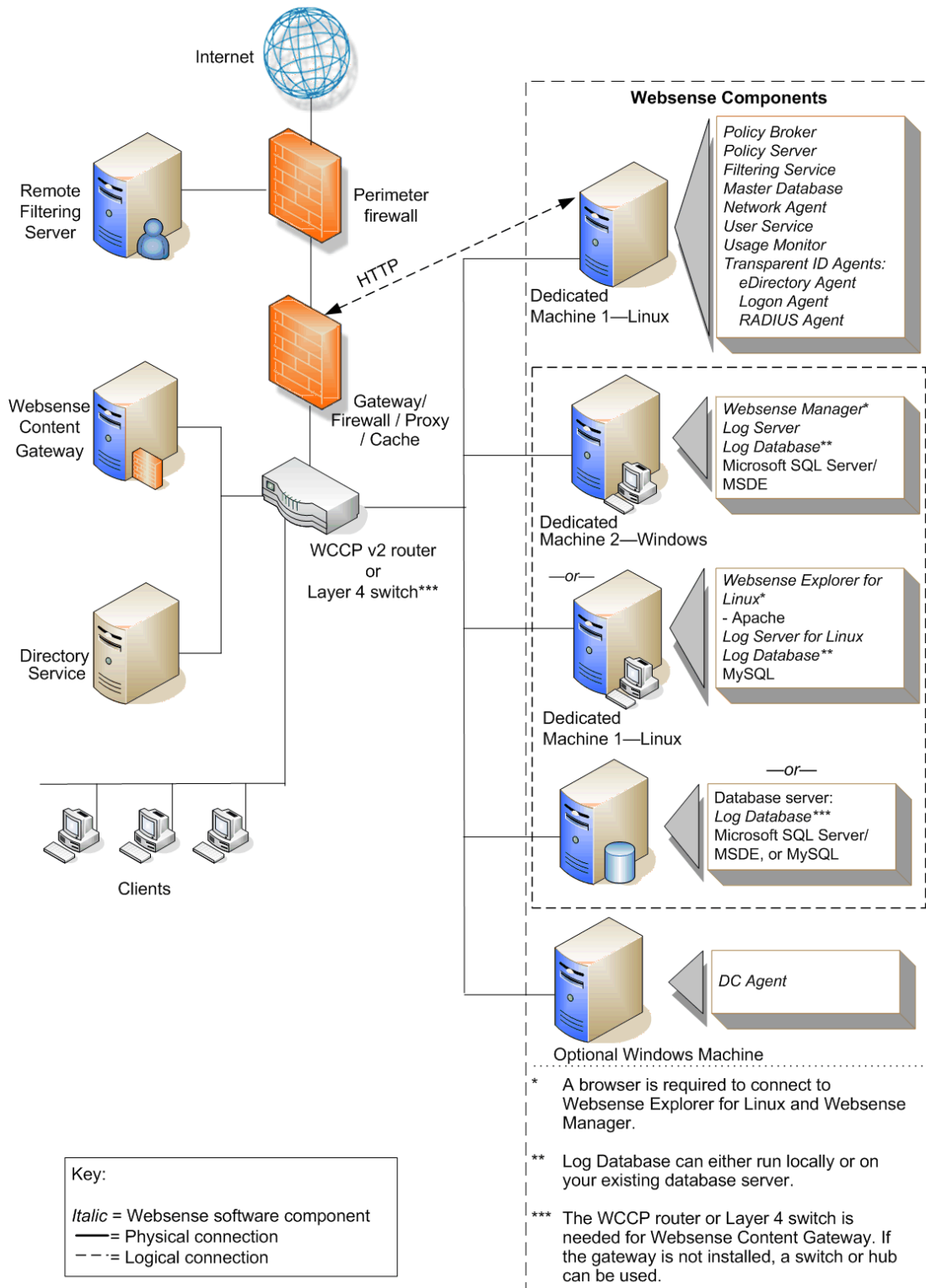

Figure 2 Overview of Linux deployment (small network)