

Large Network Deployment, 2,500 – 10,000 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 *Websense Web Security and Websense Web Filter Deployment Guide* for more information about the components.

This supplement provides system and deployment recommendations for a large network (2,500 – 10,000 users). On average, large networks have between 125 and 500 requests per second (RPS).

Additional supplements discuss networks of other sizes:

- ◆ Small (1 – 500 users)
- ◆ Medium (500 – 2,500 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.

The system recommendations described here 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 (RPS), 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 or a firewall. See *Deploying Network Agent* in the *Websense Web Security and Websense Web Filter Deployment Guide*.

Large network overview

In a large network, Websense components should be distributed on 2 or more dedicated machines. The distribution of components on these machines is similar to a medium network deployment.

Due to the increased traffic and the distributed nature of a large network, certain components, such as Filtering Service and Network Agent, may need to be deployed in multiple locations. See the supplement titled *Deploying in a Distributed Environment* for more information.



Note

Websense, Inc., recommends using dedicated machines for some Websense components. Only the Websense components and required supporting applications are installed on the machine.

The tables in this section list possible configurations.

Windows deployment recommendations

In a Windows environment, 2 dedicated machines are recommended for running Websense software.

- ◆ [Table 1](#) provides deployment recommendations.
- ◆ [Figure 1, page 5](#), shows a Windows deployment in a large network.

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

Table 1 Windows deployment (large network)

Machine	Software	Hardware Recommendations
Dedicated Machine #1	<ul style="list-style-type: none"> • Policy Broker • Policy Server • Filtering Service <ul style="list-style-type: none"> – Websense Master Database • Network Agent¹ • Transparent ID agent:² <ul style="list-style-type: none"> – DC Agent – eDirectory Agent – Logon Agent – RADIUS Agent • User Service • Usage Monitor 	<p>Windows</p> <ul style="list-style-type: none"> • Quad-Core Intel Xeon processor, 2.5 GHz or greater • 4 GB RAM • 10 GB free disk space Free space must comprise at least 20% of the total disk space.
Dedicated Machine #2	<ul style="list-style-type: none"> • Websense Manager <ul style="list-style-type: none"> – Requires Internet Explorer 7 or Firefox 2 or 3 and Adobe Flash Player 8 or later • Log Server • Log Database³ • Microsoft SQL Server 2005/2000 or MSDE 2000 	<p>Windows</p> <ul style="list-style-type: none"> • Quad-Core Intel Xeon processor, 2.5 GHz or greater • 8-16 GB RAM⁴ • 200 GB free disk space utilizing a disk array⁵ • High-speed disk access
<p>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.</p>		
Additional Machine <i>(optional)</i>	<ul style="list-style-type: none"> • Filtering Service <ul style="list-style-type: none"> – Websense Master Database 	<p>An additional machine or machines running Filtering Service may be needed, depending on the volume of Internet requests.</p> <p>Windows</p> <ul style="list-style-type: none"> • Quad-Core Intel Xeon processor, 2.5 GHz or greater • 4 GB RAM • 10 GB free disk space Free space must comprise at least 20% of the total disk space.

Table 1 Windows deployment (large network)

Machine	Software	Hardware Recommendations
Additional Machine (<i>optional</i>)	<ul style="list-style-type: none"> • Network Agent¹ 	<p>An additional machine or machines running Network Agent may be needed, depending on the volume of Internet requests.</p> <p>Windows</p> <ul style="list-style-type: none"> • Quad-Core Intel Xeon processor, 2.5 GHz or greater • 4 GB RAM
Additional Machine (<i>optional</i>)	<ul style="list-style-type: none"> • Transparent ID agent² <ul style="list-style-type: none"> – DC Agent – eDirectory Agent – Logon Agent – RADIUS Agent 	<p>Windows</p> <ul style="list-style-type: none"> • Quad-Core Intel Xeon processor, 2.5 GHz or greater • 4 GB RAM

1. Network Agent can be installed with the other filtering components, or separately on a machine in the network segment that it is assigned to monitor. For more information, see *Chapter 3, Deploying Network Agent*, in the Websense Web Security and Websense Web Filter *Deployment Guide*.
2. Transparent identification agents can be deployed alone or in certain combinations. For more information, see the Websense Web Security and Websense Web Filter *Deployment Guide*.
3. The Log Database can also be created on an existing database server.
4. The amount of required RAM depends on the total number of requests being stored and the number of requests per second being processed. To optimize RAM usage, install the Log Database on a Windows 2003 Server Enterprise Edition machine, and use the Enterprise Edition of Microsoft SQL Server.
5. The Log Database needs a disk array running RAID level 10 to improve I/O performance.

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

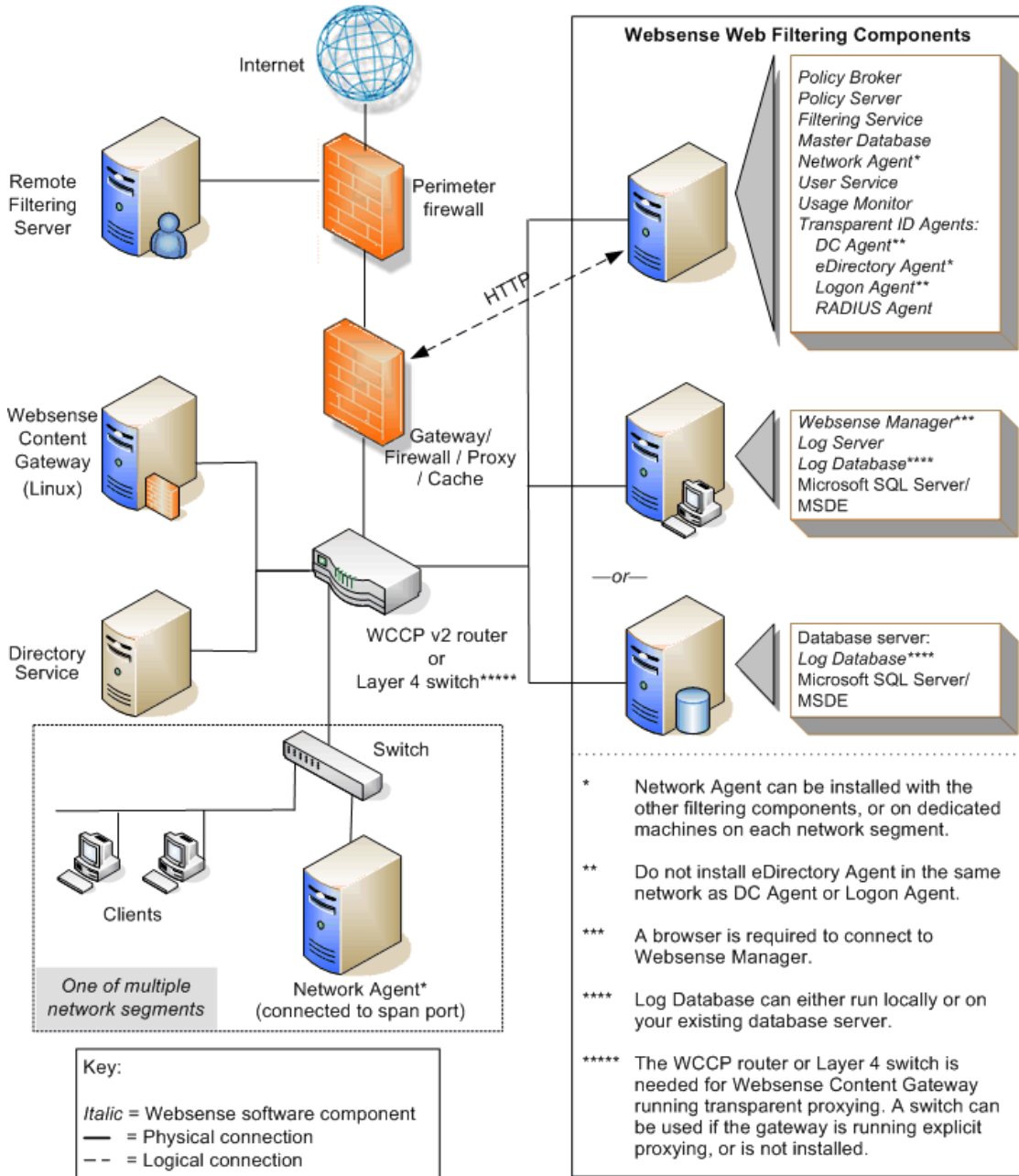


Figure 1 Windows deployment overview (large network)

Linux deployment recommendations

Most Websense components can run on either Windows or Linux machines. Full access to all reporting features (accessed via Websense Manager) requires at least 1 Windows machine.

- ◆ [Table 2](#) provides deployment recommendations.
- ◆ [Figure 2, page 9](#), shows a Linux deployment for a large network.

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

Table 2 Linux deployment (large network)

Machine	Software	Hardware Recommendations
Dedicated Machine #1	<ul style="list-style-type: none"> • Policy Broker • Policy Server • Filtering Service <ul style="list-style-type: none"> – Websense Master Database • Network Agent¹ • Transparent ID Agent:² <ul style="list-style-type: none"> – eDirectory Agent – Logon Agent – RADIUS Agent • User Service • Usage Monitor • Websense Manager (if Dedicated Machine #2 is Linux) 	<p>Linux</p> <ul style="list-style-type: none"> • Quad-Core Intel Xeon processor, 2.5 GHz or greater • 4 GB RAM • 10 GB free disk space Free space must comprise at least 20% of the total disk space.
Dedicated Machine #2 (<i>Windows option</i>)	<ul style="list-style-type: none"> • Websense Manager <ul style="list-style-type: none"> – Requires Internet Explorer 7 or Firefox 2 or 3 and Adobe Flash Player 8 or later • Log Server for Linux • Log Database³ • Microsoft SQL Server 2005/2000 or MSDE 2000 	<p>Windows</p> <ul style="list-style-type: none"> • Quad-Core Intel Xeon processor, 2.5 GHz or greater • 8-16 GB RAM⁴ • 200 GB free disk space using a disk array⁵ • High-speed disk access

Table 2 Linux deployment (large network)

Machine	Software	Hardware Recommendations
Dedicated Machine #2 ⁶ (<i>Linux option</i>)	<ul style="list-style-type: none"> • Websense Explorer for Linux <ul style="list-style-type: none"> – Requires Apache Web server • Log Server • Log Database³ • MySQL 5.0 	Linux <ul style="list-style-type: none"> • Quad-Core Intel Xeon processor, 2.5 GHz or greater • 8 GB RAM • 200 GB free disk space utilizing a disk array⁵ • High-speed disk access
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 (<i>optional</i>)	<ul style="list-style-type: none"> • Filtering Service <ul style="list-style-type: none"> – Websense Master Database 	An additional machine or machines running Filtering Service may be needed, depending on the volume of internet requests. Linux or Windows <ul style="list-style-type: none"> • Quad-Core Intel Xeon processor, 2.5 GHz or greater • 4 GB RAM • 10 GB free disk space Free space must comprise at least 20% of the total disk space.
Additional Machine (<i>optional</i>)	<ul style="list-style-type: none"> • Network Agent¹ 	Linux or Windows <ul style="list-style-type: none"> • Quad-Core Intel Xeon processor, 2.5 GHz or greater • 4 GB RAM
Additional Machine (<i>optional</i>)	<ul style="list-style-type: none"> • Transparent ID agent² <ul style="list-style-type: none"> – DC Agent (Windows only) – eDirectory Agent – Logon Agent – RADIUS Agent 	Linux or Windows <ul style="list-style-type: none"> • Quad-Core Intel Xeon processor, 2.5 GHz or greater • 4 GB RAM

1. Network Agent can be installed with the other filtering components, or separately on a machine in the network segment that it is assigned to monitor. For more information, see *Chapter 3, Deploying Network Agent*, in the Websense Web Security and Websense Web Filter *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 *General Deployment Recommendations* in the Websense Web Security and Websense Web Filter *Deployment Guide*.
3. The Log Database can also be created on an existing database server.
4. The amount of required RAM depends on the total number of requests being stored and the number of requests per second being processed. To optimize RAM usage, install the Log Database on a Windows 2003 Server Enterprise Edition machine, and use the Enterprise Edition of Microsoft SQL Server.
5. The Log Database needs a disk array running RAID level 10 to improve I/O performance.
6. 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 large Linux network. This drawing is not a required configuration; the components may be deployed differently or on multiple segments.

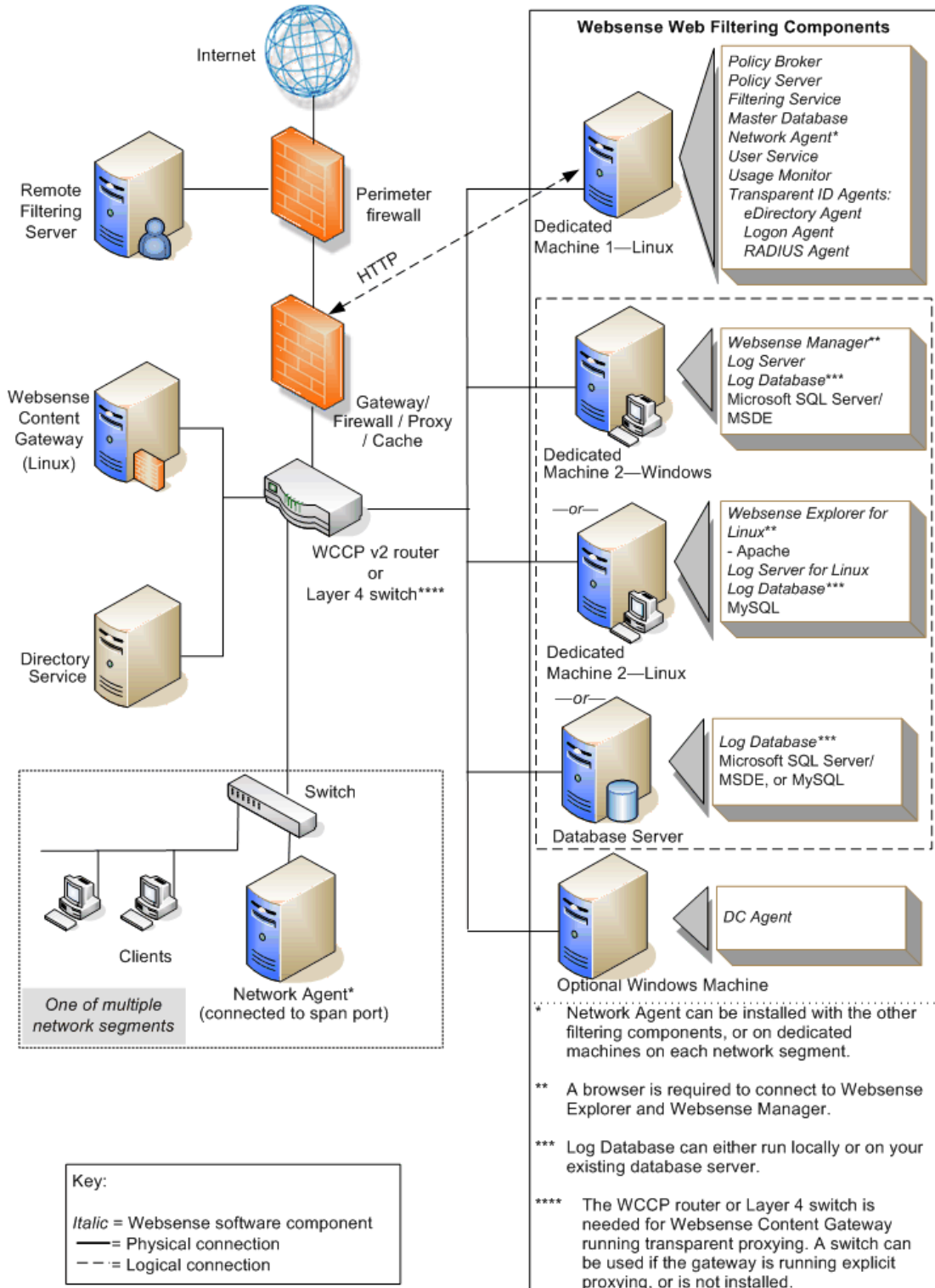


Figure 2 Concept of Linux deployment (large network)

