

Upgrading to Websense Web Security v7.7

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TRITONTM

Web security Email security Data security Mobile security

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Title:

- Support Specialist
- Accomplishments:
 - 10 years supporting
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Qualifications:

- Technical Support
 Mentor
- Product Trainer

Goals and Objectives

- Review version 7.7 system requirements
- Determine your upgrade path
- Is your system ready for upgrading
- Backing up policies
- Best practice tips
- What to expect during the upgrade
- Migrating your settings to a new server

Upgrade Scenarios

- Upgrade existing servers
 - Direct upgrade
 - Intermediate upgrade
- Migrate to new physical servers
 - Install 7.7 on a new server and either; manually input or import policies
- Migrate from a single to multiple servers
 - Suggested recommendation
 - Two 64-bit servers with SQL Server located off-box
- Relocate databases to an off-box SQL Server
- Virtualization
 - Follow directions for upgrading physical servers

Determine Your Upgrade Path

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Web Filter & Web Security software-only deployments

- Direct upgrade
 - -7.5.x or 7.6.0 7.6.5, may directly upgrade to version 7.7
- Intermediate upgrade
 - -7.0 (Web Filter, software-only) > 7.5 > 7.7
 - 7.1.1 (Web Security Gateway) > 7.6 > 7.7
 - Content Gateway deployments must upgrade to 7.6.x before upgrading to version 7.7
- Migration
 - Install 7.7 on a new server and import your policies
 - You can import policies from versions 7.5.x or 7.6.x using the *PgSetup* command

- TRITON Management Server
 - TRITON Web Security hardware and operating system
 - Windows Server 2008 R2 (Standard and Enterprise) 64-bit
 - Suggested implementation
 - Allows installing multiple Web Security modules
 - Windows Server 2008 (Standard and Enterprise) 32-bit
 - Supports only the Web Security module
 - With local SQL reporting database
 - 4 CPU cores (2.5 GHz), 4 GB RAM, 100 GB Disk Space
 - With remote SQL reporting database
 - 4 CPU cores (2.5 GHz), 4 GB RAM, 7 GB Disk Space
 - TRITON Web Security console browser support
 - Mozilla Firefox 4.x through 13.x
 - Google Chrome 13 and later
 - Microsoft Internet Explorer 8 and 9
 - Do not use compatibility mode with Internet Explorer 8

- Web Security software components
 - Not supported on domain controllers
 - Operating systems:
 - Windows Server 2008 (32-bit) and 2008 R2 (64-bit)
 - Red Hat Enterprise Linux 5 and 6
 - Windows-only components:
 - Linking Service
 - Log Server
 - DC Agent
 - Real-Time Monitor
 - Websense Content Gateway is Linux only:
 - Red Hat Enterprise Linux 5 and 6

- Web Security software components (continued)
 - Logon application, Remote Filtering Client, and Web Endpoint client are supported on
 - Windows XP with Service Pack 2 or higher (32-bit and 64-bit)
 - Windows Vista with Service Pack 1 or higher (32-bit and 64-bit)
 - Windows 7 (32-bit and 64-bit)
 - Windows Server 2003
 - Windows Server 2008 and 2008 R2
 - The Web Endpoint client fully supports the following Web browsers on both 32-bit and 64-bit operating systems
 - Documentation states:
 - Internet Explorer 7, 8, and 9 and Firefox 3.x, 4.x, 5, 6, and 7
 - Note: Actually, Firefox 13 and 14 and all Google Chrome versions are supported

- Web Security supported database engines
 - SQL Server 2005 SP4
 - Except Web, Express, and Compact; 32/64-bit, but not IA64
 - SQL Server 2008
 - Except Web, Express, and Compact; all service packs, 32/64-bit, but not IA64
 - SQL Server 2008 R2 Express
 - Installed via the Websense installer only
 - SQL Server 2008 R2
 - Except Web and Compact; all service packs, 32/64-bit, but not IA64
- Virtualization systems
 - Hyper-V over Windows Server 2008 R2
 - VMware over Windows Server 2008 R2

Intermediate Upgrades

If you currently run version 7.5 or earlier, you need to be aware of the new TRITON Management Server

- 7.6 introduced a new management infrastructure
 Unified interface for all Websense consoles
- For information on the new TRITON Management Server, see prior webinars
 - Upgrading to Web Security v7.6
 - Migrating your custom settings to version 7.6

Intermediate Upgrades

- Best practice for version 7.5 and earlier
 - Remove TRITON manager before upgrading
 - Consider installing 7.7 fresh and migrate in your settings
 - MSDE was last supported in 7.5
 - You must be integrated with a supported SQL Server during the upgrade process
 - Or, uninstall Log Server before upgrading
 - Your directory service must include an email address for each Websense delegated administrator
 - admin replaces the WebsenseAdministrator account

Intermediate Upgrades

Current	Current	Upgrade Path
Version	Platform	
v7.0.x	Windows 2003	1. Upgrade to v7.5.x in place.
		2. Migrate to Windows 2008.
		3. Upgrade to v7.7.x on the new platform.
v7.0.x	Red Hat Enterprise	1. Migrate to Red Hat Enterprise Linux 5.
	Linux 3	2. Upgrade to v7.5.x on the new platform.
		3. Upgrade to v7.7.x.
v7.1.x	Windows 2003	1. Migrate to Windows 2008.
		2. Upgrade to v7.5.x on the new platform.
		3. Upgrade to v7.7.x.
v7.1.x	Red Hat Enterprise	1. Migrate to Red Hat Enterprise Linux 5.
	Linux 4	2. Upgrade to v7.5.x or v7.6.x on the new platform.
		3. Upgrade to v7.7.x.
v7.5.x	Windows 2003	1. Migrate to Windows 2008.
		2. Upgrade to v7.7.x.
v7.5.x,	Red Hat Enterprise	1. Migrate to Red Hat Enterprise Linux 5.
v7.6.x	Linux 4	2. Upgrade to v7.7.x on the new platform.
v7.6.x	Windows 2003	1. Migrate to Windows 2008 or 2008 R2.
		2. Upgrade to v7.7.x.

Is Your Integration Supported? websense

• Websense Web Security 7.7 may be integrated with the following products

Product	Versions
Microsoft Forefront TMG	2008 or later
Cisco PIX Firewall	v5.3 or later
Cisco ASA	PIX v7.0 or later
Cisco Content Engine	ACNS v5.5 or 5.6
Cisco Router	IOS v12.3 or later
Check Point	Firewall-1 NGX, NGX 65, UTM-1 (VPN-1) Edge
Citrix XenApp	5.0 or 6.0

Backing Up

- TRITON Management Server (Best practice!)
 - In Task Scheduler, run: TRITON Backup
 - Document: <u>Backing up TRITON infrastructure settings</u>
- Full backup (Best practice!)
 - On all Websense servers, run: wsbackup.exe
 - Document: <u>Backing up Web Security configuration</u>
 - Document: <u>How do I back up and restore Web Security software?</u>
- Policy settings backup (For migrations)
 - On Policy Broker machine, run: PgSetup.exe
 - Article: How to back up and restore the v7.x policy database
- Content Gateway Backup (Best practice!)
 - Via Content Gateway Manager
 - Doc: <u>How do I back up and restore Websense Content Gateway?</u>
 - Doc: <u>Back up Content Gateway v7.7 using WCGbackup</u>
- Demonstration

Identify Upgrade Order

- If Websense components reside on multiple servers, you must identify which server to upgrade first
- Component upgrade order
 - Policy Broker
 - Policy Server
 - Filtering Service and User Service
 - Log Server
 - TRITON Unified Security Center (management server)
 - Network Agent and Content Gateway
 - Remaining server components
 - Remaining off-server components
 - Logon Agent, Remote Filtering Client, Endpoint clients

Restart Websense Components

- Intermediate upgrades, virtual servers upgrades, and Linux OS component upgrades require server reboot
- If Websense has been running for months, restart
- Restart order
 - Article: <u>Stopping and starting Websense services</u>
- Best practice
 - Reboot server
 - For multiple Websense servers, the installed components determine the order in which servers are stopped and started
 - Stop in reverse order of the component list show on prior slide
 - Rule of thumb: Policy Broker and Policy Server services must be running prior to all other services
- If installer hangs stopping a service, manually stop it

Logging and Database

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- If moving to a new SQL Server and NOT retaining the existing reporting database
 - Update the TRITION Infrastructure SQL Server settings
 - Launch Websense installer and select Modify
 - Uninstall Websense Log Server
 - Upgrade
 - Reinstall Log Server
 - A new 7.7 reporting database is generated
- If moving to new SQL Server and retaining the database
 - Update the TRITION Infrastructure SQL Server settings
 - Launch Websense installer and select Modify
 - Detach, move, and then reattach databases to new SQL Server
 - Connect Log Server to the databases on the new SQL Server
 - Article: <u>How to update the ODBC and the Log Server connections</u>
 - Upgrade
 - The existing reporting database is upgraded to version 7.7

Logging and Database

- If retaining a database hosted on a full SQL Server
 - Stop Log Server service
 - Disable all Websense SQL Agent jobs
 - After upgrade, re-enable Websense SQL Agent jobs
- If using a Windows trusted account for the SQL connection, perform the upgrade logged on as the same trusted account

Tips

- Ensure your system is functional prior to upgrading
 Upgrading does not repair a non-functional system
- The Filtering Service and TRITON Web Security machines must have same locale settings
 - After upgrade, Filtering Service can be restarted with any locale settings
- Reporting database
 - Disable SQL Server Agent jobs prior to upgrading
 - Stop Log Server
 - Consider backing up SQL partitions
 - Your SQL version and service pack must be supported
 - Incompatible versions may result in corrupted databases

Tips

- Master Database is removed during upgrade
 - Plan on a large file download when upgrade completes
 - Prior 7.7 Endpoint Clients begin working after Master database download finishes
- Set service recovery option to, "Take no action"
- Upgrade only affects local Websense components
- Perform full backups on all Websense servers
- Log out of TRITON Web Security console
- All Websense components must be same version
 - Endpoint clients are exceptions
- New services require opening ports on firewalls

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Tips

- Stop antivirus software during upgrade
 - Restart after upgrade completes
- Some Content Gateway settings are not preserved
 - Must restore Integrated Windows Authentication settings
 - See the WCG post-upgrade activities list for full details
- See the <u>Deployment guide</u> for more considerations on upgrading Linux servers

Expectations



- What to expect from the upgrade
 - Users are not filtered during upgrade process
 - Components successfully upgraded cannot be rolled back
 - Polices and most configuration details are preserved across intermediate upgrades
 - Demonstration
- Post-upgrade, enhancements and new features
 - Read the Release Notes
 - Review the Upgrading User Quick Start Tutorial

Issues Seen In Techsupport

- Incompatibility between the Content Gateway 7.7 implementation of WCCP GRE and Cisco ASA firewall products
 - To avoid this problem, do not change the WCCP configuration file (wccp.config) as suggested in the upgrade documentation
 - Article: Content Gateway v7.7.0: WCCP and Cisco ASA
 - Best practice
 - Install a 7.7 Content Gateway test system
- Encountering corrupted reporting databases when upgrading with an unsupported SQL Server

Issues Seen In Techsupport

- Running the Websense installer on a Linux server results in incorrect library file errors
 - Specific update packages must be installed prior to running the Websense Content Gateway installer
 - Use YUM to update libraries on the Linux server
 - Article: <u>How to install 'update packages' for Websense</u>
 <u>Content Gateway v7.7 software installations</u>
 - Document: Installing Web Security components on Linux

If Your Upgrade Does Not Succeed websense

- Restore from backup
 - How To Back Up And Restore v7.x Policy Database
 - <u>How Do I Restore My Websense Filtering Configuration?</u>
- Migrate policies to fresh 7.7 installation
 - Document: <u>Moving Web Security policy components to a</u> <u>new machine</u>
- Best practice
 - If resources are available, install 7.7 on a new server and either
 - Migrate in your current policies, or
 - Manually enter your policies
 - Allows spring cleaning
 - Affords reviewing current policies, key words, custom URLs, etc.

Additional Resources

- Upgrading User Quick Start Tutorial
- Before upgrading Web Security to v7.7
- <u>Upgrading Web Filter or Web Security software-only</u> <u>deployments from v7.5.x</u>
- Backup and Restore FAQ
- Backing up and restoring your Websense data
- How do I back up and restore the TRITON infrastructure?
- How do I back up or restore TRITON Unified Security Center settings?
- How do I back up and restore Web Security software?
- How do I back up and restore Websense Content Gateway?
- How to back up and restore the v7.x policy database

Additional Resources

- How to migrate 7.1 and 7.5 policies to 7.6
- Migrating Web Security to a new operating system
- What tasks should I perform prior to installing or upgrading Websense?
- Installation and upgrade
- How to install 'update packages' for Websense Content Gateway v7.7 software installations
- Content Gateway <u>Pre and post-upgrade activities</u>
- Webinar: Installing Version 7.6: The Latest Tips

Upcoming Webinar

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Introduction to Websense Data Security v7.7

Webinar Update

September 19th, 2012

Time:

Date:

8:30 A.M. PDT (GMT -8)

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