

Upgrading a V-Series Appliance to Version 7.6

Webinar May 2011



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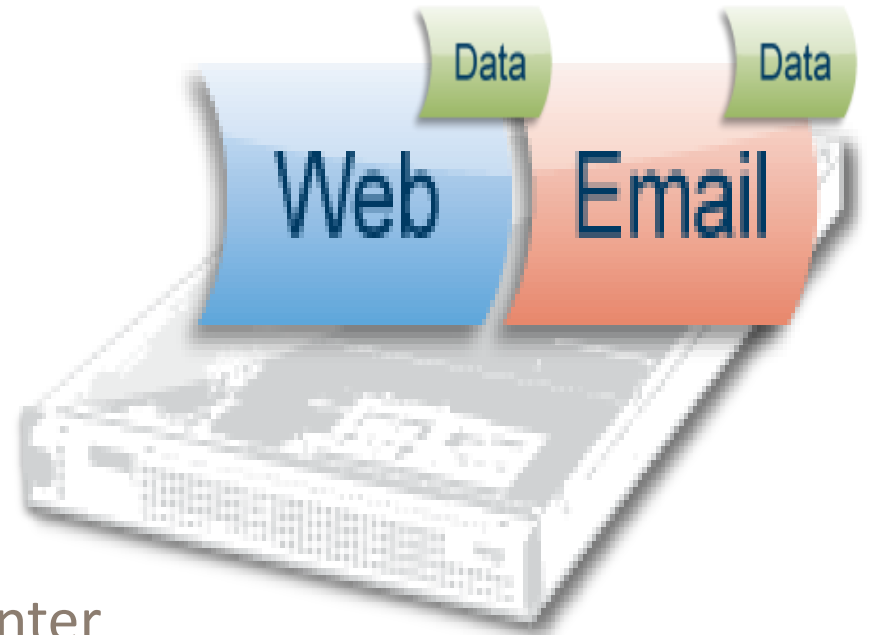
- **Title:** Support Specialist
- **Accomplishments:**
 - 9 years supporting Websense products
- **Qualifications:**
 - Technical Support Mentor
 - Product Trainer

Goals And Objectives

- TRITON Infrastructure & mgmt. module dependencies
- Appliance model upgrade path and limitations
- Backing up policies and environment settings
- Tips for successful upgrade
- Upgrade checklist and system check tool
- How to recover if the upgrade runs into problems
- Transition off-appliance components to 64-bit platforms

7.6: A Significant Release

- Many new features and usability improvements, including:
 - Email Security Gateway
 - 64-bit support
 - Real-Time Monitor
 - TRITON Unified Security Center



NEW - Email Security Gateway



- **TruEmail Data Leakage Protection (DLP)**
 - Analyze email messages for sensitive company data
- **TruHybrid email security using layered filtering**
 - *In-the-cloud* bandwidth cost savings, *on-premises* refined controls
- **Embedded Web content classification and threat analysis**
 - Analyzes URLs within email messages for threats
 - Anti-virus, anti-spam, email reputation, and real-time scanning
- **Available on V5000 & V10000 G2 appliances**
 - Email Security Gateway is not available on G1 (first generation) appliances

- **TRITON Infrastructure** (*installs 1st*)
 - Underlying communication framework required by TRITON Unified Security Center (TRITON console) and management modules
 - Uses ports 9443 and 8080
 - \EIP Infra\
- **TRITON Unified Security Center** (*installs 1st*)
 - Where Websense administrative accounts reside
 - Allows single sign-on (SSO) for all-modules
- **TRITON management modules** (*installs 2nd*)
 - Web Security, Data Security, and Email Security
 - **TIP:** Modules are installed as plug-ins into the TRITON Infrastructure
 - **TIP:** The “module plug-in” concept is important to ensure correct installation
- **TRITON management server**
 - Machine on which TRITON Unified Security Center, along with certain optional components, is installed

- TRITON Unified Security Center
 - *Multiple* management modules:
 - Windows Server 2008 R2 64-bit
 - *Single* management module (Web Security or Data Security only):
 - Windows Server 2003 or 2008 32-bit
 - Microsoft SQL Server MUST be available in the network
 - MSDE support is deprecated, replaced by SQL Server 2008 Express R2
 - **WARNING: Upgrade issue when MSDE is installed locally**
- Management module(s)
- Optional components
 - SQL Server 2008 R2 Express
 - Web Security Log Server
 - Email Security Log Server
 - Real-Time Monitor
 - Transparent ID Agents

TRITON Management Server Hardware Requirements

	Windows Server 2003 R2 32-bit*	Windows Server 2008 32-bit	Windows Server 2008 R2 64-bit	V-Series Appliance
TRITON – Data Security	✓		✓	
TRITON – Web Security	✓	✓	✓	✓
TRITON – Email Security			✓	

- Security Modules

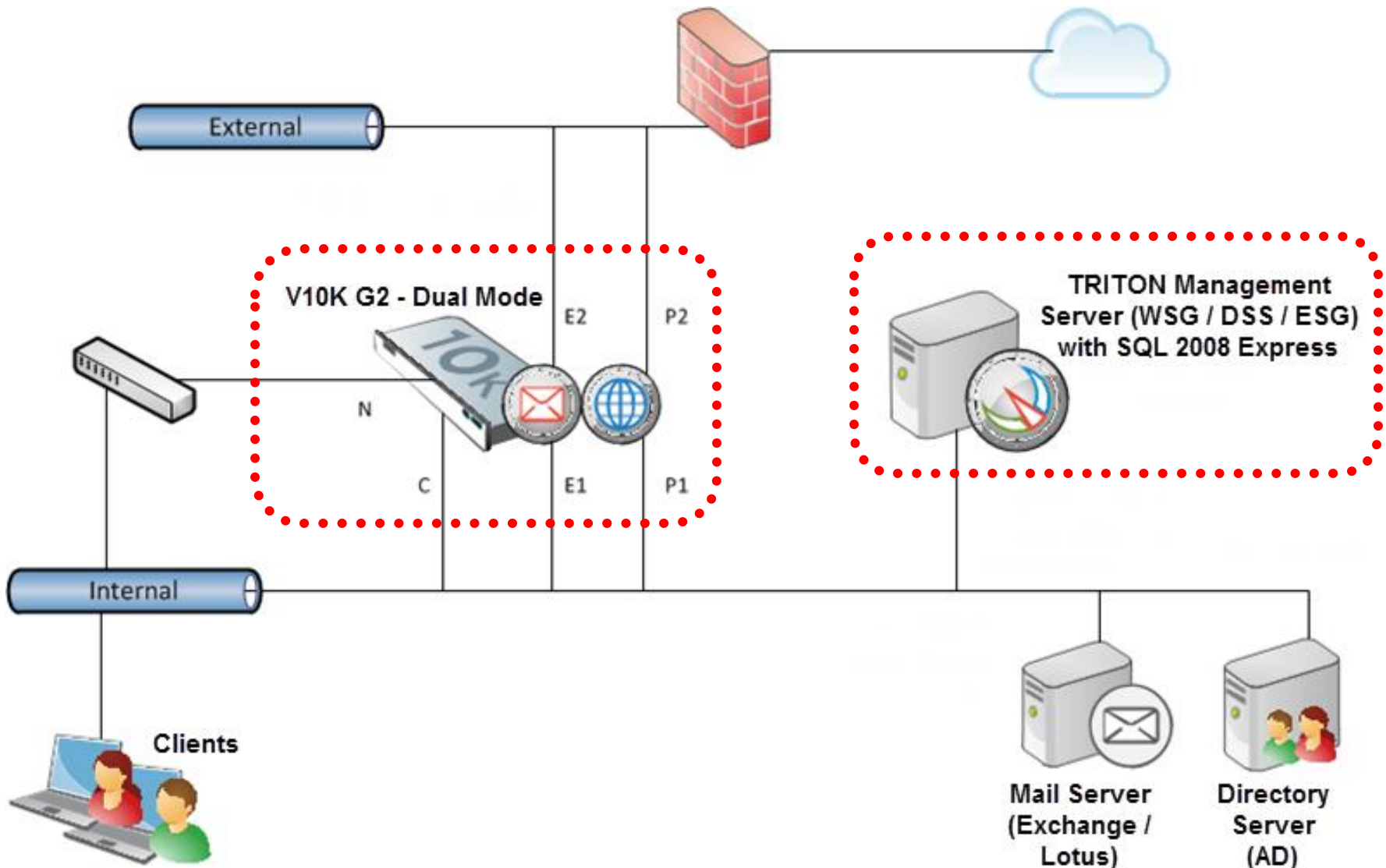
- Web
- Data
- Web/Data or Email/Data
- Web/Data/Email

- Minimum Requirements

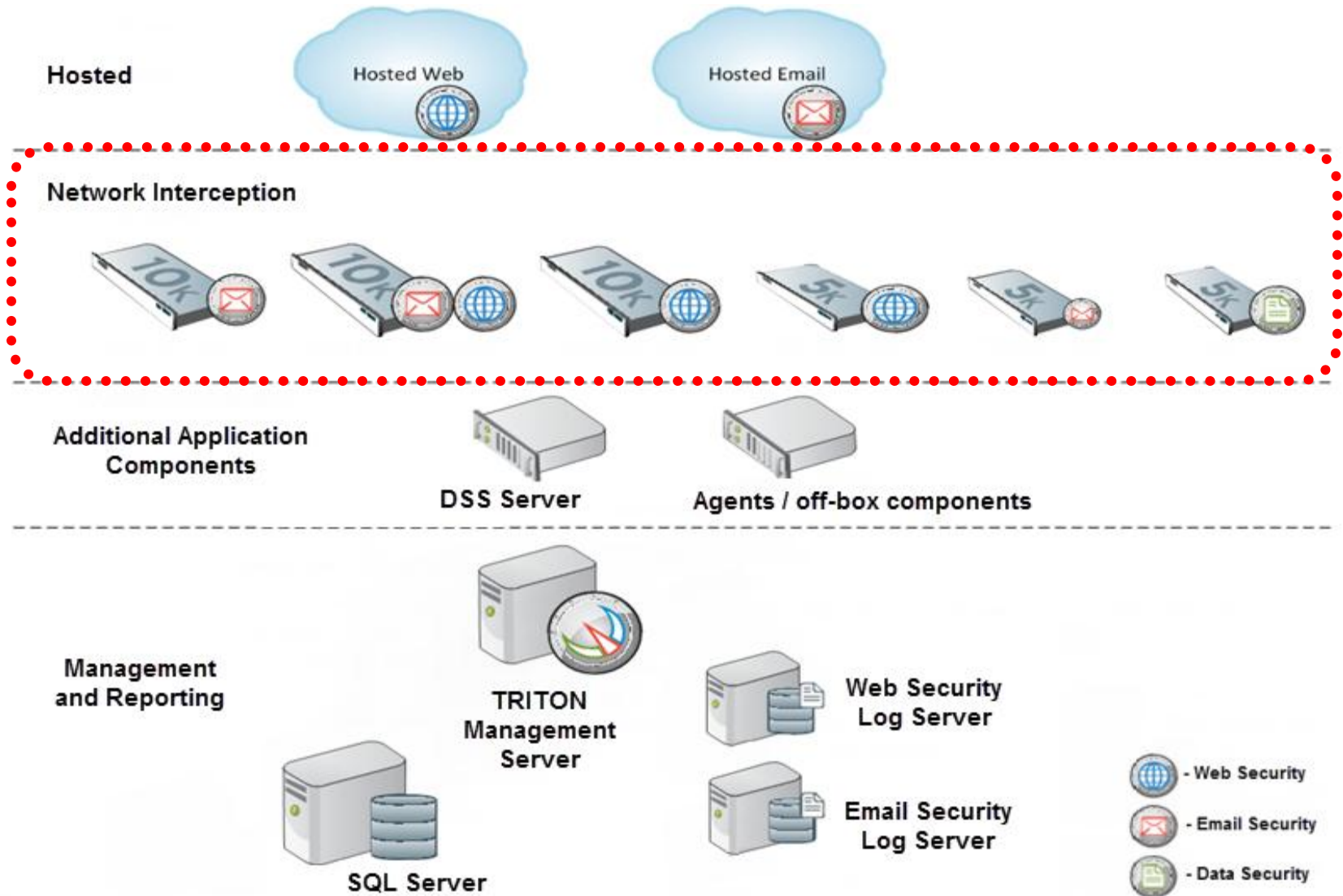
- 4 CPU cores (2.5 GHz), 4 GB RAM
- 4 CPU cores (2.5 GHz), 8 GB RAM
- 4 CPU cores (2.5 GHz), 8 GB RAM
- 8 CPU cores (2.5 GHz), 16 GB RAM

- Minimum disk space requirements depend on whether SQL Server 2008 R2 Express is installed on the management server (local database) or SQL Server is installed remotely

Simple Deployment Diagram

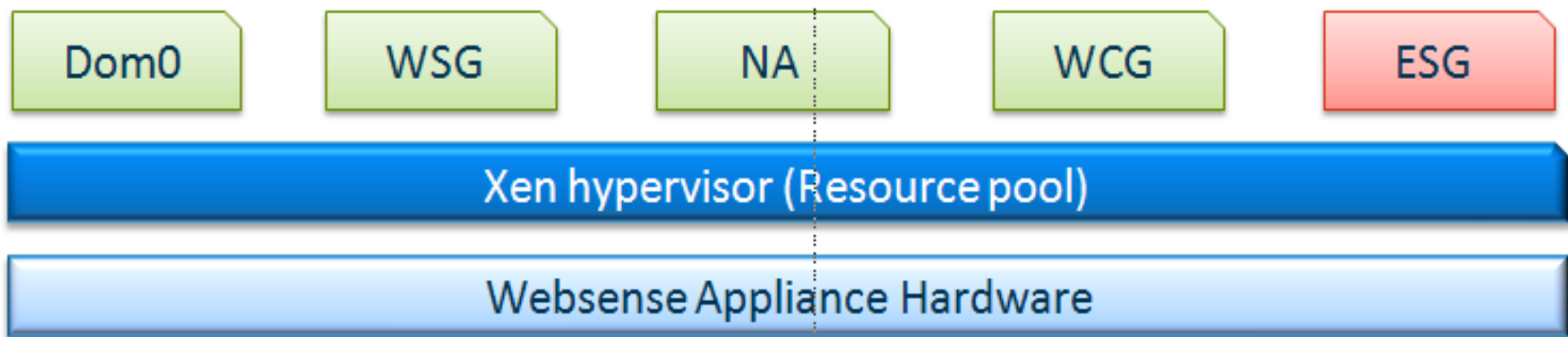


Security Modes



Provisioning Security Modes

- Versions before 7.6 (except 7.5.4) host only Web Security Gateway
- Version 7.6 introduces new modes:
 - Email Security only (G2 appliances only)
 - Web and Email Security (V10000 G2 only)
- Appliance resources are allocated differently depending on the selected mode



- The security mode is selected as part of the **firstboot** script
- Firstboot offers 3 options:
 - Web Security only
 - Email Security only
 - Web and Email Security
- Cannot run firstboot a second time to change mode
 - The appliance must be reimaged to change security mode
 - Reimaging is required to reallocate appliance resources
- New version 7.6 installations can be performed only on V-Series **G2 appliances**

Changing to Web and Email Mode

- Only v10k G2 appliances
- Uninstall all 7.5 off-appliance components
- Upgrade appliance 7.5.x to 7.6
- Perform a full backup
- Re-image the appliance with 7.6
- During firstboot, choose *Web and Email Security* mode
- Restore the full backup
- Install off-box components
 - Opportunity to install on 64-bit platforms
 - Add Real-Time Monitor
- Demonstration

- v7.5, 7.5.1, 7.5.2, 7.5.3 may directly upgrade to 7.6
 - Prior versions must be upgraded to a 7.5.x version listed above
- Two installers
 - Appliance installer and off-box installer
- Upgrade takes approximately 100 minutes (one V-Series appliance and one Windows server)
 - 10 mins, download appliance upgrade file (1.5 GB)
 - 10 mins, back up the appliance
 - 40 to 50 mins, run the upgrade
 - 10 mins, restart appliance and verify success
 - 5 mins, download the Windows 7.6 Websense Installer
 - 10-15 mins, upgrade off-box components
 - 5 mins, restart Windows server and verify success

Upgrading Multiple Appliances

- When the full policy source is a V-Series appliance
 1. Upgrade the *full policy source* V-Series appliance
 2. Upgrade all *user directory and filtering* appliances
 3. Upgrade all *filtering only* appliances
- When the full policy source **is not** a V-Series appliance
 1. Upgrade the Policy Broker and Policy Server machine
 2. Upgrade all *user directory and filtering* appliances
 3. Upgrade all *filtering only* appliances
- Considerations
 - Restart each appliance after upgrade
 - After upgrading all appliances, upgrade off-box components
- If the full policy source appliance is unavailable, or you are upgrading clustered appliances
 - See the [Deployment and Installation Center](#)

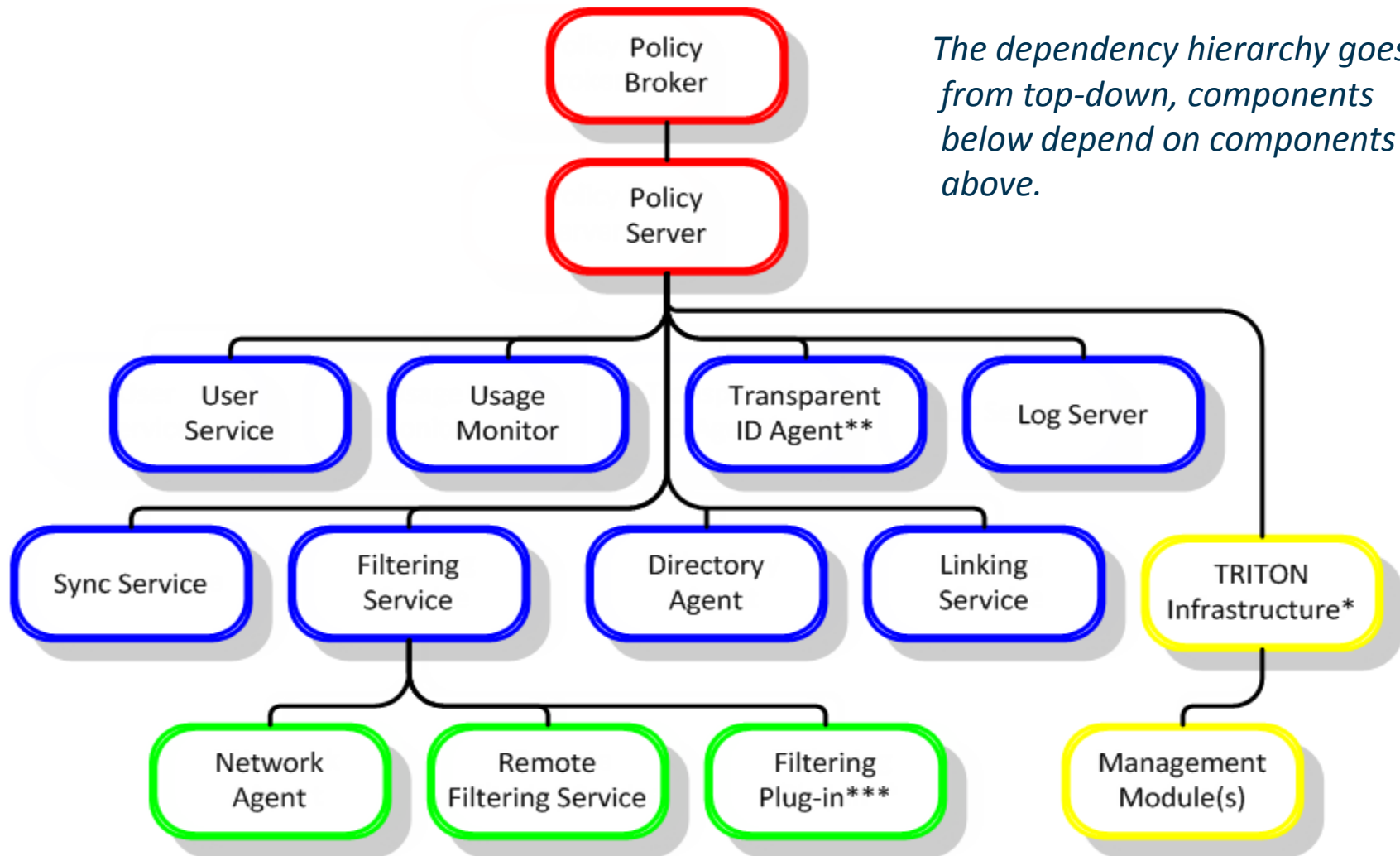
Preparing For The Upgrade

- Visit the [7.6 Upgrade Center](#)
 - Check System Requirements- [Chapter 2](#)
 - Run the [TRITON Console System Requirements tool](#)
- Perform a full appliance backup
- Decide if you are moving to 64-bit servers
- TIP: Remove TRITON - Web Security before upgrading
- Identify a supported Microsoft SQL Server installation
- TIP: [Move MSDE databases](#) out of Websense\ directory or reattach them to SQL Express
- Demonstration

- Chapter 53, Preparing for the upgrade
 - Back up configuration and settings
 - Download Content Gateway logs
 - Service disruption during upgrade
 - Restart required
 - Websense administrator accounts
 - Content Gateway changes
 - Configuration settings not preserved
 - New features to configure after upgrade
 - admin password
 - Disable on-appliance TRITON - Web Security if both on- and off appliance instances used in prior version

- **Always use the Websense Installer to modify an installation**
 - The *Modify* option is not available when uninstalling via Windows Uninstall applet
- **Uninstall order**
 1. Secondary components and plug-ins
 2. Web Security/Data Security/ Email Security management modules
 3. Core components
 4. TRITON Infrastructure
 5. SQL Server
 - Save the reporting databases?

Component Dependencies



The dependency hierarchy goes from top-down, components below depend on components above.

* SQL Server must be available

** DC Agent, Logon Agent, eDirectory Agent, or RADIUS Agent

*** Microsoft ISAPI Filter, Citrix Integration Service, or Squid redirector plug-in

- The uninstaller ONLY notifies you of dependent components on the same machine
 - The uninstaller cannot notify you of dependent components on other machines
 - Remove any dependent components on other machines first
- Multiple Policy Servers
 - Policy Server keeps track of the location of the components associated with it
 - Log in to each Policy Server instance to view settings
- Preserve your custom files
 - dc_config.txt, custom block pages, .ini files, etc.
- Chapter 48: [Removing Components](#)

Converting To 64-bit Platforms

- Your policy source resides *on the appliance*
 - On non-appliance servers
 - Back up custom files
 - Uninstall components using the Websense Installer
 - The uninstaller gracefully deregisters components from Policy Server
 - After appliance is upgraded to 7.6
 - Reinstall off-box components on 64-bit servers
 - The installer gracefully re-registers components with Policy Server
- Your policy source resides *off the appliance*
 1. Set appliance to full policy source & upgrade to 7.6
 2. Upgrade the off-box policy source to 7.6, and backup policies
 3. Install a new 7.6 policy source on the 64-bit platform
 - Import policies from the 32-bit machine (step 2)
 4. Point appliance to the new policy source 64-bit server
- Article: [How to migrate 7.1 and 7.5 policies to 7.6](#)

- **V10000 G2 appliance**
 - Recovery 7.6 image available
- **V5000 G2 appliance**
 - Recovery 7.6 image available
- **V10000 G1 appliance**
 - No 7.6 recovery image available
 - Must recover with 7.5 image and then upgrade to 7.6
- **Disaster Recovery Process:**
 - G2, recover with 7.6 image, restore from backup
 - G1, recover with 7.5 image, upgrade to 7.6, restore backup
 - Must have 7.6 backups available

- [Backing up 7.5 - Appliance Manager Help](#)
- [7.6 Release Notes](#)
- [Introducing Websense[®] V-Series 7.6](#)
- [7.6 Upgrade Center](#)
 - TRITON Console System Requirements tool
 - Top KB articles for upgrade issues
- [Stopping and starting 7.6 Web Security services](#)
- [Websense 7.6 Install or Upgrade Checklist](#)
- [Deployment and Installation Center](#)
 - A pdf repository for most 7.6 documents
- **V-Series Appliance Migration**
 - Article detailing changing appliance security modes
- [Upgrading V-Series Appliances to Version 7.6](#)
 - Common concerns seen in techsupport

Knowledge Base

- Search or browse the knowledge base for documentation, downloads, top knowledge base articles, and solutions specific to your product.

Support Forums

- Share questions, offer solutions and suggestions with experienced Websense Customers regarding product Best Practices, Deployment, Installation, Configuration, and other product topics.

Tech Alerts

- Subscribe to receive product-specific alerts that automatically notify you anytime Websense issues new releases, critical hot-fixes, or other technical information.

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- Create and manage support service requests using our online portal.

Webinar Update

Title: **Installing Version 7.6: The Latest Tips**

Date: **June 15, 2011**

Time: **8:30 AM PST (GMT -7)**

How to register: <http://www.websense.com/content/SupportWebinars.aspx>

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Questions?

