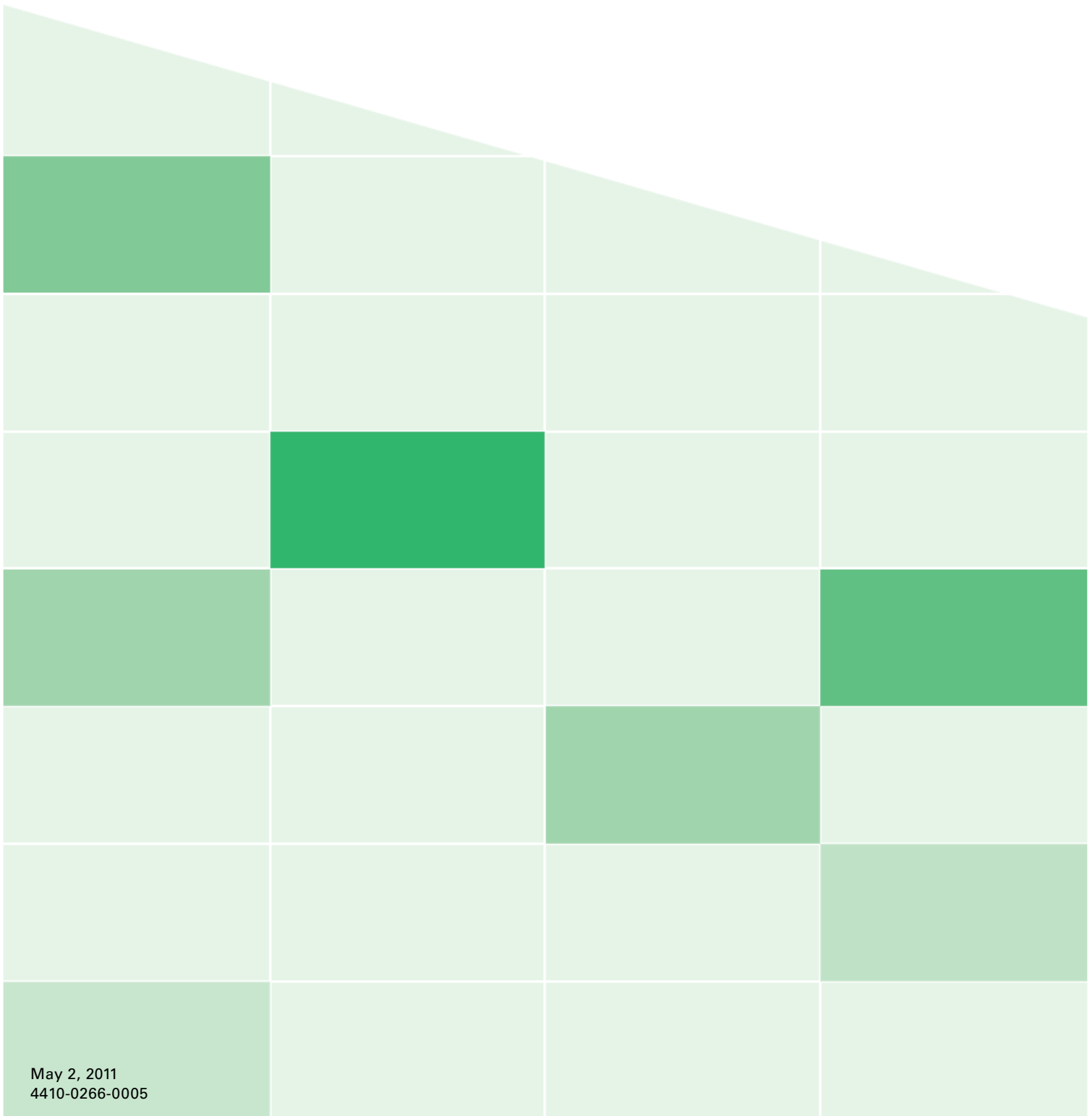




VBrick Enterprise Media System

VEMS v5.4 Portal Server Release Notes



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About VBrick Systems

Founded in 1997, VBrick Systems, an ISO 9001 certified vendor, is a privately held company that has enjoyed rapid growth by helping our customers successfully introduce mission critical video applications across their enterprise networks. Since our founding, VBrick has been setting the standard for quality, performance and innovation in the delivery of live and stored video over IP networks—LANs, WANs and the Internet. With thousands of video appliances installed world-wide, VBrick is the recognized leader in reliable, high-performance, easy-to-use networked video solutions.

VBrick is an active participant in the development of industry standards and continues to play an influential role in the Internet Streaming Media Alliance (ISMA), the MPEG Industry Forum, and Internet2. In 1998 VBrick invented and shipped the world's first MPEG Video Network Appliance designed to provide affordable DVD-quality video across the network. Since then, VBrick's video solutions have grown to include Video on Demand, Management, Security and Access Control, Scheduling, and Rich Media Integration. VBrick solutions are successfully supporting a broad variety of applications including distance learning and training, conferencing and remote office communications, security, process monitoring, traffic monitoring, business and news feeds to the desktop, webcasting, corporate communications, collaboration, command and control, and telemedicine. VBrick serves customers in education, government, healthcare, and financial services markets among others.

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Portal Server v5.4 Release Notes

These *Release Notes* have important information about v5.4 of the Enterprise Media System Portal Server. The Portal Server allows you to manage your video activities seamlessly with device, system and user management, a scheduling interface, and viewing portal. You can access all live IP Video channels and on-demand servers—at any time or from any place. More information can be found in the VEMS Portal Server user documentation. The setup file on the Product CD installs the necessary VEMS Portal Server components to a target VEMS Portal Server machine. VEMS Portal Server v5.4 requires the installation of a license file, normally supplied by e-mail or CD-ROM. *Note that the VEMS Portal Server will not operate correctly on a server that is configured as a primary domain controller.* **VBrick tests and supports the VEMS Portal Server on the platforms listed below.** These are the only supported platforms—VBrick does not test or support the Portal Server on other platforms.

- Windows Server 2003 (Web Edition or Standard Edition)
- Windows Server 2008 (Web Edition or Enterprise Edition)

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What's New in VEMS v5.4

- Lifesize Video Center support – display, play, and manage (add, modify, delete) live and stored Flash content from a LifeSize server.
- Multi Format Set Top Box – support for additional resolutions (1920x1080, 1280x720, 720x576, 720x480).
- Rich Media Studio –
 - support for Rich Media Studio 1.2 (H.264 multicast) SAPs.
 - support for Silverlight presentations.
- Support for VBrick DVB-T Gateway.
- Support for Internet Explorer 9 and Firefox 4.

Flash Support in VEMS 5.4 or Higher

The following table shows the Flash servers and Flash file types supported in this VEMS v5.3. As explained below, there are some constraints on Flash files when using a progressive download File Server.

Table 1. Flash Support in VEMS 5.3

Supported Server Types	Supported File Types
Wowza Flash Server	H.264 (MP4), FLV, F4V
Adobe Flash Media Server	H.264 (MP4), FLV, F4V
Distributed Media Engine (DME)	H.264 (MP4), FLV, F4V
LifeSize Video Center	MP4
Progressive Download File Server	FLV, SWF, H.264 (MP4), F4V
VBStar (Windows Media or H.264)	FLV, SWF, H.264 (MP4), F4V

Playing Flash Files from a Progressive Download File Server

Based on our tests, VBrick has determined that when playing Flash files from a progressive download File Server, the Flash player has issues which can result in inconsistent performance largely depending on the source of the Flash files. If possible, it is recommended that you do not use a File Server for Flash files. Instead, use a VOD-W or a Darwin server for H.264/MP4 content and a Wowza/Adobe server for Flash content. If you require use of a file server for playback of Flash files, VEMS does support the ingestion and playback of H.264 (MP4), FLV, and F4V files to and from progressive download File Servers and VBStars (H.264 and WM).

- ▼ For best results when playing Flash from a progressive download File Server:
 - Use video files created by Adobe applications rather than files created by other tools.
 - Try a different browser, ideally Internet Explorer 8. The Flash player behaves different in different browsers. If you encounter issues with the player:
 - Wait for a few moments. Click the Pause button and then the Play button.
 - Restart the stream

Digital Signage Reboot

If VBrick Digital Signage is installed on the VEMS server machine, the VEMS server will automatically reboot weekly at the default day and time (Wednesday, 2:00 AM) set in Digital Signage. To change or disable this auto reboot, see the "Content Settings > Boot Schedule" topic in the *Digital Signage Quick Start Guide*. Note that when a reboot occurs, all video playback and recordings originating from the VEMS server (including presentations) may be interrupted. Administrators may need to close the Admin Console and log back in; client end users may need to close all windows and restart their VEMS application. Scheduled content and presentations (not already in progress) will not be affected.

What's No Longer Supported in VEMS

The following table shows legacy devices and features have limited support or no support in VEMS 5.4.

Table 2. Unsupported Devices and Features

Device	Description
MPEG-1 Encoders	VBrick no longer provides full support for legacy MPEG-1 devices and you cannot initiate programming from an MPEG-1 encoder. This means you cannot create a scheduled broadcast from a VBrick MPEG-1 appliance, nor can you use a manually-entered URL that points to a VBrick MPEG-1 appliance. Also you cannot add new MPEG-1 content to a VOD-W server. You may be able to play, or create schedules from a VOD-W server using existing MPEG-1 content, but VBrick assumes no responsibility for support if problems occur.
NXG Servers	Existing NXG VOD servers are compatible with VEMS 5.4 but have not been tested and will no longer be supported by VBrick. This means you can use existing NXG servers if they work but VBrick assumes no responsibility for support if problems occur.
PowerPCs	<ul style="list-style-type: none">• Legacy PowerPC G3/4/5 Macs are no longer supported and may not play 5.4 streams. If you wish to use existing PowerPC Macs at your site, VBrick recommends you do not upgrade to VEMS v5.4.• Legacy Safari browsers (v3.1.2 or earlier) may work with VEMS but are not tested or supported.
Linux PCs	VBrick support for Linux PCs has been discontinued entirely.

System Description

Portal Server Prerequisites

Windows 2003/2008 Server Requirements

- The Windows Server 2003 or Windows Server 2008 installation disks are required for the install.
- The Portal Server must be installed on a 32-bit Windows Server operating system. 64-bit operating systems are not supported.
- A minimum of 800 MB free disk space. Substantial additional disk space will likely be needed when ingesting or recording video.
- IIS Web Server and IIS FTP Server functionality must be enabled. The installer will determine if this needs to be installed.

Portal Server Specifications

VEMS Standard Edition, NVR 10

Single Xeon Processor at 2.13 GHz, 2 GB memory, 4 x 73 (10 k, 2.5 in drives) configured as a RAID5, Redundant Power.

-
- PowerEdge R610 with Chassis for Up to Six 2.5-Inch Hard Drives
 - E5506 Xeon Processor, 2.13GHz 4M Cache, 4.86 GT/s QPI, TurboHT
 - 2GB Memory (2x1GB), 1066MHz Single Ranked UDIMMs for 1 Processor, Adv ECC
 - Embedded Broadcom, GB Ethernet NICS with TOE
 - PowerEdge R610 Heat Sink for 1Processor
 - (4) 73GB 10K RPM Serial-Attach SCSI 2.5" Hot Plug Hard Drive
 - PERC 6/i SAS RAID Controller 2x4 Connectors, Internal, PCIe256MB Cache
 - Windows Server 2008, Web Edition
 - DVD ROM, SATA, Internal
 - RAID 5 for PERC 6/i Controller
 - Sliding Ready Rails Without Cable Management Arm
 - Energy Smart Power Supply Redundant, 502W

VEMS Professional Edition, Enterprise Edition, NVR 40, Distribution Servers

Dual Xeon Processors at 2.8 GHz, 4 GB memory, 2 x 73 GB drives configured as RAID 1 for the OS, 2 x 146 GB drives configured as a RAID1 for recordings, Redundant Power.

-
- PowerEdge R610 with Chassis for Up to Six 2.5-Inch Hard Drives
 - (2) X5560 Xeon Processor, 2.8GHz 8M Cache, 6.40 GT/s QPI, TurboHT
 - 4GB Memory (4x1GB), 1066MHz Single Ranked UDIMMs for 2 Processors, Adv ECC
 - Embedded Broadcom, GB Ethernet NICS with TOE
 - PowerEdge R610 Heat Sinks for 2 Processors
 - (2) 73GB 10K RPM Serial-Attach SCSI 2.5" Hot Plug Hard Drive
 - (2) 146GB 10K RPM Serial-Attach SCSI 2.5" Hot Plug Hard Drive
 - PERC 6/i SAS RAID Controller 2x4 Connectors, Internal, PCIe256MB Cache
 - Power Saving BIOS Setting
 - Windows Server 2008, Web Edition
 - DVD ROM, SATA, Internal
 - RAID 1/RAID 1 for PERC 6/i or SAS 6/iR Controllers
 - Sliding Ready Rails Without Cable Management Arm
 - Energy Smart Power Supply Redundant, 502W
-

IPv6 Support

VEMS v5.3 has limited support for IPv6. IPv6 has a larger address space than IPv4 resulting from the use of a 128-bit address, whereas IPv4 uses only 32 bits. The new address space thus supports 2^{128} addresses. This expansion provides flexibility in allocating addresses and routing traffic and eliminates the need for network address translation (NAT). VEMS v5.3 supports IPv6 as follows:

- Admin access to an IPv6-enabled Portal Server using the host name or the IPv6 address.
- Full operability of the Portal Server from an IPv6 enabled client using an IPv6-enabled Portal Server specified by host name in the browser.
- Assignment of specific LAN/Internet Address Range(s) using IPv6 style addresses on the Global Assignments page in the Admin Console.
- Assignment of Client Address(es) using IPv6 style addresses when defining Zones in the Admin Console.

Note If your network has IPv6-enabled VEMS clients or VEMS servers, you must define IPv6-style ranges, and IPv4-style ranges, for all clients defined in the LAN/Internet zone.

Installing the Portal Server

If you ordered a Hardware/Software combination, the software will be pre-installed, your licenses will be activated on your server, and no additional installation is required. The *Portal Server Admin Guide* will instruct you on how to configure the software. The *User Guide* will instruct you and your end users on how to access and view video from the Portal Server and how to schedule and view events with the Scheduler (if you purchased the Scheduler module).

For software only orders, it is strongly recommended that you read the *Release Notes*, which contain the installation instructions, and the *Admin Guide* prior to installing the software. The first step you should take is to Activate your software license. See the detailed instructions on the VEMS Product CD and on the "Software License Activation" document that was shipped with your system. *Be aware that if you purchased a server-based "software-only" product from VBrick, you will need to install the software on a fully-dedicated server.* There is no support or warranty coverage for Portal Server, Distribution Server, VOD, or NVR software installed on a non-dedicated server. VBrick also recommends that you do not use anti-virus, spyware detection, or similar software. If you purchased a Network Video Recorder, see the *NVR Release Notes* for installation instructions.

Note Windows Server 2003 or Windows Server 2008? The installation steps for certain procedures vary slightly depending on whether you are using Windows Server 2003 or Windows Server 2008. For example, in Windows Server 2003 you use Control Panel > Add or Remove Programs for certain steps. In Windows Server 2008 you use Control Panel > Programs > Programs and Features. *This document explains how to perform installation steps if you are using Windows Server 2008.* If you are using Windows Server 2003, the steps will be slightly different.

Also, if you will be installing VEMS on a system with Windows Server 2003 *Standard Edition* installed, you will need to perform certain configuration steps *before* installing the Portal Server. These steps are explained below in [Configuring for Windows Server 2003 Standard Edition](#).

Configuring for Windows Server 2003 Standard Edition

The Portal Server runs on Windows Server 2003 Web Edition or on Windows Server 2003 Standard Edition. If you are using a server with Windows Server 2003 Standard Edition installed, you must modify the installation as explained below *before* installing the Portal Server. **If you are using Windows Server 2003 Web Edition or Windows Server 2008, ignore these steps and go to [Installing the Portal Server \(Windows Server 2003 or 2008\)](#) on page 6.**

- ▼ To modify the Windows Server 2003 Standard Edition configuration
- 1. Install IIS (Internet Information Services).
 - a. Go **Start > Control Panel > Add or Remove Programs**.
 - b. Click on **Add/Remove Windows Components** in the left navigation panel of the window.
 - c. Click on **Application Server** and select **Details**.
 - d. Make sure the following subcomponents are selected:
 - Application Server Console
 - ASP.NET
 - Enable network COM+ access
 - Internet Information Services (IIS)
 - e. Then select **Internet Information Services (IIS)** and click **Details**.

-
- f. Make sure the following subcomponents are selected:
 - Common Files
 - File Transfer Protocol (FTP) Service
 - Internet Information Services Manager
 - World Wide Web Service
 - g. Then select **World Wide Web Service** and click **Details**.
 - h. Make sure the following subcomponents are selected:
 - Active Server Pages
 - World Wide Web Service
2. If you install .NET 2.0 before installing IIS, the Network Service user is not added correctly to the .NET framework folder. Use these steps to verify or add the Network Service user:
 - a. Go to `C:\WINDOWS\Microsoft.NET\Framework`.
 - b. Right-click on the `Framework` folder, click **Properties**, and select the **Security** tab. If the Network Service user is present, exit the window and you are done.
 - c. If the Network Service user is not present, click the **Add** button, type **Network Service**, and then **OK**.
 - d. Give the Network Service user the following permissions and click **OK**:
 - Modify
 - Read & Execute
 - List folder Contents
 - Read and Write
 3. When done, reboot the server, and install the Portal Server as explained below.

Disabling Password Complexity (Windows Server 2008)

On Windows Server 2008 you must disable "password complexity" on the **Local Security Policy** window before installing the Portal Server.

- ▼ To disable "password complexity" on the server machine:
1. Go to **Start > Administrative Tools > Local Security Policy**.
 2. In the left navigation pane, double-click **Account Policies**, and then click **Password Policy**.
 3. In the right pane, double-click on **Password must meet complexity requirements**.
 4. Then check the **Disabled** box and click **OK**.

Installing the Portal Server (Windows Server 2003 or 2008)

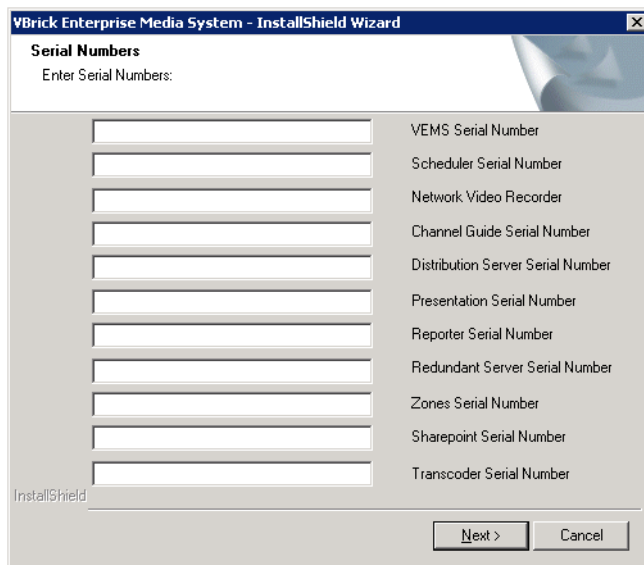
The VEMS Portal Server installation (for Windows Server 2003 or 2008) is a two-step process. First you install the VEMS Portal Server program files; then you configure the IIS web site. *The appropriate Windows Server installation disk may be required for this install.*

When installing the Portal Server, the VEMS Portal Server host name or IP address must match the host name or IP address of the computer on which it is installed. If the computer's host name or IP address is different, change these values in VEMS Portal Server *after* you install the VEMS Portal Server software. Go to **Control Panel > Programs > Programs and Features**. Then select **VBrick Enterprise Media System** and click **Uninstall/Change**. Then click **Modify Host Name/IP address stored in the VEMS Web.config file** and modify these values as necessary. It is also good practice to check that the **Date & Time** and **Time Zone** are set

accurately on the server. See "Synchronizing the Portal Server and the NVR" in the *Portal Server Admin Guide* for more information.

▼ To install the Portal Server:

1. Note the server name or IP address where the VEMS Portal Server server will be installed.
2. Go to the "Software" page on the VEMS Product CD and run the VBrick Enterprise Media System setup file. The InstallShield Wizard will extract the files, start Portal Server Setup, and verify the necessary prerequisites are installed. (Note: you may be prompted to reboot after prerequisites are installed. If so reboot the machine and then double-click on the installer again to continue the installation process.)
3. When prompted, use the "License Activation Keys & Serial Numbers" card that was included with the VEMS Product CD to enter serial numbers for each purchased component. Click **Next** when done.



4. Windows Server 2003 only. When prompted, be sure **IIS** and **MySql** are checked for installation and click **Next** to continue. (If you choose not to install these pre-requisites, the install will end.)
5. If prompted, insert the original **Windows 2003 Server** installation disk and click **Next**.
6. A Welcome page is displayed after the prerequisites are installed. Click **Next** to continue.
7. Read the End-User License Agreement (EULA) and click **Yes** to continue.
8. A dialog box shows the default Portal Server directory path: `c:\program files\vbrick`. Select **Next** to continue or **Browse** to select a different path.
9. When prompted, navigate to the folder with your license (.lic) files. License files are obtained by using the "License Activation Keys & Serial Numbers" card included with the Product CD. The "Software License Activation" document, also included, explains how to activate your licenses using these keys. Note that multiple license files may be shown if you purchased optional VEMS components. *Select all available license files in the folder.* (For more about license files, see "Installing Serial Numbers and License Files" in the *Portal Server Admin Guide*.)
10. The Portal Server installation will then run to completion without additional input. This may take several minutes.

-
11. When the installation is complete, press **Finish** to exit setup. This completes the VEMS Portal Server installation. The VEMS Portal Server runs in the background and will auto-start if you re-boot the server machine. If you experience problems or need to start or stop VEMS Portal Server for any reason, you can or stop VEMS Portal Server as explained in [Launching the Portal Server](#).

Note If you need to add or change a license file after initial installation, go to **Control Panel > Programs > Programs and Features**. Then select **VBrick Enterprise Media System** and click **Uninstall/Change**. Then use the radio buttons to install or replace the required license(s).

Reinstalling the Portal Server

Use the following steps in the unlikely event that you need to reinstall the VEMS Portal Server software.

- ▼ To reinstall VEMS Portal Server:
 1. First uninstall the software. Go to **Control Panel > Programs > Programs and Features**.
 2. Then select **VBrick Enterprise Media System** and click **Uninstall/Change**.
 3. When prompted, be sure to *keep* the database.
 4. When finished, restart the machine.
 5. Reinstall VEMS Portal Server (see [Installing the Portal Server \(Windows Server 2003 or 2008\)](#) on page 6). You *do not* need to re-configure the web site.
 6. Restart the machine and you are done.

Launching the Portal Server

As noted, VEMS Portal Server runs in the background and will autostart if you reboot the machine. If you experience problems or need to start or stop VEMS Portal Server for any reason, you must start or stop the default web site. Note also that this is a web server installation that runs continuously. No desktop icons are present to show run status.

- ▼ To start or stop the VEMS Portal Server Web Site:
 1. Go to **Administrative Tools > Internet Information Services (IIS) Manager**.
 2. Expand the tree under the **server_name** and click **Sites**.
 3. Right-click **Default Web Site**, select **Manage Web Site**, and select **Start** or **Stop** as appropriate.
- ▼ To launch VEMS Portal Server from the server host machine:
 1. Open a web browser.
 2. Enter `http://localhost` to launch the client application.
 3. Enter `http://localhost/admin` to launch the admin application. The first time you run this application the VBrick EULA (End User License Agreement) and (optionally) the Microsoft EULA will be displayed.
- ▼ To launch VEMS Portal Server from a client machine:
 1. Open a web browser.
 2. Enter `http://<ip_addr|server_name>` to launch the *client* application where `<ip_addr|server_name>` is the IP address or server name of the VEMS Portal Server. The first time you run this application the VBrick EULA (End User License Agreement) and

(optionally) the Microsoft EULA will be displayed. (If using Integrated Windows Authentication, use the server_name.)

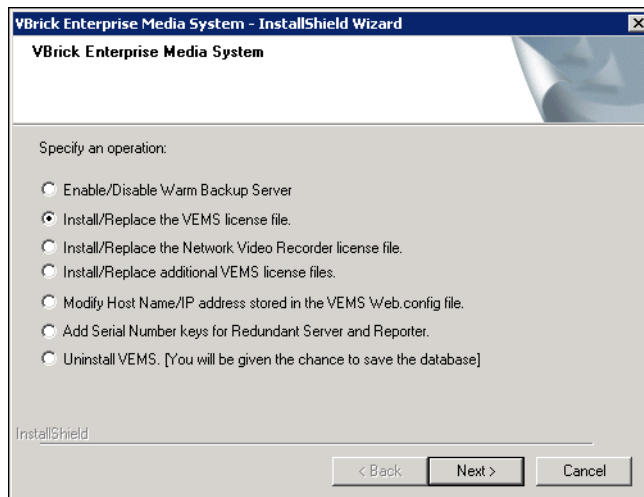
3. Enter `http://<ip_addr|server_name>/admin` to launch the *admin* application where `<ip_addr|server_name>` is the IP address or server name of the VEMS Portal Server. (If using Integrated Windows Authentication, use the server_name.)

Uninstalling the Portal Server

Use the following procedure to uninstall the Portal Server for any reason. (Do not uninstall the Portal Server before performing an upgrade. **Before uninstalling the Portal Server be sure to take it off the network and reboot the machine.** If you fail to do so it may be necessary to reinstall the application and *then* uninstall again as explained below. If you have Distribution Servers configured for presentation load-balancing, run the [DistributionServer.exe](#) tool on each server and click **Revert** and **Start** before uninstalling the application (see [Installing Distribution Servers](#) on page 12 for more information).

▼ To uninstall the Portal Server:

1. Revert any defined Distribution Servers if present (see previous paragraph).
2. Go to **Control Panel > Programs > Programs and Features**. Then select **Vbrick Enterprise Media System** and click **Uninstall/Change**.
3. When the following window is displayed, select **Uninstall VEMS** and click Next.



4. Respond appropriately when prompted to save the database.
5. After the uninstall, reboot the machine when prompted.

Setting Regional and Language Options

VEMS has limited support for internationalization. In all cases the VEMS server (and any recording servers or distribution servers) must be configured to display English (United States) numbers, dates, and times. If a non-US version operating system is installed, the format must be changed to English (United States):

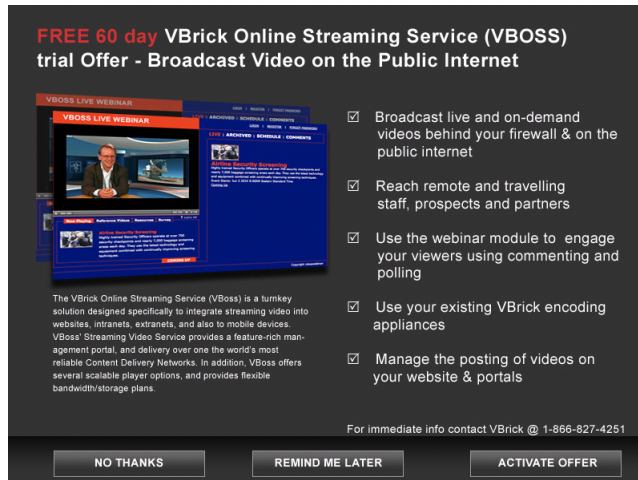
▼ To configure the server for English (United States) numbers, dates, and times:

1. Go to **Start > Control Panel > Regional and Language Options**.
2. On **Formats** tab, set **Current format** to **English (United States)**.
3. On **Administrative** tab, click **Copy to Reserved Accounts**.

- Then check **System accounts (...)** and click **OK**, and **OK** to exit.

Turning Off the VBoss Popup

To encourage administrators to test drive VBrick's online streaming service (VBoss), a popup trial offer is displayed when launching the Admin Console.



- ▼ To disable the VBoss popup window:
 - Open Windows Explorer on the Portal Server machine and go to `C:\Program Files\VBrick\MCS\Common\MCS Admin Console\web.config`
 - Open `web.config` and change the value for `EnableAdvertisementOffers` to **false**.

```
<appSettings>
  <add key="MiniViewMode" value="false"/>
  <add key="EnableAdvertisementOffers" value="true"/>
</appSettings>
```

Upgrading the Portal Server

Upgrading from Portal Server v3.1/3.2/4.x/5.x to v5.4

Version 5.4 supports upgrades from all 3.x/4.x/5.x versions. The upgrade to VEMS v5.4 is highly automated with little user interaction. *Be sure to read the following notes before you begin.*

- ▼ To upgrade from Portal Server v3.1/3.2/4.x/5.x to v5.4:
 - Before running the upgrade, take the server off the network and reboot the machine.
 - Install the Portal Server. Run `setup_VBrick_Enterprise_Media_System_5_2_0.exe` and click **OK** when prompted. The installer will run automatically and prompt for a reboot.
 - When done select any license(s) when prompted.

-
- Notes**
- The Portal Server has an option (in Global Settings > Global Assignments) to change the MySQL password. Since a software upgrade reverts the MySQL user name and password to the defaults (`root` and `vbrick_18`), you will have to repeat your changes after an upgrade if you previously changed the defaults.
 - If you change the MySQL username and password, you will have to repeat your changes after an upgrade because the upgrade reverts them to `root/vbrick_18`
 - If you have one or more Distribution Servers defined in your configuration, run the Distribution Server tool and select **Revert** on the Portal Server and on each Distribution Server before performing an upgrade. Then run the Distribution Server tool and select **Start** on the Portal Server and on each Distribution Server after the upgrade. See [Installing Distribution Servers](#) on page 12 for more information.
-

Upgrading from Portal Server v3.0

The upgrade from MCS v3.0 to VEMS v5.4 is a two-step process. First you install a patch file (`SetupMCSS_3_0_0_Patch.exe`) and then you run the v5.4 setup program (`Setup_VBbrick_Enterprise_Media_System_5_2_0.exe`).

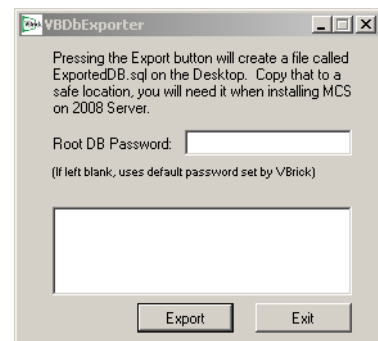
- ▼ To upgrade from MCS v3.0:
 1. Before installing the upgrade, first take the server off the network and reboot the machine.
 2. Run the patch file `SetupMCSS_3_0_0_Patch.exe`, follow the prompts, and reboot when done.
 3. After the reboot run `Setup_VBbrick_Enterprise_Media_System_5_2_0.exe` and follow the prompts. The installation is highly automated and requires little interaction.
 4. Click **OK** when finished and the installer will prompt for a reboot.
 5. Reboot the machine and you are done.

Upgrading from Windows Server 2003 to 2008

The v5.4 release has a "Cross-O/S Upgrade" option that lets you upgrade your server machine from Windows Server 2003 to Windows Server 2008.

Note If MySQL is present on your 2008 computer, please uninstall before continuing. You will also need to manually delete the `MySQL` folder typically located at `C:\Program Files\MySQL`

- ▼ To upgrade the server machine from Windows Server 2003 to Windows Server 2008:
 1. Prior to the upgrade, on the 2003 Portal Server, run the `SetupVBDatabaseExporter.exe` from the Product CD to install the VBDatabaseExporter program. A shortcut will be installed on the desktop called VBDatabaseExporter. Double-click on it to bring up the program. If you have not changed the root password for MySQL simply press **Export** (otherwise enter the current password and press **Export**). This will create a file called `ExportedDB.sql` on the desktop. Save this file and any custom user data in the `VBbrick\MCS` directory to a safe and convenient location.
 2. Custom user data can be found in the following directories:



-
- D:\VBrick\Presentations\ or C:\Program Files\VBrick\MCS\Presentations if no D: drive is present on the system.
 - D:\VBrick\MCSPresentations\ or C:\Program Files\VBrick\MCS\MCSPresentations if no D: drive is present on the system.
 - C:\Program Files\VBrick\MCS\Logs\, or if the default directories are not used, the files located in the directory determined by MCS Admin Console > Global Settings > Access Logging > General Logging Properties > Log File Directory.
 - C:\Program Files\VBrick\MCS\nsc\
 - C:\Program Files\VBrick\MCS\sdp\
 - C:\Program Files\VBrick\MCS\StationIcons\
 - C:\Program Files\VBrick\MCS\Images\Thumbnails\

Copy these folders into the same location you put the [ExportedDB.sql](#) file in Step 1. If you installed MCS in a non-default directory, change C:\Program Files to the appropriate directory in the file paths described in above in Step 2.

3. If you purchased our pre-packaged content, you will need to save the appropriate license files. Go to: C:\Program Files\VBrick\MCS\licenses\ and save the [contentlicense](#) folder. After you install VEMS 5.4 you will need to take these license files and add them using the Portal Server "Install/Replace License Files" function. See the *Portal Server Admin Guide* for instructions on how to do this.
4. When done, wipe the drive and install Server 2008 (either Web or Enterprise Edition).
5. When done, install the Portal Server. See [Installing the Portal Server](#) on page 5 for instructions. Near the beginning of the installation process, you will be asked if this is a Cross-OS upgrade. If **Yes**, a dialog box will let you browse to the [ExportedDB.sql](#) file you saved in Step 1 above.
6. Follow the prompts and reboot the server when prompted. If you saved any directories from your previous version of MCS you can now copy them back into the appropriate directories in VEMS v5.4. The file locations will be the same as they were in your previous version of MCS unless you chose a different directory; if so the locations will be the same once you get to [\[InstallDir\]\MCS](#).
7. Reboot the server.

Installing an NVR

The NVR lets you off-load all recording tasks from the VEMS Portal Server machine to one or more separate "recorder server" machines. The NVR provides the ability to record live streams from the network, store these recorded video files on a specified location (a record server or other network location), transcode these streams from one format to another, and optionally automatically transfer the contents to selected locations, and/or ingest them to VOD servers. For NVR installation instructions, see the *NVR Release Notes* in the VEMS online help.

Installing Distribution Servers

Installing Distribution Servers

Distribution servers are used to load-balance the distribution of .jpg images and HTML pages when delivering large-scale presentations. In order to use Distribution Servers in a VEMS environment, you must configure "zones" and define a Distribution Server for each

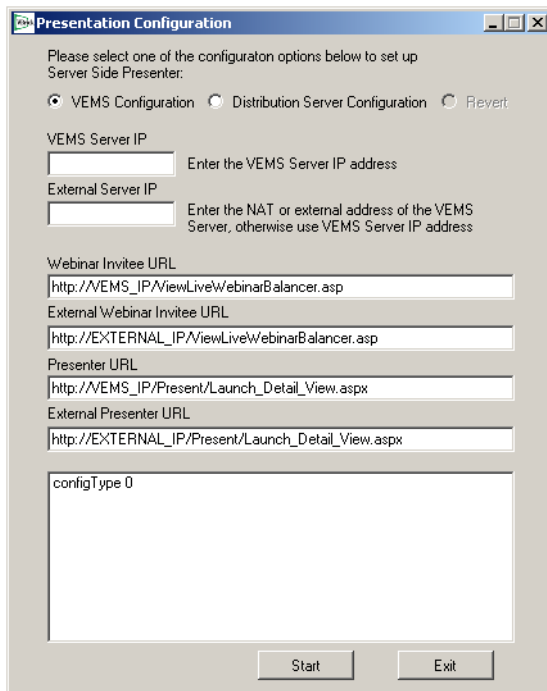
zone. See the "Distribution Servers" topic in the *Portal Server Admin Guide* for more about distribution servers. See the "Zones" topic in the *Portal Server Admin Guide* for an explanation of how to configure and use zones that point to specific servers. (Also see the "Configuring for Presentations" topic in the *Portal Server Admin Guide*.) Use the following steps to install a distribution server:

1. Go to the "Distribution Server" page on the VEMS Product CD and run the Distribution Server setup file on each distribution server. (See [Installing the Portal Server](#) on page 5. The steps are identical except that you only use the Distribution Server license file.)
2. Run the Distribution Server tool ([DistributionServer.exe](#)) on the Portal Server and on each distribution server to configure your site's IP addresses. The distribution server tool ([DistributionServer.exe](#)) is located in:

[C:\Program Files\VBrick\MCS\utils\DistributionServer](#)

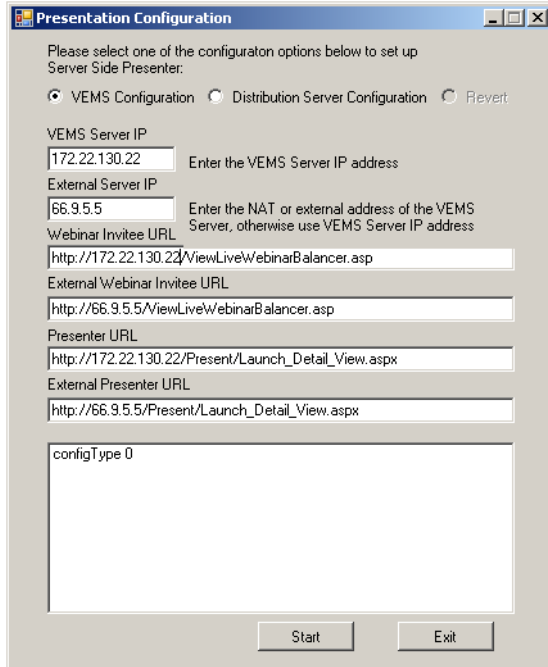
▼ To run the Distribution Server tool on the Portal Server or a Distribution Server:

1. Launch the tool to display the following window.

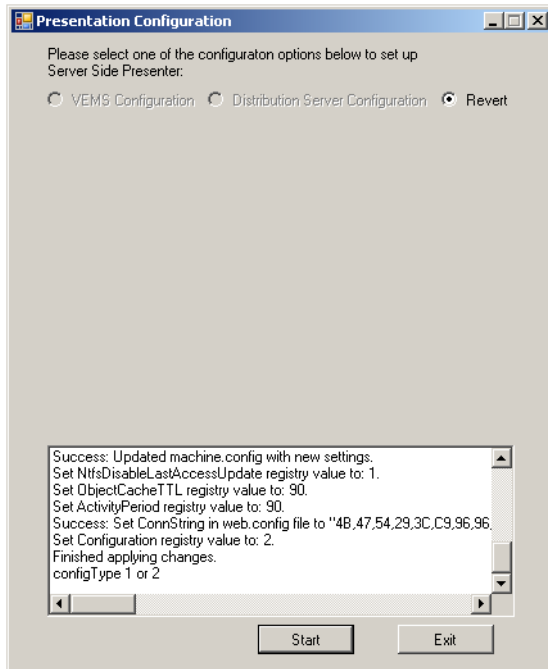


2. Enter the internal and external IP addresses for your VEMS server. As shown in the following window, the remaining fields are automatically populated with the appropriate IP addresses. For the **VEMS Server IP** enter the Portal Server's actual IP address. For **External Server IP** enter the NAT or external address of the Portal Server.

Note The first two fields are used to configure the *VBrick* load balancer. If you are not using the *VBrick* load balancer, enter values that are appropriate for your site.

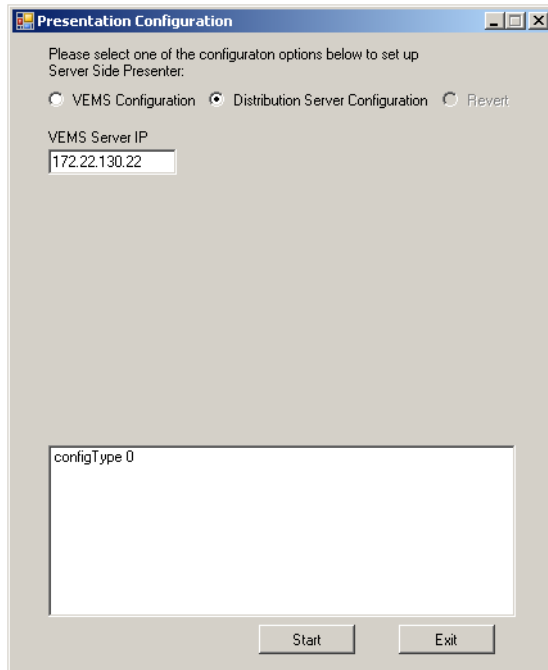


3. Click **Start** to run the tool. When done the following window is displayed. If there are errors or you need to change the values for any reason, use the **Revert** button.



- ▼ To install the distribution server software on a Distribution Server:
 1. Launch the tool as explained above.
 2. Select **Distribution Server Configuration**, enter the VEMS Server IP Address and click **Start**. (If the Distribution Server is on the same network as the main Portal Server, enter the **VEMS Server IP**. If the Distribution Server is on a different network (for example if the Distribution Server accesses the Portal Server via the Internet—not an intranet—

enter the NAT or external address of the Portal Server.) Always take into account how the Distribution Server identifies the Portal Server via IP when configuring this tool.



Configuring Distribution Servers

Note This step explains how to configure ETVBackup on each Distribution Server. **This step is not optional.** If you have installed distribution server(s) this configuration step is required. Repeat this procedure on each Distribution Server. Note that the user logged into the Distribution Server must be a user with Administrator rights.

Configuring a Local Distribution Server

Use this configuration procedure when the Distribution Server is on the same network as the VEMS Portal Server and there is no firewall between them.

▼ To configure a local Distribution Server:

1. Set up ETVBackup.

Note In order to configure the ETVBackup Profiles as explained in this section, you must be logged in to the Distribution Server as administrative user

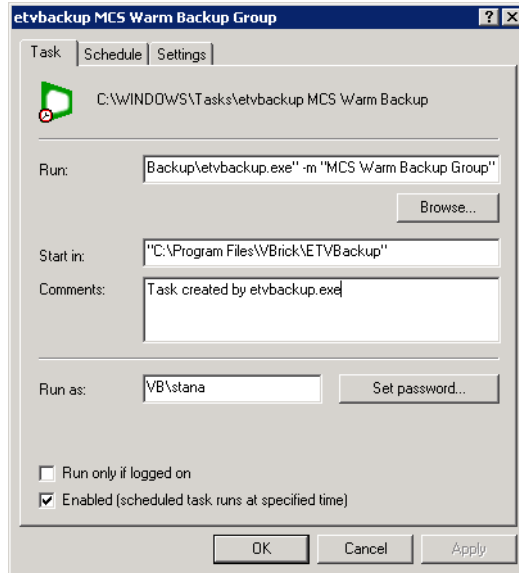
- a. Start ETVBackup and enter a valid serial number for the license (from the "License Activation Keys & Serial Numbers" card that was included with your shipment). If you copied the serial number to the Windows Clipboard, ETVBackup will automatically put the serial number in the serial number text box.
- b. Add two new profiles, they are located in the [C:\Program Files\VBrick\MCS\ETVBackupScripts](#) folder.
 - i. Double-click on the ETVBackup shortcut on the desktop, if you get a message asking to visit a web page, click No
 - ii. Enter in the serial number if you haven't already registered the product.

-
- iii. Go to the **Profiles** menu item and select **Import Profile** and browse to [Distribution Server Presentations.sps](#) and [Distribution Server Thumbnails.sps](#) and import each one.
 - c. Right-click on the [Distribution Server Webinar data](#) profile and select **Modify**.
 - i. Next to “Live MCS Database” type in the following value:
`\\<name_of_server>\Presentations\`. The [name of server] value is the VEMS server.
 - ii. Next to **Database backup** browse to the following directory:
`D:\VBrick\Presentations`.
 - d. Right-click on the [Distribution Server Webinar Thumbnails](#) profile and select **Modify**.
 - i. Next to **Live MCS Database** type in the following value:
`\\<name_of_server>\Thumbnails\`. The <name of server> value is the VEMS server.
 - ii. Next to **Database backup** browse to the following directory: `C:\Program Files\VBrick\MCS\Images\Thumbnails`
 - e. In the main ETVBackup screen right-click on the [VEMS Warm Backup Group](#), choose the Schedule menu item, then select **Delete Schedule**.
 - f. In the main ETVBackup screen add a group profile named [DistributionServer Group](#). Select Profiles > New > Enter “DistributionServer Group” and **Next**. Check the “Group” radio button. Select “Done”, then “OK”. The main profile setup window will now appear.

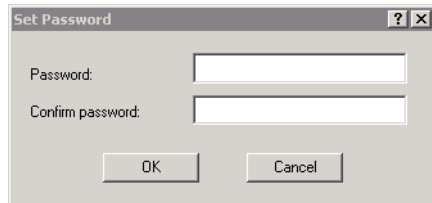
Select the following two profiles ([Distribution Server Webinar data](#) and [Distribution Server Webinar Thumbnails](#)) and add them to the group by highlighting them and pressing the “>” button, followed by **OK**. The program will ask if you would like to perform a simulated run—select **No**.
2. Create a schedule for ETVBackup. The procedure for this step varies depending on whether you are using [Windows Server 2003](#) or [Windows Server 2008](#). Use the instructions that are appropriate for your site.

Windows Server 2003

- ▼ To create a schedule on Windows Server 2003:
1. Right-click on [MCS Warm Backup Group](#) and select **Schedule**.
 2. Click **Edit Schedule**.



3. Be sure a user with administrative privileges on the server machine is shown in the **Run as** box. Press **Set Password** and enter the password associated with that user.

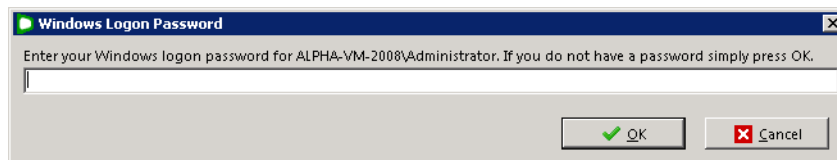


4. Press **OK** and **OK** and minimize the application—do not exit.

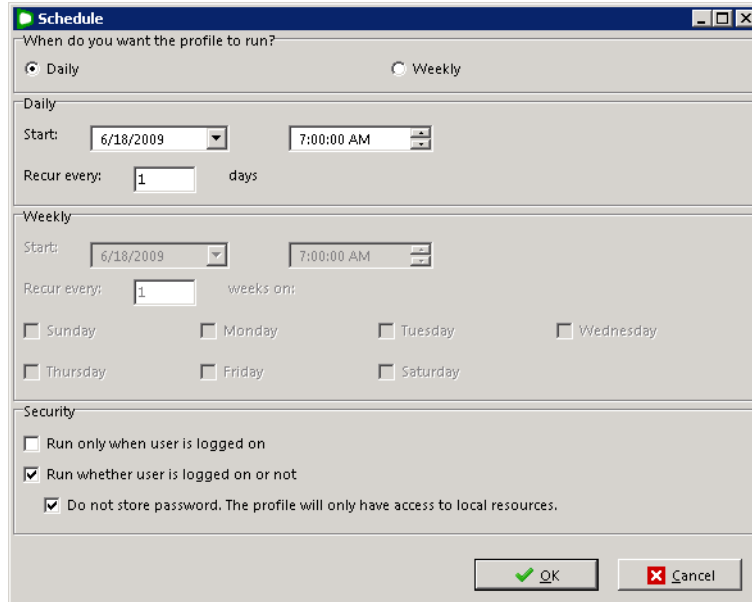
Windows Server 2008

- ▼ To create a schedule on Windows Server 2008:

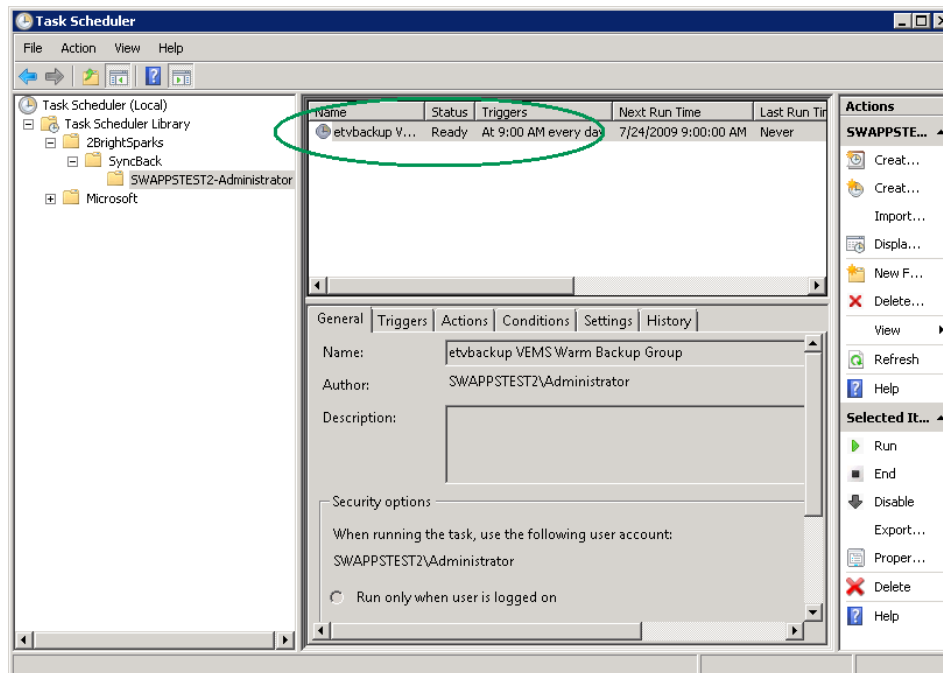
1. In ETVBackup, right-click on **Distribution Server Group** and select **Schedule**.
2. When the popup window is displayed, click **Yes** to create a schedule.



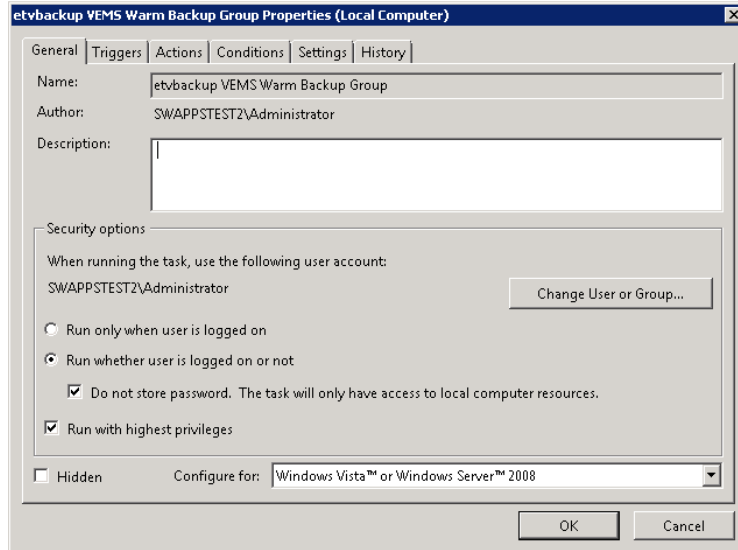
3. Be sure a user with administrative privileges on the server machine is shown in the **Run as** box. Then enter the password associated with that user and click **OK**.



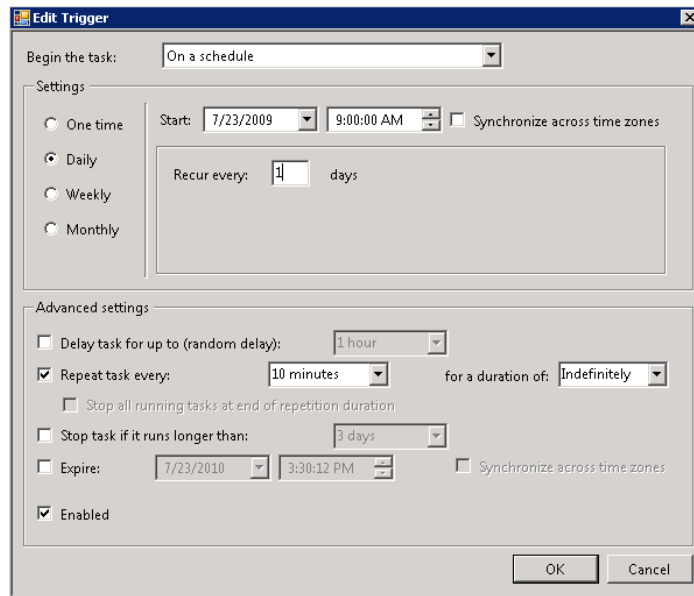
4. On the "Schedule" window, click **OK** and **OK** to exit.
5. On the Windows Web Server 2008 desktop, go to **Start > Administrative Tools > Task Scheduler**.
6. Expand **Task Scheduler Library > 2BrightSparks > SyncBack** and double-click on **ServerName-Administrator**.



7. In the upper pane, double-click on **etvbackup VEMS Warm Backup Group** to display the properties page.



8. Click on the **Triggers** tab and click **Edit**.



9. Select **Repeat task every 10 minutes**, set **for a duration of Indefinitely** and click **OK**.

Configuring a Remote Distribution Server

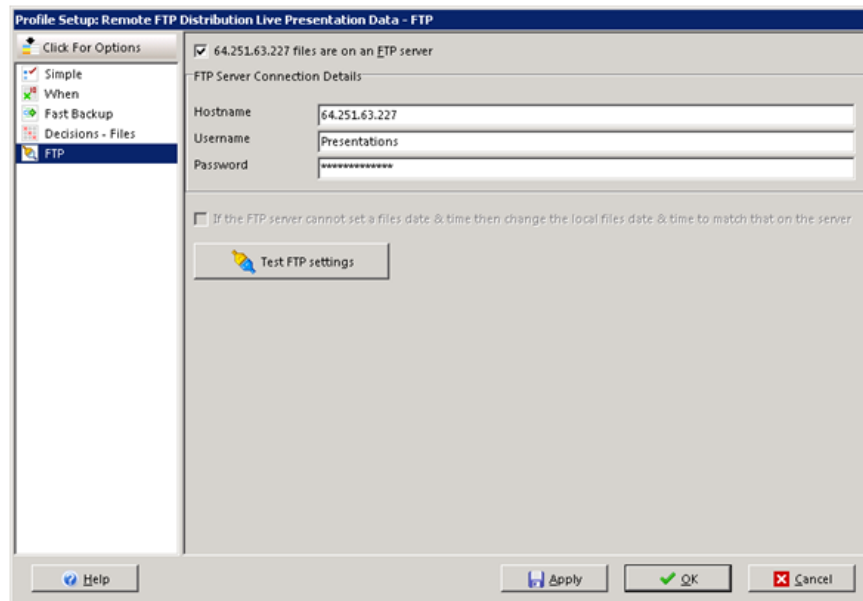
Use this configuration procedure when the Distribution Server is on a different network than the VEMS Portal Server or there is a firewall between them. You must open Port 21 (FTP Port) between the VEMS Portal and the Remote Distribution Server.

▼ To configure a remote Distribution Server:

1. Set up ETVBackup.

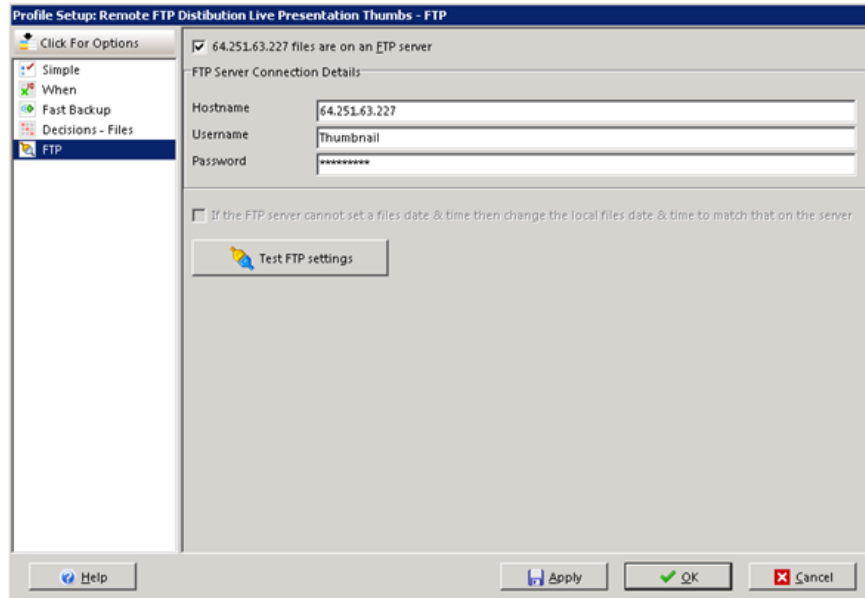
Note In order to configure the ETVBackup Profiles as explained in this section, you must be logged in to the Distribution Server as administrative user

- a. Start ETVBackup and enter a valid serial number for the license. If you copied the serial number to the Windows Clipboard, ETVBackup will automatically put the serial number in the serial number text box.
- b. Add two new profiles, they are located in the **C:\Program Files\VBrick\MCS\ETVBackupScripts** folder.
 - i. Double-click on the ETVBackup shortcut on the desktop, if you get a message asking to visit a web page, click No.
 - ii. Enter in the serial number if you haven't already registered the product.
 - iii. Go to the **Profiles** menu item and select **Import Profile** and browse to **Remote FTP Distribution Live Presentation Data.sps** and **Remote FTP Distribution Live Presentation Thumbs.sps** and import each one.
- c. Right-click on the **Remote FTP Distribution Live Presentation Data** profile and select **Modify**.
 - i. Next to "Live Presentation Data" type in the following value:
D:\VBrick\Presentations
 - ii. Next to **127.0.0.1** (double-click and change name to Remote Distribution Server IP for labeling) browse to the following directory: **\presentations**
- d. Select **FTP** on left hand pane. Enter IP Address of Remote Distribution Server in Hostname field (This most likely will be Public address of Remote Distribution Server). Press **Test FTP Settings** to test connection. If ftp fails, check Firewall settings the FTP Username and password are both **Presentations** and are automatically created by VEMS installer.
- e. Select **OK** to exit Modify Profile Setup.



- f. Right-click on the **Remote FTP Distribution Live Presentation Thumbs** profile and select **Modify**.
 - i. Next to **Live Presentation Thumbs** type in the following value:
C:\Program Files\VBrick\MCS\Images\Thumbnails
 - ii. Next to **127.0.0.1** (Double Click and change name to Remote Distribution Server IP for labeling) browse to the following directory: **\Thumbnails**

- iii. Select **FTP** on left hand pane. Enter IP Address of Remote Distribution Server in Hostname field (This most likely will be Public address of Remote Distribution Server). Press **Test FTP Settings** to test connection. If ftp fails check Firewall settings, the FTP Username and password are both **Thumbnail** and are automatically created by VEMS installer.
- iv. Select **OK** to exit Modify Profile Setup.



- g. In the main ETVBackup screen right-click on the **VEMS Warm Backup Group**, choose the Schedule menu item, then select **Delete Schedule**.
 - h. In the main ETVBackup screen add a group profile named **DistributionServer Group**. Select Profiles > New > Enter “DistributionServer Group” and **Next**. Check the “Group” radio button. Select **Done**, then **OK**. The main profile setup window will now appear.
 - i. Select the following two profiles (**Remote FTP Distribution Live Presentation Data** and **Remote FTP Distribution Live Presentation Thumbs**) and add them to the group by highlighting them and pressing the “>” button, followed by **OK**. The program will ask if you would like to perform a simulated run—select **No**.
2. Create a schedule for ETVBackup. Go to Step 2 in [Configuring a Local Distribution Server](#) on page 15 and repeat the procedure to create a schedule using the Windows Task Scheduler.

Uninstalling Distribution Servers

The steps to uninstall a Distribution Server are the same as for uninstalling a Portal Server. See [Uninstalling the Portal Server](#) on page 9 for details. If you have Distribution Servers configured for presentation load-balancing, run the DistributionServer.exe tool on each server and click **Revert** and **Start** before uninstalling the application (see [Installing Distribution Servers](#) on page 12 for more information).

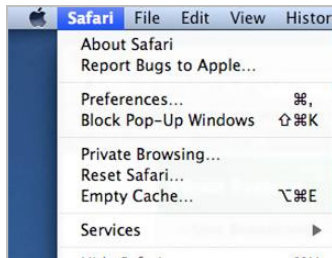
Macintosh Configuration

Configuring Safari

If you use Safari as your web browser on any Macintosh computer, it will block pop-up windows by default. This prevents the Portal Server from creating an external player and also prevents full-screen mode from functioning properly.

▼ To configure Safari for Portal Server operation:

1. From the **Safari** dropdown menu, deselect **Block Pop-Up Windows**:



2. Then configure incoming connections as explained below. In order to view certain types of networked video streams, you must configure your Macintosh firewall to allow inbound UDP connections. This is configured differently depending on whether you are using Snow Leopard, Leopard or Tiger.

Configuring Snow Leopard

If accessing the Portal Server from a Mac OS X Snow Leopard machine with Safari, no streams will play unless you change the default 64 bit mode to 32 bit.

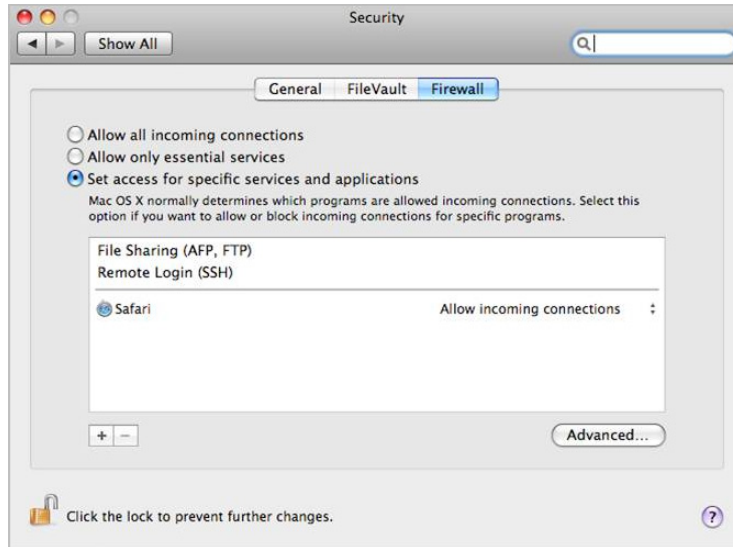
▼ To change Safari to 32 bit mode:

1. On the Macintosh desktop, go to **Finder > Macintosh HD > Applications > Safari**.
2. Right-click on the **Safari** icon and select **Get Info**.
3. Check **Open in 32-bit mode** and close the window.

Configuring Leopard

▼ To configure Macintosh OS/X 10.5 (Leopard):

1. Go to **System Preferences > Security**, then select the **Firewall** tab. You will see a window that looks like this:



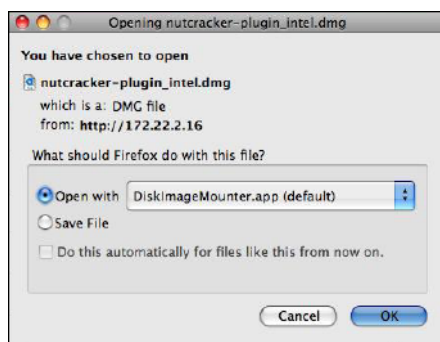
2. Set the Firewall either to **Allow all incoming connections** (not secure) or to **Set access for specific services and applications** (recommended). If you select the latter item, you must then click the **+** icon at the bottom of the window and add your web browser (Safari or Firefox) to the list. Note that the system will not work if you set the firewall to **Allow only essential services** because UDP packets will be blocked.

Installing Macintosh Components

Depending on the **Specify Components to Download to Clients** setting on the Portal Server Global Assignments page, Macintosh users may be prompted to download VBrick player components the first time they launch a stream. These components must be installed to view all stream types (MPEG-1/2/4, Windows Media, H.264) and a separate download may be required for each.

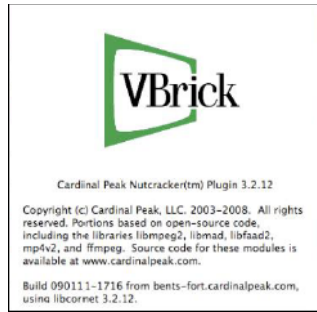
- ▼ To download and install Macintosh components

1. Click on the link to download the VBrick Macintosh video player plugin. This will display the following window.



2. Select **Open with** and click **OK** and double-click on the [nutcracker-plugin-x86.pkg](#) to install the plugin. Follow the prompts and accept the defaults.
3. An administrator-level account is required to install the plugin. **Contact your system administrator and enter an appropriate administrator password when prompted.**
4. When done, restart your computer to complete finish the installation.
5. Verify the plugin is successfully installed.

-
- a. Open a Portal Server client window and launch a video.
 - b. Ctrl-click on the video and select **About** from the popup menu. Verify that **Plugin 3.2.12** is installed.



Upgrading Macintosh Components

If a Portal Server client machine has an older version of VBrick components installed, you must manually upgrade the player as explained below. **The Portal Server will not alert you that an update player plugin is available or required.**

Note If you do not upgrade the player on your Macintosh client machines to the latest version, older video content will continue to play as before but new features such as H.264 and Firefox 3 support will not be available.

- ▼ To upgrade an existing Portal Server client machine
 1. Open the Portal Server in a web browser on the client machine requiring an update, launch a video, and check the *current* player version using the steps outlined above.
 2. Ctrl-click on the video and select **About** from the popup menu. If the version number is less than **3.2.12** continue to the next step to perform an upgrade.
 3. For Intel Macs, in the browser address bar, type the following URL:
[http\(s\)://<<Portal Server IP or Host Name>>/nutcracker-plugin_intel.dmg](http(s)://<<Portal Server IP or Host Name>>/nutcracker-plugin_intel.dmg)
 4. When prompted, open the file, follow the prompts, and enter a password as explained above.
 5. When done, restart your computer and verify the plugin is successfully installed as explained above.

Microsoft Service Packs and Security Updates

It is standard VBrick policy to configure and ship our products with the recommended service packs and security updates available from Microsoft on the release date of the VBrick product. During product development, VBrick client and server applications are fully tested on the applicable operating system (Windows XP, Vista, Windows 7, Windows Server 2003, or Windows Server 2008) with the Microsoft service packs and updates available at that time. We also run limited regression tests when new service packs are released by Microsoft. Once installed at a customer site however, it becomes the customer's sole responsibility to continue installing security updates and patches as they become available. VBrick assumes no liability for damage resulting from the failure to patch your software. For best results, we recommend running Microsoft's "automatic updates" during off-peak hours when it will not affect users or impact performance.

Note To avoid affecting users or impacting performance, VBrick recommends you set System Properties > Automatic Updates to **Check for updates but let me choose whether to download and install them**. This way you can install updates during off-peak hours when the system is idle.

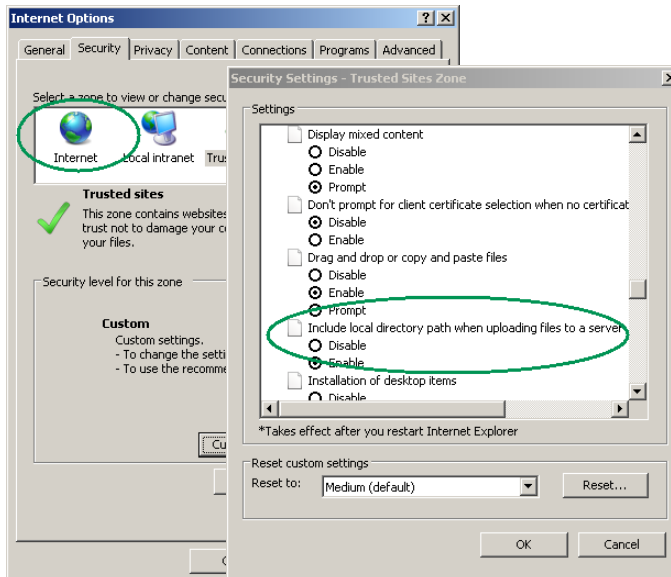
- ▼ To see what security (and other) updates are installed:
 1. Go to **Start > Windows Update**.
 2. In the right navigation pane, click **View update history** to display the history of all installed updates.
 3. If necessary, go to **Start > Control Panel > Add or Remove Programs** to remove an unwanted update.

Required Settings for Internet Explorer 8

Microsoft Internet Explorer 8 has standard security options that may prevent the Portal Server "Add Video" function from working properly. In order to successfully ingest recorded video to a VOD server you may have to configure one or more of the following options in Internet Explorer depending on whether the Portal Server is in an internet or an *intranet* "zone." Depending on your local environment, you may also need to add the Portal Server to the list of trusted sites.

Add to Internet Zone

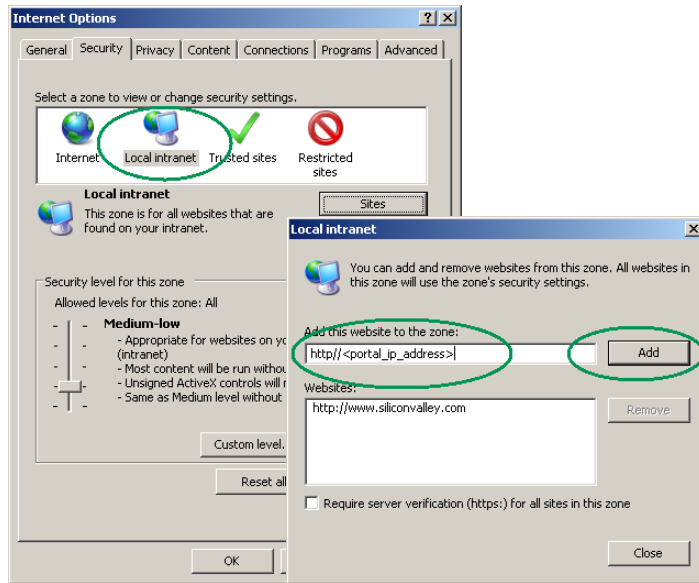
- ▼ To use the Portal Server in the Internet zone:
 1. Go to **Tools > Internet Options > Security**.
 2. Select the **Internet** zone and **Custom Level**.
 3. Enable **Include local directory path when uploading files to a server**.



Add to Intranet Zone

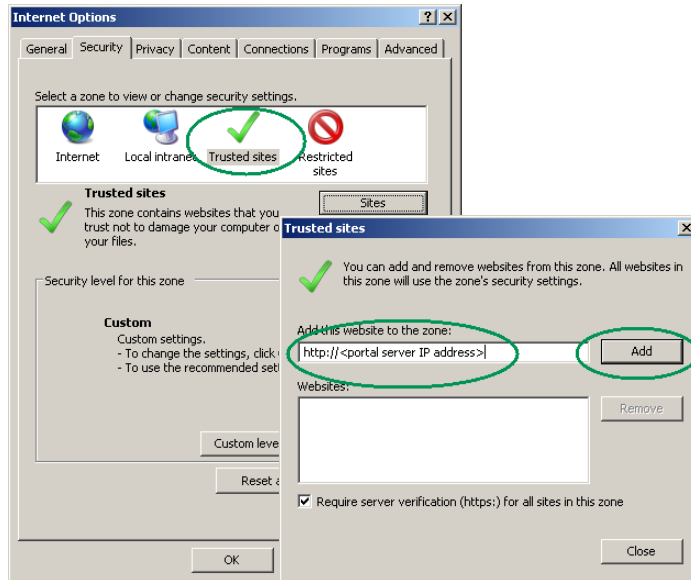
- ▼ To use the Portal Server in the Intranet zone:
 1. Go to **Tools > Internet Options > Security**.
 2. Go to **Local intranet > Sites > Advanced**.

3. Add the Portal Server IP address to the zone.



Add to Trusted Sites

- ▼ To add the Portal Server as a trusted site:
 1. Go to **Tools > Internet Options > Security**.
 2. Go to **Trusted sites > Sites > Advanced**.
 3. Add the Portal Server IP address to the zone.



Caveats

This section addresses known issues, most of which have an easy workaround. For more information about any item, or help with an issue not listed here, contact your reseller or VBrick Support Services. The caveats below are arranged into categories as follows. *Note that the VEMS category includes the Portal Server, NVR, VBrick encoders, etc.*

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VEMS

- The Program Name for streams on the **Live Media** page may be appended with an underscore. This is a workaround for an issue that occurs when the program name being added (via the Stored Broadcast Schedule) has an odd number of characters. (9584)
- VEMS v5.3 is fully compatible with all VBrick H.264 encoders. *VEMS v5.2 is not compatible with H.264 encoders when using specific "Advanced Settings" for scheduling a live broadcast.* In VEMS v5.2, when using the "Advanced settings > Schedule Start Options," the scheduled live broadcast from an H.264 encoder will fail with an error at runtime if the Destination = Server or if the Destination = Multicast and you change the **Closed Captioning** default or the **Video** or **Audio** rate defaults. Please contact Support Services for more information.
- The H.264 VBStar supports two simultaneous archivers but VEMS supports only one. When recording to a VBrick VBStar in VEMS, you cannot schedule more than one simultaneous recording. (9506)
- When transcoding large HD H.264 ISMA files to lower bitrate H.264 files using certain transcoder templates (**H.264 1.5M High Motion (LAN)**, **H.264 750K High Motion (Internet)**, **H.264 500K Low Motion (Internet)** or **H.264 128K High Motion (Internet)**), the transcoding may fail with an "Unknown error encoding file" message. If this happens, try using the **H.264 iPhone & ITouch** template. (9315)
- When scheduling a recording from an MPEG-2 encoder to an MPEG-2 decoder, the **Source IP Address** on the Configuration > Decoder > Network page must be blank. If not, you can create the schedule but the stream will not play. (8929)
- VEMS supports only one Portal Server (not counting a "warm backup") installed on your local network. If more than one VEMS server is installed, you may get unpredictable and/or undesirable behavior from the server and from any clients. (9253)
- The VEMS server cannot retrieve the SDP file that is used with various supported URL strings when the **External VAdmin** parameter for an H.264 encoder is set to **HTTPS Only**. (9015)
- Thumbnail creation may fail on a Macintosh or Windows 7 client. If this happens, the DCOM VBThumbNailCreator configuration must be changed on the VEMS server. Go to Administrative Tools > Component Services > DCOM Config. Right-click on VBThumbNailCreator and select Properties. On the Identity tab, click "This user" and

type the local VEMS user credentials with permissions to run VBThumbNailCreator DCOM module. Click OK when done. (9140)

- If VBrick Digital Signage is installed on the VEMS server machine, the VEMS server will automatically reboot weekly at the default day and time (Wednesday, 2:00 AM). To change or disable this auto reboot, see the "Content Settings > Boot Schedule" topic in the Digital Signage *Quick Start Guide*. Note that when a reboot occurs, all video playback and recordings originating from the VEMS server (including presentations) may be interrupted. Administrators may need to close the Admin Console and log back in; client end users may need to close all windows and restart their VEMS application. Scheduled content and presentations (not already in progress) will not be affected.
- Audio-only H.264 streams are not supported by VEMS and may result in unpredictable behavior. For example they will not play in StreamPlayer, they cannot be added to a Wowza server, etc. (9075)
- When using the keypad on the AmiNET130 remote control for a "Search" in Portal Server mode, the **9wxyz** button will terminate the search and exit the page. This is a known bug. (8720)
- When selecting an Autoingest folder and selecting or deselect servers on the **Add/Modify Video On-Demand Content Folders** page, you may get a message that the "**Folder already exists.**" This message is erroneous and can be ignored. (8729)
- VOD-W files with the string "rtsp" in the file name will not play on AmiNET130 set top boxes. To work around this issue remove "rtsp" from the file name before ingesting or adding the file.
- In VEMS 5.1, the VOD-W server does not support HTTP Tunneling for H.264 streams from an AmiNET 130 set top box.
- Portal Servers and NVRs can only have one IPv4 IP address at a time (not including the loopback address). Secondary addresses on a server NIC or a second server NIC (with at least one IP address) are not supported. Multiple IP addresses will cause unpredictable and/or undesirable results. Similarly, multiple IP addresses on a client PC will cause the MPEG-4/H.264 plug-in to fail and the PC will not play multicast MPEG-4/H.264 streams.
- In dual-monitor mode, your monitor(s) may produce unexpected results when going Full Screen on an MPEG-2 or H.264 stream. To workaroud this issue, select and briefly play a WM stream. Subsequent MPEG-2/H.264 streams will display properly at Full Screen.
- **CaptureID is not found.** This error indicates there was a problem with a recording. When a recording fails, VBRecordService sends the status to VBUserService on VEMS server and removes the VBASR object from the list it maintains. VBScheduleEngine sends a StopCapture at the end of scheduled time interval but VBRecordService returns the error **CaptureID is not found** because the corresponding VBASR object has already been removed. To resolve this issue, check the **Status** page or the **Live Media** page to see if there are other errors returned by VBRecordService via VBUserService. For more detailed information, enable logging for some of the recording components. (7303)
- VBrick appliances use Programs Names that are associated with a Session Announcement Protocol to identify encoded streams. This SAP text is displayed in the Portal Server Scheduler and in other places. For best results, always use a unique Program Name on the VBrick appliance.
- When modifying a scheduled, private conference (between MPEG-4 appliances only) to run again at a later date, you may get an **Invalid IP Address** error on the **Advanced Settings** page. To work around this error, select a different Destination in Advanced Settings, and then select Destination 1 again.

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- If **URL Password Protection** is enabled for a VOD-W server, the length of the VOD content URL ([rtsp://ServerIP/Folder and Filepath/Password Key](#)) may exceed the maximum character length (100 chars) and the video will not play. To work around this issue, you can reduce the number of characters in the VOD asset name.
 - When recording H.264/MPEG-4 files there is a "hinting" phase at the end of the recording phase designed to reduce CPU overhead and preprocessing. In extreme cases, the hinting may take over an hour depending on number of recordings, bit rate, and duration. When the Portal Server "Status" page shows "Recording in progress" and 100% done, it means the recording is done but the hinting is still in progress. When the hinting completes, the file can be FTPed to the VOD servers.
 - MPEG-4 and H.264 appliances only. If you change the appliance's management port (default = 80), and the appliance is not in the Portal Server database, the Portal Server will not discover and play *multicast* streams from these appliances. To workaroud this issue, manually add the appliance(s) to the Portal Server database.
 - A file server using secure playback can be configured with an IP address or a host name. If the server certificate is issued for an IP address, you must use the IP address; if issued for a host name, you must use the host name. Otherwise, the video will not play and a message will indicate the security certificate was issued for a different website.
 - If two clients each try to record a stream at the same time, and the bandwidth required for both exceeds what is available on the VBrick (default = 20 mbps), the connection to the VBrick will be refused and one of the recording will fail with a message in the Status window. This is expected behavior.
 - When creating playlists, the popup Javascript window that lets you set Start and End times will not function unless the Portal Server has been added to the list of trusted websites. Go to **Tools > Internet Options > Security** and add the Portal Server host name or IP address to the list of **Trusted sites**.
 - When recording a stream from the WM IPR in Portal Server mode, a rectangular red box is displayed in the lower-right area of the window to show that a recording is in progress. If you never leave the page, you can stop the recording by simply pressing the **Record** again. If you leave the page however (e.g. if you choose **MENU** and select another option), you must reselect the stream (and *then* press **Record**) to stop the recording and close the box.
 - If the **Receive Address Mode** of an MPEG-2 decoder is configured for **Program Name**, and the Portal Server is scheduled to stream to this VBrick, the video will not play as scheduled. There is no workaround. This is a known bug and was fixed in VBDNA v4.2 firmware.
 - When scheduling a live or a stored broadcast from a VBrick appliance that has multiple bit rate (MBR) enabled, the scheduled broadcast will use the VBrick's configured bit rate regardless of the template setting in the Scheduler. In this scenario, the Scheduler may generate error messages similar to the following on both the Portal Server's **Diagnostics** page and the VBrick's **System Log**. These messages can be safely ignored and the schedule will execute properly.
[Failed to Set<vbrickSlot1EncoderNetwork TransmitEnable=1> Slot1EncoderTemplateApplySet set to applySet failed](#)
 - When creating a stored broadcast schedule, the schedule will fail to create if the schedule **Start** date and **End** date are different (for example if it starts on one day and ends on the next). The end date and time in the schedule are adjusted to the duration of the stored file (except for Windows Media or Darwin files) but **Create Schedule** returns an error message. To work around this issue, simply click **Modify** and then click **Finish**.

- When playing a stored video on the external player, if you upload an image for a thumbnail, and then switch streams while the **Update Image** panel is still open, any subsequent thumbnail you upload will be applied to the first stream for which you originally uploaded a thumbnail.
- Depending on the order in which they were originally installed, video streams may not run in the embedded player after you uninstall Internet Explorer ActiveX controls or Firefox plugins. To work around this issue in Internet Explorer, go to **Start > Control Panel > Internet Options > Settings > View Objects** and remove the following objects (if present) with Internet Explorer closed: **CVBUI**, **CFtpClientMgr Object**, **VBrick Streamplayer Components**, **VBrick MPEG4 Components**. Then go to VEMS and re-install them when prompted. To work around this issue in Firefox, simply download and install the browser from [Mozilla](http://www.mozilla.com).
- When switching between streams and/or switching between the integrated player and an external player, the embedded Windows Media Player will sometimes lose its ability to go fullscreen. This is a documented Microsoft problem with a patch available from: <http://support.microsoft.com/?kbid=912452&SD=tech>
- If you are FTPing non-English file names in IIS (for example when using the Portal Server SDK), there may be issues with Unicode support. If file names are not correctly displayed, go to **Control Panel > Regional and Language Options > Languages** and select **Install Files for East Asian Languages**. After rebooting go to **Control Panel > Regional and Language Options > Advanced** and select a language in the **Language for non-Unicode programs** control box. After a reboot the file names will display in the selected language on the FTP site using a command prompt window (on a Windows XP machine) or the Internet Explorer browser.
- When creating a Live Emergency Broadcast template from a WM appliance, if you set **Advanced Settings > Schedule Start Options > HTTP Push** to **Enabled** the existing Encoder Server settings will be used. Therefore, you also need to configure the WM appliance for the push. In IWS, go to go to **Configuration: Encoder > Server** and configure the Server Name or IP Address and Publishing/Mount Point. See "Creating Publishing Points" in the *WM Appliance Admin Guide* for more information.
- If you configure an MPEG-4 appliance with Audio and Video disabled and Closed Captions *enabled* (in extremely low bandwidth applications, for example), you must have **CC ON** set in the embedded Portal Server player or no stream (from any appliance) will play. If this happens, set closed captions to **On**, then close the browser and restart.
- In some cases, because of a naming resolution issue, a LAN Network Video Recorder (NVR) does not record when the VEMS Portal Server server is in a DMZ. As shown on the status page, the recording will either fail or run indefinitely (without actually recording). To work around this issue, modify (or create) a `hosts` file on the VEMS Portal Server as shown below. Go to `c:\windows\system32\drivers\etc\hosts`. Open the `hosts` file in an editor and add the IP address and computer name of the NVR as shown below. (If the `hosts` file is not present, you must create one by saving a `txt` file with no extension.)

```
# Copyright (c) 1993-1999 Microsoft Corp.
# This is a sample HOSTS file addresses to host names. Each
# entry should be kept on an individual line. The IP address should
# be placed in the first column followed by the corresponding host name.
# The IP address and the host name should be separated by at least one
# space. Additionally, comments (such as these) may be inserted on
# individual lines or following the machine name denoted by a '#' symbol.
# For example:
# 102.54.94.97      rhino.acme.com # source server
# 38.25.63.10      x.acme.com      # x client host
```

```
127.0.0.1      localhost
nvr ip address nvr computer name
```

- Use care when configuring virus scanning software. To avoid problems when recording on the VEMS Portal Server, do not scan any folders into which recorded files are being saved. This is typically: `D:\Inetpub\ftproot\MCS\Record`.
- When creating an Emergency Broadcast template for a live broadcast and *manually selecting MPEG-4* and **Program Name**, the destinations available page shows only VBricks—it does not show IPRs. Manual entry of Program Name does not apply to IPRs.
- If an ingestion fails after a record and you wish to use the auto-ingest feature, be sure to purge the failed ingestion on the Status page before attempting the auto-ingestion.
- When scheduling a broadcast of MPEG-4 content from an InfoValue server to a VBrick decoder, v3.3 or higher software must be installed on the VBrick or the video will not play. Also the MPEG-4 file must be "hinted" or it will not play properly on the VBrick decoder. Hinted files contain reorganized data that facilitates streaming, fast forward, rewind, etc.
- You cannot create or upload thumbnails for Live Video streams that were added using the VEMS Portal Server **Global Settings > URLs** functionality. Any attempt to create thumbnails for these URLs will fail.
- VOD Polling interval requires a restart before changes take effect. On Admin page, go to **Global Settings > Global Assignments > Assign VOD Polling Interval**. If you change the value, you must restart Vbrick Object Starter Service on the VEMS Portal Server for this parameter to take effect.
- There is an issue with Admin settings for **Allow Access to Specific VOD Content** and **Allow Content Publishing**. If you check a parent directory, the sub-directories are also checked to indicate that the user has access to all sub-directories. However, at present there is no way to keep the user from unchecking a subdirectory. Regardless whether the user unchecks a sub-directory whose parent directory is checked, VEMS Portal Server will still allow access to the sub-directory.
- The installer now changes the default root password for the MySQL database from no password to `vbrick_18`.
- For one-click login, if you type in the IP Address, rather than the name of the machine, you will be prompted for a username/password box. This is intended behavior as IE sees the IP Address and believes the user is in the Internet Zone. If you click on **Remember my password** you will not see the box again.
- If a user has defined a default IPR channel, and then removes that particular customized channel in the **Customize Streams** page, that default IPR channel is still listed as the current channel, even though it no longer exists.

VOD Servers

- Content being added to the LifeSize server is subject to the following constraints:
 - If a transcode is currently in progress on the Add Video page, content will not be added to LifeSize and a message will be displayed in the Windows Event Viewer.
 - If a remote NVR is configured, and it is the only NVR, content will not be added to LifeSize and a message will be displayed in the Windows Event Viewer..

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- If a remote NVR is configured, as well as a local NVR, content may be added to LifeSize if the local NVR is selected randomly by the NVR's load-balancing algorithm.
 - LifeSize supports playlists but the playlist cannot be imported directly into VEMS unless "composited" video exists for the playlist. If not present, composited video can be generated by adding formats from the video's Edit page. (9643)
 - If you delete all VOD servers using the Admin Console, the **Media Library** tab will not be displayed on PC clients even if URLs for Live Video Streams have been defined. To workaround this issue, simply add a non-functional VOD server and the Live URLs will be displayed. (9430)
 - Do to a limitation with RTMPT, the Wowza server, and the VEMS Flash player, any RTMPT content served from Wowza will not start in the external player window at the same position it was playing in the parent window. If this happens, you will need to manually navigate (using the "seek" slider) to the right place in the stream. (9305)
 - Darwin VOD Servers – Some Darwin Open Source VOD Servers have a 2 GB limitation for H.264/MPEG-4 files. Video files greater than 2 GB from a Darwin server, may not play on any player or platform. Check with the Darwin open source community (<http://developer.apple.com/opensource/>) for updates.
 - When using dual NICs on any Windows VOD server, communication between the NICs may fail if there is no path in the routing table from one NIC to the default gateway. To work around this issue, add a path to the default gateway as explained in the Windows Server documentation.
 - When ingesting content to a VOD-W Server, all content titles must begin with a forward slash (/) and apostrophes are not allowed.
 - Depending on user requirements, VOD users can be restricted to viewing RTSP streams at a specified bandwidth in Kbps. This feature is not currently supported for Darwin and VOD-WM video-on-demand servers.
 - The duration of Darwin and WM video assets is not extracted in this release. As a result, the duration of a stored broadcast *schedule* for a Darwin or WM asset will not be automatically adjusted to the actual length of the clip. This means that the video asset plays until file end but the multicast continues until the end of the scheduled time.
 - Multicast streaming from the VOD-D (Darwin) server is not supported.

Set Top Boxes

- On a Multi Format Set Top Box you cannot record (unicast) RTSP H.264 Transport Streams. You can play these streams; you cannot record these streams. (9492)

Browsers

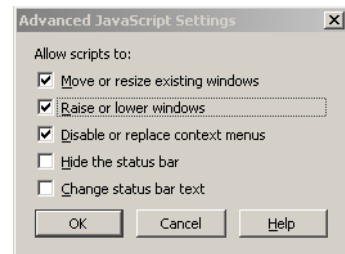
Internet Explorer

- With Internet Explorer 9 on Windows 7, the **Record** pushbutton may not work for an H264TS stream from an H.264 encoder. The workaround is to click on a different stream and then click on the original stream, and the **Record** pushbutton will work as expected.
- When installing download components (FTP .cab) from the **Add Video** page using Internet Explorer 8, an error page may be displayed. This will only happen after the first download. If this error occurs, exit the browser and restart.
- Web page errors can occur in Internet Explorer 7 when running the Admin console and the Scheduler on separate tabs in the same browser instance. For example, if you modify

an Emergency Broadcast template on one tab and then try to modify a schedule on a different tab, Internet Explorer will report a web page error.

Firefox

- When opening an e-mail link to a presentation on a distribution server, with Firefox as the default browser, there is no link on the VEMs client page for the Windows Media plugin. To play WM files, open the main Portal Server page in Firefox and download the plugin using the provided link. (8731)
- Firefox only. When playing a stored WM stream on a Windows 2000 machine, the Pause control will black out the player window when you pause and then play. Do not use Pause. This is a known issue with no workaround.
- Firefox only. When viewing a playlist in an external player window, the external window does not stay on top when the clip changes. To change this behavior, Go to **Tools > Options > Content**. Click the **Advanced** button to the right of the **Enable JavaScript** checkbox, then check **Raise or lower windows**.
- The controls for some Portal Server features (for example Presentations and Playlists) will simply refresh the page. For these controls and features to work properly in Firefox, you must set Javascript options as shown here. Go to Tools > Options > Content > Enable Javascript > Advanced and check Raise or lower windows.



Players

Macintosh

- Macintosh desktop clients require Mac OS X 10.6.6 or higher to play Adobe Flash Multicast streams. (9473)
- When playing streams from a WM VBStar or a WM file server, the stream plays from the beginning of the file rather than from the bookmarked location (even though the timestamps are correct). (SCR 9151).
- When the Macintosh **Dock Bar** (set in System Preferences) is set to **Medium** or **Large**, it distorts the controls in the Preview window at fullscreen and you cannot toggle Closed Captions on or off. To work around this issue, set the **Dock Bar** to **Small** or turn off completely when using fullscreen (9143)
- Macintosh (Safari) clients may not play live or stored video after a Portal Server upgrade. Clearing the browser cache will usually resolve this issue.
- Macintosh (Safari and Firefox). MPEG-4 content encoded using the 56K template will not display closed captions.
- Macintosh only (Safari 3.0 or higher). If Apple QuickTime is enabled in Global Settings as the default Macintosh Player for MPEG-4 Content, the QuickTime player will freeze the first time you click on any item. Click again to unfreeze and continue.
- Macintosh only. Safari 3.0 or higher. If Apple QuickTime is enabled in Global Settings as the default Macintosh Player for MPEG-4 Content, and the browser becomes unresponsive, click anywhere on the QuickTime player to recover.
- Macintosh only. When multiple external windows are enabled, recording is disabled and you can only record the stream shown in the preview window. In some cases the **Record** button may be displayed on external windows even though it is non-functional.

- When using a Macintosh with Safari, you cannot always launch a stored stream from the Scheduler page by clicking on the TV icon. To work around this issue, launch the stream from the **Live Media** page instead.
- Macintosh only. The mute button is not "sticky" and works for the selected (live or stored) stream only. If you select a different stream, it will not be muted.
- On Windows PCs, you must have Apple QuickTime 7.5.5 installed to play MPEG-4 and H.264 streams with QuickTime.
- QuickTime (using Firefox or Safari) does not support Fast Forward or Rewind when playing a stored MPEG-4 stream. The FF and RW buttons on the QuickTime player simply pause the stream.

QuickTime

- To play H.264 streams in QuickTime, you must set Direct3D video acceleration to off in QuickTime Preferences. (This option is enabled by default.) Go to Edit > Preferences > QuickTime Preferences > Advanced > Video > DirectX and uncheck **Enable Direct3D video acceleration**.
- Be aware that QuickTime performance is highly dependent on the power of the graphics card installed on your computer.
- Due to known performance limitations, do not use the QuickTime PC player for live 1080p30 streams.

Windows


- Windows Web Server 2008 only. The Portal Server typically runs behind a firewall and is installed by default with Windows Firewall set to **Off**. If necessary, you can use the following steps to configure the Portal Server to run with Windows Firewall set to **On**.
 1. Go to **Start > Control Panel > Windows Firewall**. Check that the Firewall is **On** and click **Allow a program through Windows firewall**.
 2. To allow client access to the web server, go **Add port** and add Port 80 (TCP) to the Exceptions list.
 3. To enable FTP, go to **Add port** and add Port 21 (TCP).
 4. To enable live streams, go to **Add program** and navigate to <C:\Program Files\Common Files\VBrick\VBSapSrv>
 5. To enable recording, go to **Add program** and navigate to <C:\Program Files\VBrick\Asr\VBASR.exe>
 6. To enable thumbnails, go to **Add program** and navigate to <C:\Program Files\VBrick\MCS\ThumbNailCreator.exe>
- With Windows Web 2008 (and Automatic Updates selected), warning messages can be generated by the Data Execution Prevention (DEP) software. To work around these messages go to **Start > Control Panel > System > Advanced system settings > (Performance) Settings > Data Execution Prevention** and add the flagged VBrick module as an exception.
- Windows Vista or Windows 7 only. Live streams and stored streams will not work properly in fullscreen mode if you have the **Color scheme** set to **Windows Aero**. If this Vista option is selected, go to **Appearance and Personalization** and select a different color scheme.
- To avoid problems when recording content, the Windows Firewall must be set to **Off**. Go to **Start > All Programs > Windows Firewall** to turn it off.

Silverlight

The following caveats apply when hosting RMS Silverlight presentations on VEMS:

- Publishing Silverlight presentations to VEMS requires a configured Windows Media Server. Progressive download is not supported via the Silverlight player.
- Silverlight presentations hosted on VEMS must have both multicast and unicast live viewing URLs configured. To configure these URLs, open the Admin console and go to **Presentation Devices > Advanced Configuration > Add Viewing URL**.
- Multicast RMS Silverlight presentations must have an .nsc file present on the VEMS server in the `nsc` folder: `C:\Program Files\VBrick\MCS\nsc`. The .nsc file must be referenced in the live viewing URL as follows. The .nsc file can be retrieved from the target VBrick reflector or Window Media Server and placed in the `nsc` folder.
`http://<VEMS_IP_Address>/nsc/rmssilverlight.nsc`
- Macintosh clients: VEMs will select only unicast viewing URLs (multicast URLs are not supported).
- Windows PC clients (Firefox only): VEMS will select only unicast viewing URLs (multicast URLs are not supported).

Rich Media Desktop

- When VEMS is configured (in Global Assignments) to use QuickTime for H.264/MPEG-4 content, it will play a Rich Media Desktop (RMD) URL as expected. However if you play a different stream with QuickTime, and then return to the original RMD URL, the stream will not play. To work around this issue, go to **Tools > Internet Options > Delete Browsing History > Cookies**. After clearing the cache the URL will work as expected.
- In order to play a live multicast URL from Rich Media Desktop (RMD) in VEMS, the audio and video IP addresses in the .sdp file must be the same. If not the same, the stream will not play.
 - ▼ To create a valid .sdp file such that a VEMS player or StreamPlayer is capable of playing a multicast from RMD:
 1. Go to the Broadcast > Broadcast Settings page in RMD and configure as follows.
 - **Encoder Preset:** LAN - MPEG4, DSL/Cable - MPEG4, Modem - MPEG4
 - **Destination:** Multicast
 2. Click **Generate** to generate the **Video Address** and **Audio Address**.
 3. Edit the **Audio Address** to match the **Video Address**.
 4. Click "Save SDP File"  and save to a local folder.

A VEMS administrator will need to copy this file to the VEMS server (`C:\Program Files\VBrick\MCS\sdp`) and create a live URL for the stream. See the "Add/Modify a URL for a Live Video Stream" topic in the *Portal Server Admin Guide* for more.
 5. Click **Save** and when you broadcast your RMD session, the multicast URL in VEMS will play successfully.





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