



VBrick Enterprise Media System

VEMS v5.0.1 VOD-WM Server
Admin Guide



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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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VOD-WM Server v5.0.1 Admin Guide

This *VOD-WM Server Admin Guide* is written for anyone who will be using or configuring a VBrick VEMS VOD-WM Video on Demand Server. This includes system administrators, network technicians, and others. This document explains how to set up and configure the VOD-WM server and how to perform initial administration tasks. For most common tasks like ingesting content, use the VEMS Portal Server and refer to the *VEMS Portal Server Admin Guide* for details. You can perform most administration tasks using the Portal Server. VOD-WM servers are a key component in VBrick's VEMS Enterprise Media System. They provide standard VOD features for Windows Media files.

VBrick VOD Servers

VBrick VOD servers use the latest PowerEdge hardware from Dell. VBrick (and Dell) are currently transitioning from legacy PowerEdge 1950/2950 models to current 610/710 models. As a result you may have 1950/2950 models, 610/710 models, or a combination of both models. This manual documents the VOD software running on a 610/710 server. To view the corresponding 1950/2950 documentation, go to www.vbrick.com/documentation/vems.html

Organization

Server Overview	provides an overview of the WM server including compatibility and system requirements.
Getting Started	explains how to unpack and install the server. This includes setting the IP address and configuration in VEMS Portal Server.
Managing the Server	explains how to use monitoring and performance resources on the server to track bandwidth, usage, logging, etc.
Creating Publishing Points	explains how to create authenticated and non-authenticated publishing points on the server.
Adding Content	explains how to ingest video content to the server.
Restoring Windows Media Services	explains how to restore Windows Media Services management after you change the computer name.
Reinstalling Windows Media Services	Installation instructions are provided here only in the unlikely event that you ever need to reinstall the operating system.

Font Conventions

Arial bold is used to describe dialog boxes and menu choices, for example: **Start > All Programs > VBrick**

`Courier fixed-width font` is used for scripts, code examples, or keyboard commands.

Courier bold fixed-width font is used for user input in scripts, code examples, or keyboard commands.

This bold black font is used to strongly emphasise important words or phrases.

Folder names and user examples in text are displayed in this sans serif font.

User input in text is displayed in this bold sans serif font.

Italics are used in text to emphasize specific words or phrases.

Related Publications

[Dell PowerEdge R610 Technical Guidebook](#)

[Dell PowerEdge R710 Technical Guidebook](#)

Printer-Friendly

[VOD-WM Server Release Notes](#)

[VOD-WM Server Admin Guide](#)



Server Overview

VBrick's VOD-WM Server has been integrated with the VEMS family of products including the Portal Server, the WM Network Video Appliance, the Scheduler, and the Network Video Recorder (NVR). The VOD-WM delivers stored Windows Media assets as unicast/multicast streams across an Ethernet network and is built on a Dell hardware platform. Other features include the ability to schedule asset playback, asset searching, user and system statistics, and more. The Portal Server is required to gain the full benefits of the VOD-WM server and is sold separately. In order to set up the Portal Server, follow the directions in the *VEMS Portal Server Admin Guide*. Once the Portal Server is setup, you can access video on the VOD-WM server through the Portal Server web interface.

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Feature Overview

VBrick VOD-WM servers provide interactive, on-demand playback of Windows Media video that is stored on the server with a variety of methods. The VOD-WM servers are a basic component in the VBrick's VEMS solution and work seamlessly with the VEMS Portal Server. They ingest and deliver unicast (or multicast) streams in Windows Media format. The VOD-WM Server supports Fast Forward and Rewind. The general specifications for the VOD-WM servers are shown below. See the Dell documents listed in [Related Publications](#) on page vi for more information. Not all Windows Media servers support multicast streaming. *Only Windows Media Services 9 Series running on Windows Server 2008 Enterprise Edition support multicast.*

Table 1. VOD-WM Server Specifications

Model	Hardware †	Processor	Memory	RAID
Entry-Level	Dell PowerEdge R610	1	2 GB	RAID 5
Mid-Level	Dell PowerEdge R610	1	2 GB	RAID 1/5
High-End	Dell PowerEdge R710	2	4 GB	RAID 1/5, 8 slots

† Web Edition or Enterprise Edition. Enterprise required for multicasting.

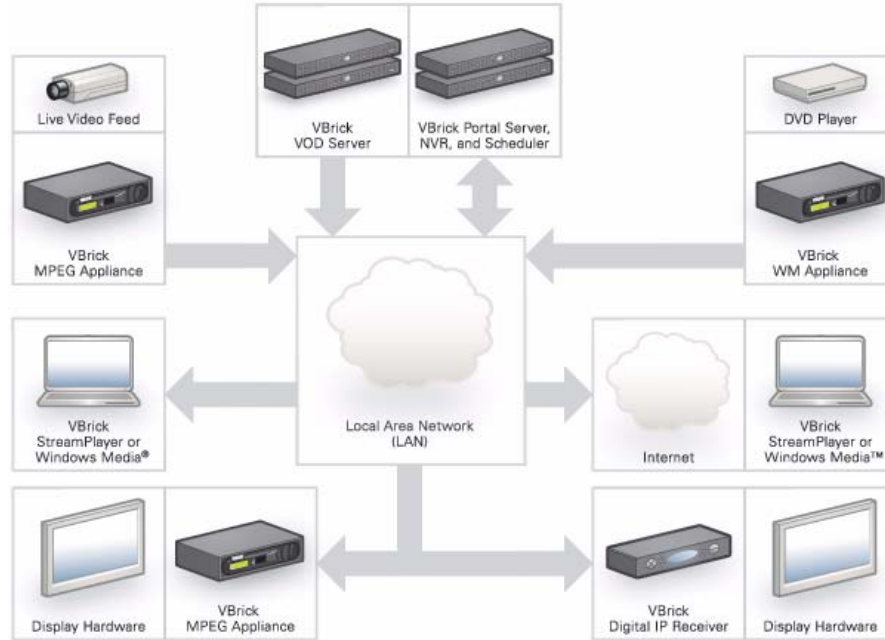


Figure 1. VBrick Enterprise Media System

Server Compatibility

The VOD-WM servers are compatible with the following VBrick devices:

- VB6000 WM Network Video Appliances with VBDNA 1.0 or higher.
- VEMS Portal Server v3.2 or higher.
- VEMS Scheduler v3.2 or higher
- Network Video Recorder v3.2 or higher.
- StreamPlayer 4.3 or higher.

System Requirements

The VOD-WM server has been tested to provide the specified performance with no additional software installed. *Be aware that the installation of virus scanners or security software that consume system I/O resources may have an adverse impact on streaming performance.* These components are not tested by VBrick and you should test the VOD-WM for performance and reliability after installing them.

External Storage

VBrick's SAS (serial attached SCSI) ES5, ES10, and ES15 external storage arrays are fully compatible with all VOD-WM servers.

VOD-WM Server Software

All server software is pre-installed by VBrick. If, for some reason, you ever need to reinstall the software, use the Dell recovery CDs to reinstall the Windows Server 2008 (Web or Enterprise) operating system. Contact VBrick [Support Services](#) if you need help. Each VOD-WM server has the following software pre-installed.

- Windows Server 2008 (Web or Enterprise Edition).

- Internet Information Services (IIS).
- ASP.NET.

Note Windows Media Services are installed and a publishing point is configured on the server prior to shipment. The Computer Name of the VOD-WM Server is **VODWM**. If you subsequently change this name, you will temporarily be unable to manage Windows Media Services. See [Restoring Windows Media Services](#) on page 23 and/or contact VBrick Support Services for more information.

VOD-WM Server Software CD

The VOD-W Server Software CD has all server documentation including this *VOD-WM Server Admin Guide* in searchable HTML format.

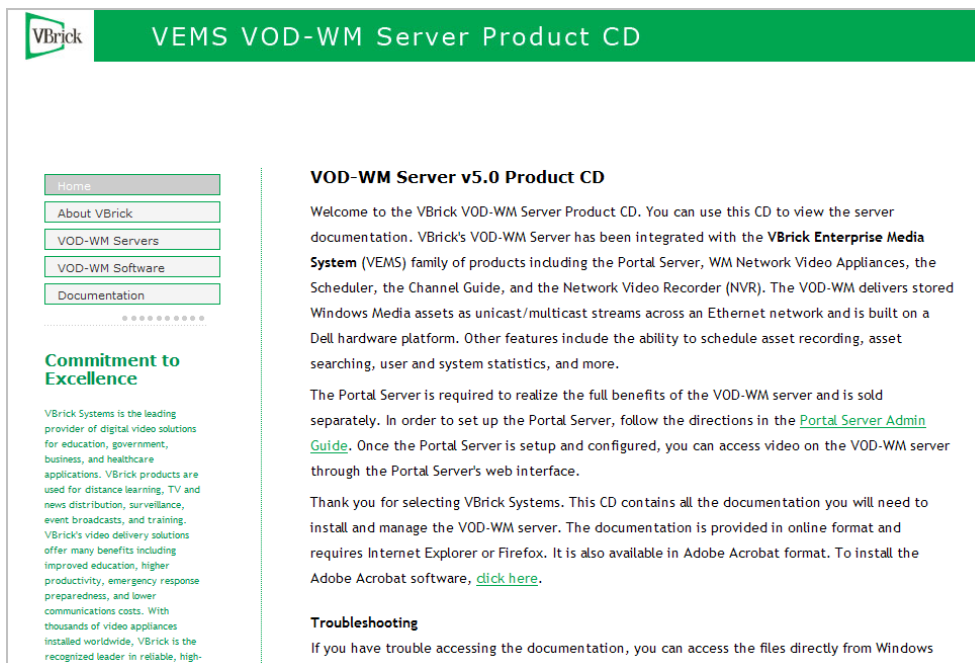


Figure 2. VOD-WM Server Product CD

Technical Support

If you can't find the information you need from the documentation or from your reseller, you can contact VBrick Support Services on the web at www.VBrick.com/support. The Support Services website has downloads, FAQs, documentation, support guidelines, and an on-line form you can use to submit questions. VBrick will make every effort to answer your technical questions in 24 business hours or less.



Home > Support : Online Support

VBrick On-Line Support

Support & Training

- Support Overview
- Customer Services
 - Order Tracking
 - Product Registration
 - Warranty Info
 - Warranty Status
 - Warranty Policy
 - Out of Warranty
- Technical Support Services
 - Knowledge Base
 - Documentation
 - Downloads
 - Request Service
 - Call Tech Support
 - Self Service
- Professional Services
- Resources
 - Documentation
 - Downloads
 - Forum
- VBrick University Training

VBrick products are sold and supported by an extensive network of resellers. For immediate support, first contact your local VBrick Reseller.

VBrick Support Services can be reached via email by completing the form with your question or issue. Please have your contract number or serial number ready to expedite the process ([click here](#) to locate serial #). Priority service levels and response times are predicated by the Platinum or Gold levels of service associated with your product or account.

For immediate assistance, please contact VBrick support services at 203-303-0222.

Warranty Policy

Online Support Form

All fields are required

Name

Company

E-mail address

Country

Phone Number

Issue Concerns

Order Number

Getting Started

Installing the VOD-WM Server

The hardware installation of the VOD-WM server is straightforward. Unpack the server and connect the cables as described below. Note that all server software is pre-installed before being shipped.

▼ To install the server onsite at your location:

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Step 1. Unpack the Server

Each shipment comes with:

- A Dell PowerEdge R610 or R710 server configured with a Microsoft Windows Media streaming server.
- All power cords and cables.
- Rack mount kit.
- VBrick VOD-WM Server Product CD (including this *VOD-WM Server Admin Guide*.)

Step 2. Connect the Server

Note The following steps explain how to connect Dell PowerEdge R610/R710 servers. To connect legacy servers, please refer to the documentation that was shipped with the server. To view all VBrick product documentation, go to www.vbrick.com/support/documentation

▼ To set up the VOD-WM server:

1. Connect the monitor, keyboard, mouse, and network cables as described below.



Figure 3. VOD-WM (Dell R610 – Rear View)



Figure 4. VOD-WM (Dell R710 – Rear View)

2. If rack mounting the unit, mount the VOD-WM server in the rack, using the rack mount kit provided.
3. Connect the VOD-WM server to the network by plugging the 10/100/1000 BaseT Ethernet cable into the Ethernet port 1 on the rear of the unit.
4. Connect the monitor cable to the blue video port (rear) or black video port (front) on the VOD-WM server. Turn the monitor on.
5. Connect a mouse and keyboard to any available USB ports (front or rear) on the VOD-WM server.
6. Plug the VOD-WM server into a power source, using the power cords provided. (All VOD servers have redundant power supplies, each with its own cord.)
7. Turn the VOD-WM server's main power on by pressing the power switch at the front of the unit.



Figure 5. VOD-WM (Dell R610 – Front View)



Figure 6. VOD-WM (Dell R710 – Front View)

- The VOD-WM server will boot and automatically load using the default settings. Wait 5–8 minutes for the unit to fully power up. As new hardware is attached (for example a keyboard and mouse) the operating system will automatically discover and install the drivers.

Step 3. Login to the Server

After the server boots, the next step is to login with the default user name (**Administrator**). After logging in, it is always a good idea to add a password.

▼ To add an administrator password:

- Go to **Start > Administrative Tools > Computer Management**.
- In the left panel expand **Local Users and Groups** and then click on **Users**.
- Highlight the **Administrator** user and then right-click and select **Set Password**.
- Ignore any warning and enter and confirm an Administrator password.



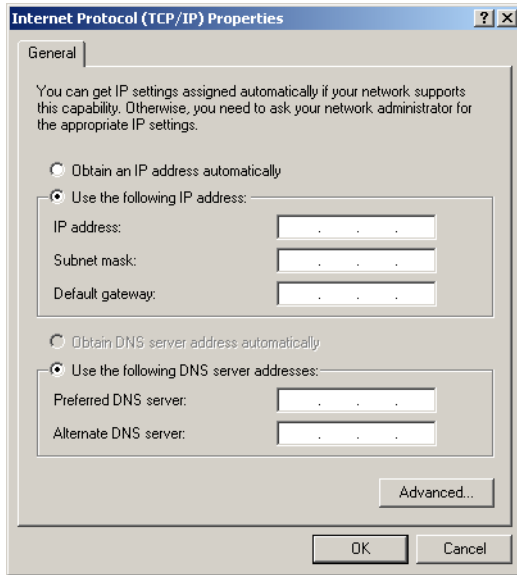
Step 4. Configure the IP Address

You need to configure the IP address as explained below on the server machine. When done, be sure to reboot the machine before configuring the server in the VEMS Portal Server. VBrick strongly recommends that you use a static IP address rather than a dynamically-configured DHCP. The use of a DHCP server creates a number of issues when the IP address changes. For example clients configured to point to the VOD-WM server's IP address may need to be re-configured. Also, the VEMS Portal Server is configured to use the IP address of the VOD-WM server so the Portal Server configuration will have to change. You can configure the IP address by connecting a monitor to the VGA port on the server.

▼ To configure the static IP address of the server machine in Windows Server 2008:

- Go to **Start > Control Panel > Network and Sharing Center > Manage Network Connections**.

2. Right-click on the connection to which you want to add a static IP address and click **Properties**.
3. Double-click on **Internet Protocol Version 4 (TCP/IPv4)**.
4. Click on **Use the following IP address** and enter the values provided by your system administrator for **IP address**, **Subnet mask**, and **Default gateway**.
5. Click **OK** when done.



Step 5. Configure the VEMS Portal Server

The VOD-WM server must be configured in VBrick's VEMS Portal Server before it is recognized as part of the VEMS system.

- ▼ To configure the VOD-WM server in VEMS Portal Server:
 1. Launch VEMS Portal Server and login as an administrator.
 2. Go to **Global Settings > Servers** and select **VOD-WM-STANDARD** or **VOD-WM-ENTERPRISE** from the dropdown list. (Select **Standard** if you are installing a server running Windows Server 2008 Web Edition; select **Enterprise** if you are installing a server running Windows Server 2008 Enterprise Edition.)

3. Enter the **IP or Domain**, **Server Description** (optional), **FTP User Name** (default = `vbrickuser`) and **FTP Password** (default = `vbrickuser`).
4. Accept the default **Publishing Point** parameters and click **Add** when done.

This completes the Portal Server configuration. However in order to verify the installation as explained below, you must manually sync up the VOD-WM server with the VEMS Portal Server as follows:

- ▼ To manually sync the VOD-WM server with the VEMS Portal Server:
 1. Launch the VEMS Portal Server admin tool and go to **Global Settings > Global Assignments > Assign VOD Polling Interval**.
 2. Click **Sync Now**. Do not change anything else and exit when done.

Step 6. Verify the Installation

Use the following sequence of steps to verify the VOD-WM server is installed properly and can communicate with the VEMS Portal Server. If you can use the VEMS Portal Server to launch a video stored on the VOD-WM Server, you have tested connectivity and verified the installation. For more information about VEMS Portal Server, see the *VEMS Portal Server Admin Guide*.

- ▼ To verify the installation:
 1. Ping the IP address of the VOD-WM server from any PC in the same network.
 2. Launch an VEMS Portal Server client. Open a browser and enter the VEMS Portal Server hostname or IP address (e.g. <http://portalserveripaddress>) in the address bar.
 3. Go to the **Asset Library** and launch any of the Windows Media (wmv) videos available in the **Demo** folder. If it runs, you have successfully completed the installation.

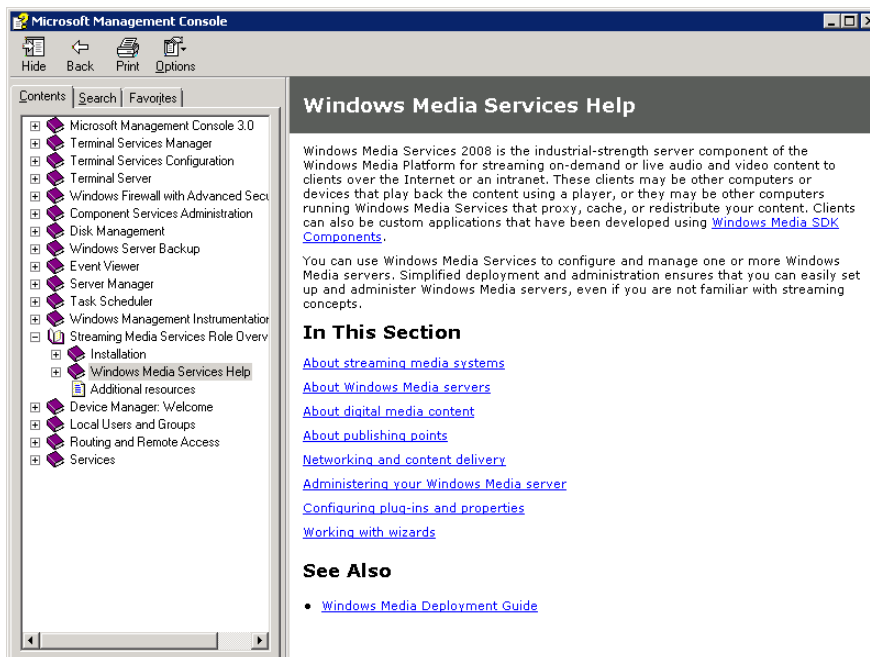
Managing the Server

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Overview

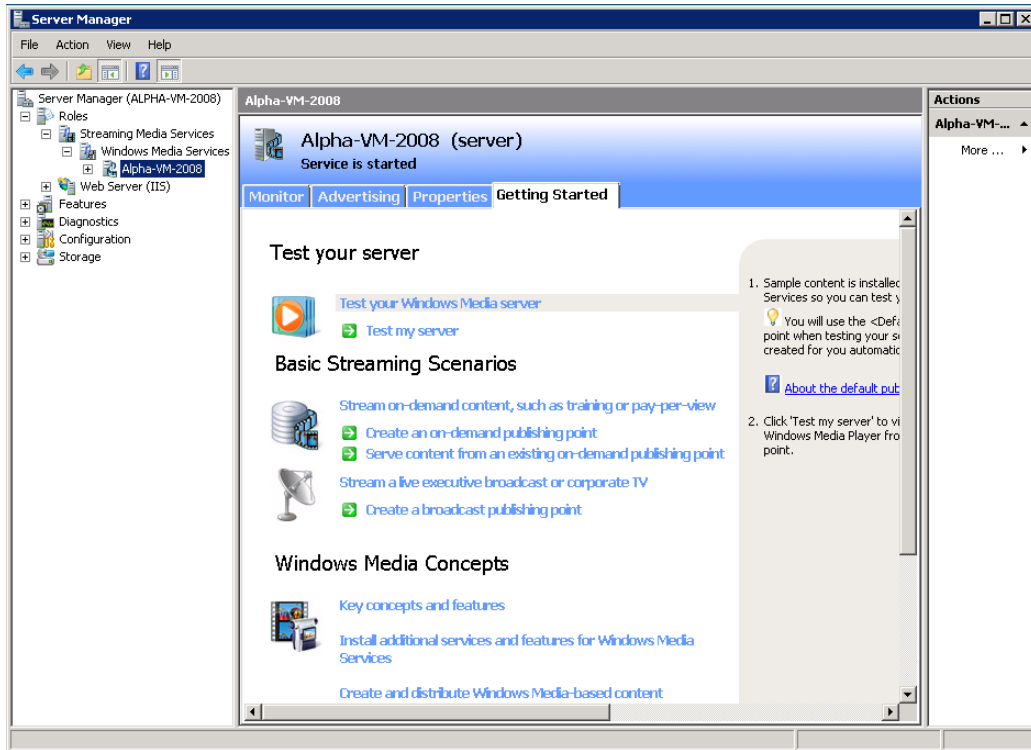
Windows Media Services provides numerous tools to help you manage a streaming media server. This section provides a brief overview of some of the resources that are available to help you manage the server. Use the **Help** pages (see below) embedded in the server application to understand the concepts and get help for specific issues. You can also go to the Microsoft Streaming Server [website](#) for additional information:



Managing the Server

- ▼ To launch the Windows Media server:
 1. Go to **Start > Administrative Tools > Server Manager**.
 2. On the **Managing Your Server Roles** page, click on **Manage this streaming media server**. This displays the **Server Summary** page.
 3. In the left tree control, expand **Roles > Streaming Media Services > Windows Media Services**.

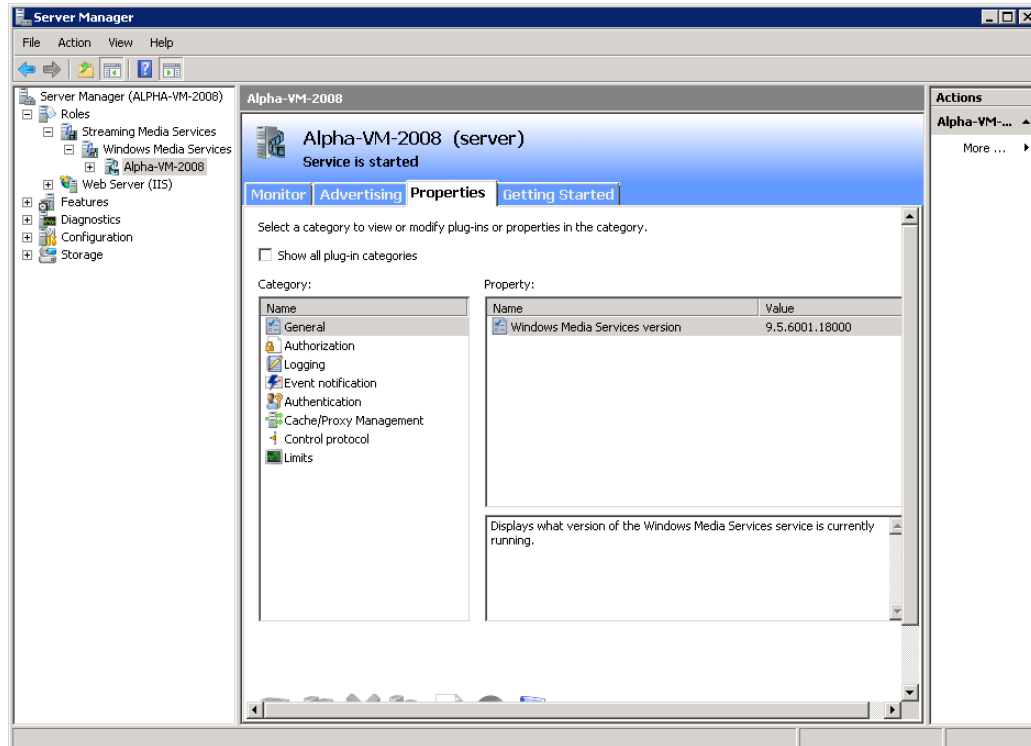
4. Double-click on the server name to display the **Getting Started** page and expand the tree control.



This page has four tabbed windows as follows.

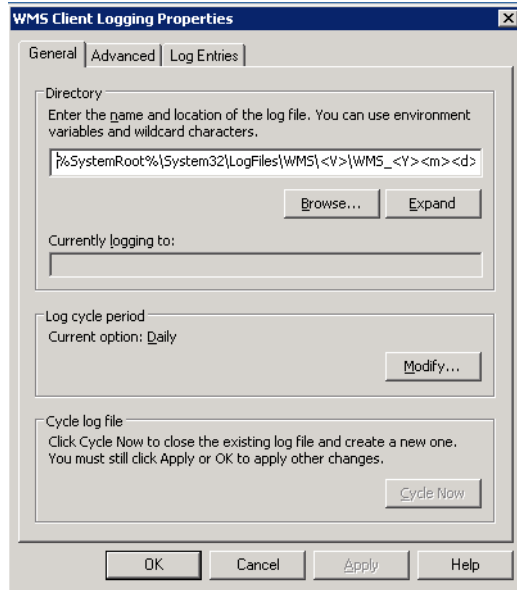
Getting Started	Displays various help topics to help you get acquainted with the system.
Properties	Displays various server properties such as Logging, Event notification, etc. Highlight any property in the Category list, then right-click and select Properties in the Plug-in list (or use the View properties icon at the bottom of the page)
Advertising	Used to add advertising content.
Monitor	Information only. Click the View Performance Monitor icon to launch the Windows Media Performance Monitor.

Server Properties



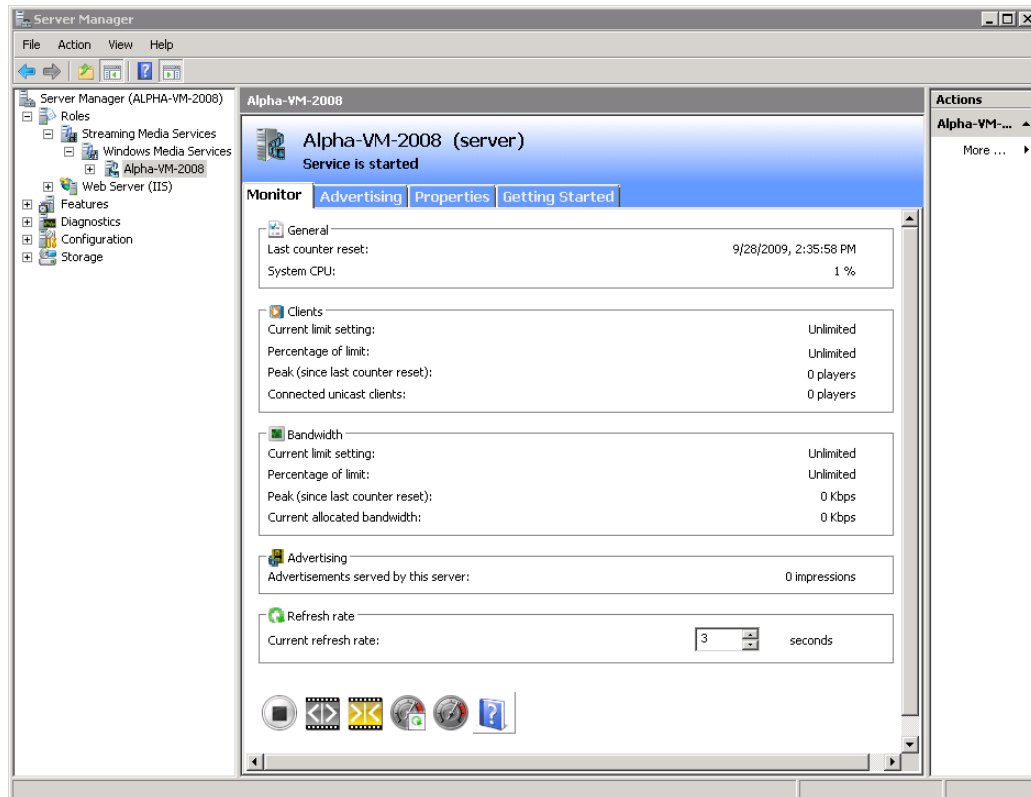
Note The default Publishing Point on the VOD-WM server is **VBP** and it must match the server configuration in VEMS Portal Server. You can change the Publishing Point name but VBrick strongly recommends you keep the default.

- ▼ To display or set logging properties:
 1. Select **Logging** in the Category list.
 2. Select **WMS Client Logging** and right-click to Enable or Disable logging.
 3. Right-click and select **Properties** to set Logging Properties including the location of the log file.




Performance Monitor

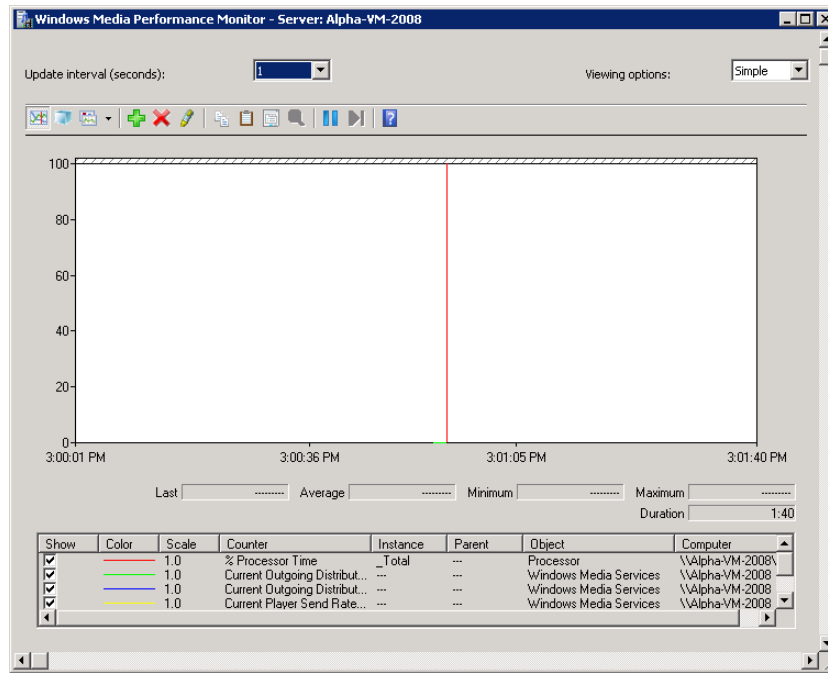
Click on the **Monitor** tab for a quick read-only view of bandwidth and usage metrics. Use the icon to Start/Stop services, reset counters, or to launch the Performance Monitor.



▼ To view the Performance Monitor:

1. Click the **View Performance Monitor** icon  at the bottom of the window.

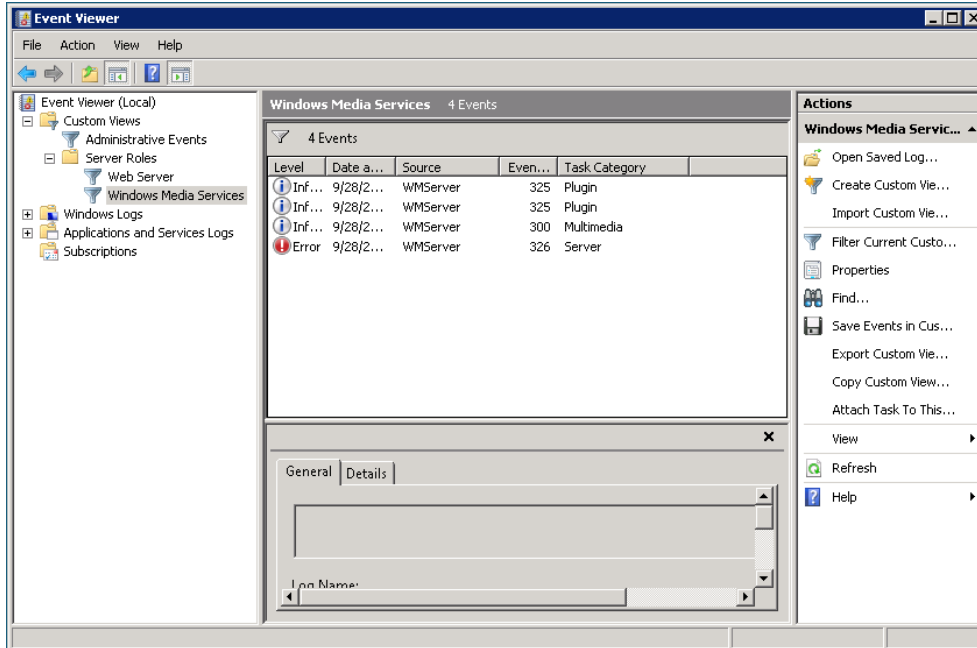
- Use the toolbar controls above the display area to add or remove counters.



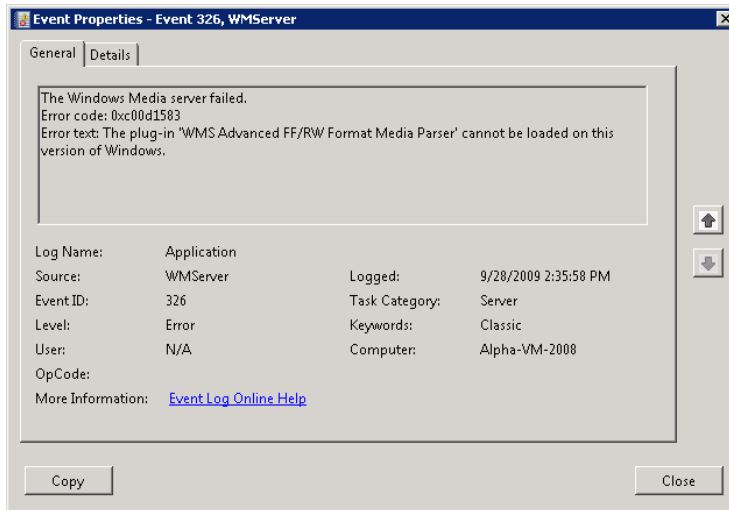
Windows Event Viewer

The Windows **Event Viewer** is available on Windows Server 2008 Web or Enterprise Edition and other operating systems. Use this tool to review any system-level messages written to the Windows system event log.

- ▼ To launch the Windows event viewer:
 - Go to **Start > Control Panel > Administrative Tools > Event Viewer**.
 - In the left tree control, expand **Custom Views > Server Roles** and click on **Windows Media Services**.



- For more details, double-click on any event to launch the **Event Properties** window. Use the arrows buttons on this window to page through the log or the **Details** tab to see more information.



Creating Publishing Points

The WM Server can also be configured with publishing points to be used as a reflector server. When used in this manner, live WM streams reflected from the WM Server can be selected and viewed from the VEMS Portal Server. To have the reflected stream appear on the **Live Broadcasts** page of the Portal Server, go to the **Configuration: Encoder > Server** page in IWS and complete the **Announce External Server** section. For more information, see the "Configuration" chapter in the *WM Appliance Admin Guide*.

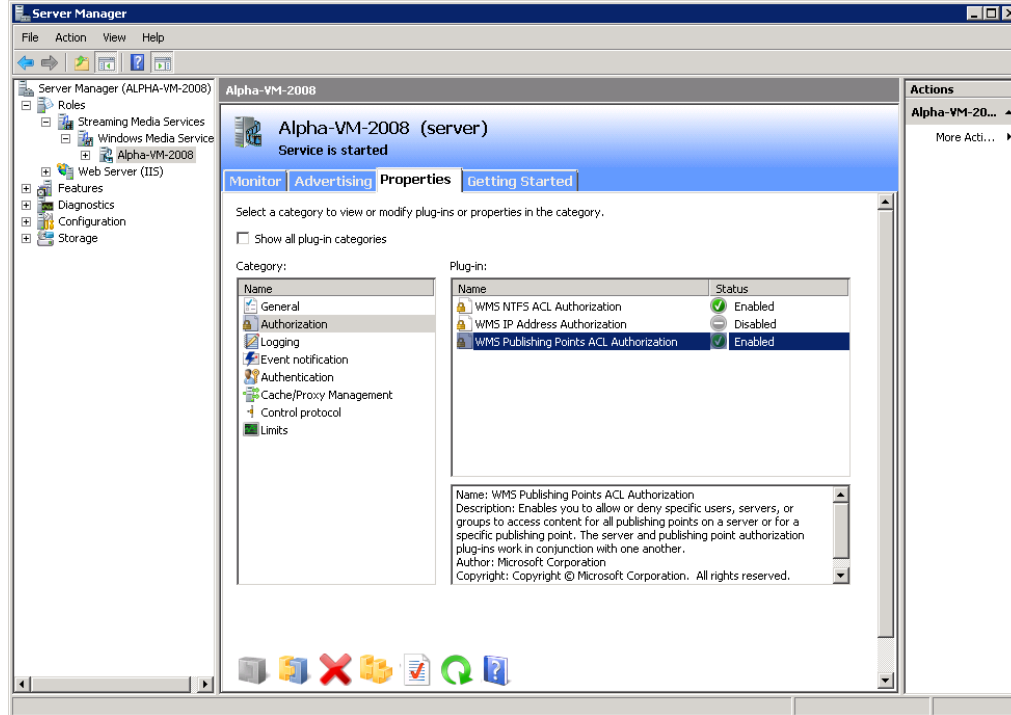
The following paragraphs explain how to create publishing points on a Windows Media Server to allow live streaming from a VBrick WM appliance to the server. It is important to note that, by default, **WMS Publishing Points ACL Authorization** is enabled on the Windows Media Server. This means that an HTTP push from a WM appliance will not connect to the server unless you first create a user name and password for an authorized user on the WM Server and enter that user name and password in the appliance configuration. (If you disable authorization entirely, anyone who knows the URL can view the stream.) See the *VEMS Portal Server Admin Guide* and the Microsoft Windows Media Server documentation for more information.

Creating Publishing Points

The WM Appliance supports both authenticated and non-authenticated push publishing points for the Microsoft Windows Media Server. Depending on how you configure the Windows Media Server, authentication can be the default setting for all push publishing points, it can be required on a per-publishing-point basis, or not required at all. A typical deployment of the Windows Media Server will most likely have the authentication setting on to force a push device to authenticate itself before it can send data to the publishing point.

▼ To verify and enable or disable authentication:

1. Open the **Server Manager** and expand **Roles > Streaming Media Services > Windows Media Services**.
2. Select the named Windows Media server and click the **Properties** tab in the right pane. This displays two additional panes.
3. In the left pane, select **Authorization** and right-click **WMS Publishing Points ACL Authorization**.



4. In the right pane click **Properties**. If there are user names in the list, click the username to view the allowed function. The named user will have a combination of read/write/create permissions as follows:
 - Read – will allow the user to read from the publishing point.
 - Write – will allow the user to write (push) to the publishing point.
 - Create – at the server level will allow a user to create publishing points, or at the individual point level it will allow a user to create "Copy From Points."

Adding users and privileges at the server level will allow all inherited publishing points to acquire the same security privileges. To add individual privileges for a specific publishing point, select the **Publishing Point**, click **Properties**, select **Authorization**, and right-click **WMS Publishing Points ACL Authorization**. To add users and subsequently, permissions, the user must already exist as a domain user or as a local user on the server. The user name will be listed and can be given the desired privileges.

Creating Authenticated Push Publishing Points

On the **WMS Publishing Points ACL Authorization** screen from above, uncheck **Allow Write Permission** for the **Everyone** user if already checked, and add write permission for a selected user or set of users by adding the user. Click **Ok** to apply the change to the server. Only the named users will be allowed to push to the server after being authenticated. If this change is done at the server level, the changes must be propagated to the publishing point level to be effective.

Creating Non-Authenticated Push Publishing Points

Either disable **WMS Publishing Points Authorization**, or keeping the default policy of authorization always on, and selectively allowing authentication to be bypassed for some, on the **WMS Publishing Points ACL Authorization** at the publishing point level, select **Allow Write**

Permission for the **Everyone** user (if already on the list or add to the list if necessary). Click **OK** to apply the change to the server. If this change is done at the server level, and the change is propagated to all publishing points, all publishing points will allow push without authentication.

Note The Windows Media Server must have the HTTP control protocol enabled to accept a push. Go to the **Properties** tab and select **Control protocol** in the left pane and in the right pane enable **WMS HTTP Server Control Protocol** to enable HTTP Control Protocol on your server. The HTTP control protocol uses port 80 by default so make sure you do not have other services running that also use that port. Also, the WMS Negotiate Authentication must be enabled at the server or Publishing Point level.

Creating Pull Publishing Points

Create a broadcast publishing point on the server and use the WM Appliance's **HTTP URL** (on the Encoder > Server page) as the source for the publishing point. When you start the publishing point it pulls the stream from the appliance and you can see the server listed in the client table on the VBrick's **Status: Server Status > Slot1 Details** page in IWS. You can optionally enable the **Start publishing point when first client connects** feature in the publishing point's general properties to have the server wait for a client to connect before it starts the pull from the appliance.



Adding Content

VBrick strongly recommends that you use the VEMS Portal Server exclusively to ingest all VOD-WM content. With the VEMS Portal Server you can add individual files or you can FTP or copy pre-recorded content to the VEMS Portal Server for easy ingestion to the VOD-WM server. The VEMS server periodically (every 5 minutes) polls certain folders for presence of content and if found ingests the content onto multiple VOD-WM servers. This process is called Automatic Content Ingestion or Auto-ingestion. The content is placed in a pre-defined subfolder under the FTP root folder. This pre-defined folder is called the auto-ingest root folder. Content can also be added by using the **Add Video** function in VEMS Portal Server or by recording a live stream. See the *Portal Server User Guide* for more information.

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Content Backup and Recovery

VBrick strongly recommends that all stored VOD-WM video content be backed up to an external storage system, a Storage Area Network (SAN), or a tape backup system. Backing up video content onto an external system is insurance against the failure of one or more of the VOD-WM disk drives.

Best Practices

After adding a new video to the VEMS system using the Portal Server, it may take a few minutes or longer after ingestion before new video appears in the Portal Server content directory. Use the **Sync Now** function to make the content available immediately.

- ▼ To sync the server with new content:
 1. On the VEMS Portal Server, go to **Global Settings > Global Assignments > Assign VOD Polling Interval**.
 2. Click **Sync Now**. Do not enter anything else.



Restoring Windows Media Services

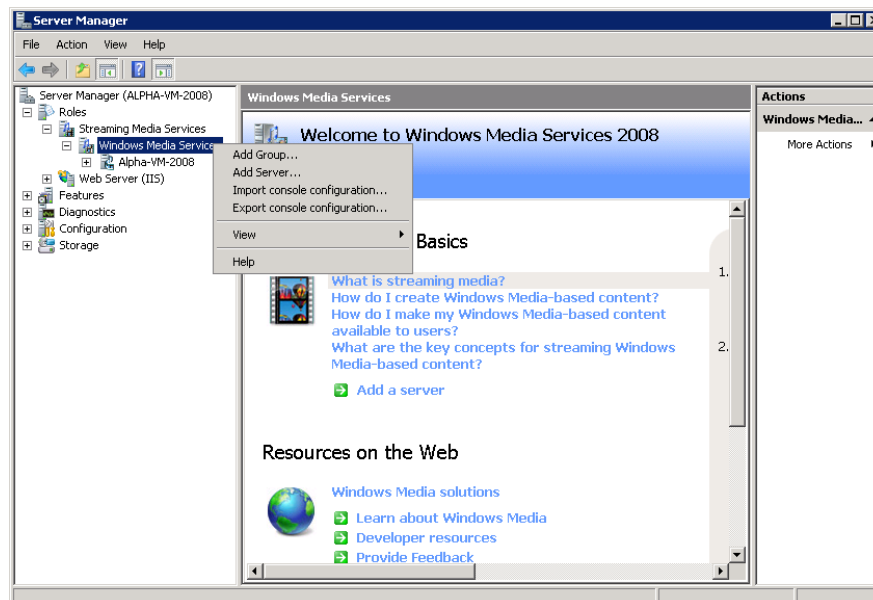
Introduction

Windows Media Services are installed and a publishing point is configured on the server prior to shipment. The **Computer Name** of the VOD-WM Server is **VODWM**. **If you subsequently change this name**, the Windows Media Services branch in the Microsoft Management Console (MMC) shows no server and all Windows Media Services configuration, such as Publishing Points, are missing. Windows Media Services management is unavailable. This procedure explains how to restore Windows Media Services management after a server rename. Contact VBrick Support Services if you need help or more information.

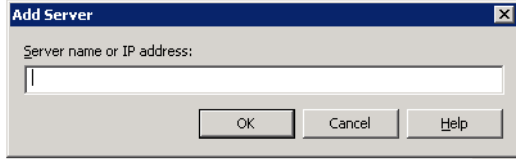
Restoring Windows Media Services

When you rename the server, using any available method, you will typically be prompted for a reboot. Run the following procedure *after* you reboot the server.

- ▼ To restore Windows Media Services management:
 1. Go to **Start > Administrative Tools > Server > Manager**. (Ignore any popup error windows from Windows Media Services.)
 2. In the left tree control expand **Roles > Streaming Media Services**.
 3. Then right-click on **Windows Media Services** and select **Add Server** from the popup.



4. In the **Add Server** popup enter **localhost** or the new name of the server.



5. The new server name will appear under **Windows Media Services**. Expand the tree under the new server name and the previous configurations including Publishing Points will be visible and accessible.
6. This completes the restore procedure. Now you can launch the VEMS Portal Server, go to **Global Settings > Servers**, and configure the VOD-WM Server with the new server name if necessary. (Note: Select **Standard** if you are installing a server running Windows Server 2008 Web Edition; select **Enterprise** if you are installing a server running Windows Server 2008 Enterprise Edition.)

Add/Modify VoD/FTP Servers

Number of Connection Licenses:

Note: when purchasing a Video On-Demand Server from VBrick, you are permitted one connection license for each server purchased. If you wish to use Video On-Demand Servers from other sources, you must purchase a connection license from VBrick for each connected server to continue to use the software in a legal manner.

IP or Domain	Server Description	FTP User Name	Server Type
172.22.130.20		vbrickuser	VOD-W
172.22.2.157		vbrickuser	VOD-WM-ENTERPRISE

vbrickuser

FTP Password: Domain or Machine Name:
 Confirm Password: User Name:
 Streaming Alias (IP or Domain): User Password:
 HTTP Tunneling Port: Confirm Password:
 Secondary Server Address: (IP or Domain of second NIC or NAT)

	Name	Publishing Local Path	Publishing Directory	Low Space Threshold (MB)	Free Space (GB)
<input type="button" value="Add"/>	VBP	d:/wmpub/WMRoot	/	20	

Add/Modify Video On-Demand Content Folders

Reinstalling Windows Media Services

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Reinstalling Windows Media Services

Note The VBrick VOD-WM server is shipped with Windows 2008 Server and Windows Media Services already installed. *The installation instructions in this chapter are provided only in the unlikely event that you need to reinstall Windows Media Services.*

This chapter does not explain how to install Windows Server 2008. Rather, it assumes that Windows 2008 Server (Web or Enterprise Edition) is already installed. **Note that Windows Media Services are not installed with Windows Server 2008.** If Windows 2008 Server is installed, you will still need to download and install Windows Media Services 2008 as explained here. Use the following Microsoft link to download the three files listed below.

<http://www.microsoft.com/downloads/details.aspx?FamilyID=9ccf6312-723b-4577-be58-7caab2e1c5b7&displaylang=en>

- Windows6.0-KB934518-x86-Server.msu
- Windows6.0-KB934518-x86-Core.msu
- Windows6.0-KB934518-x86-Admin.msu

Installing Windows Media Services 2008

▼ **To configure the server with Windows Media Services 2008, install the downloaded software in the sequence shown below:**

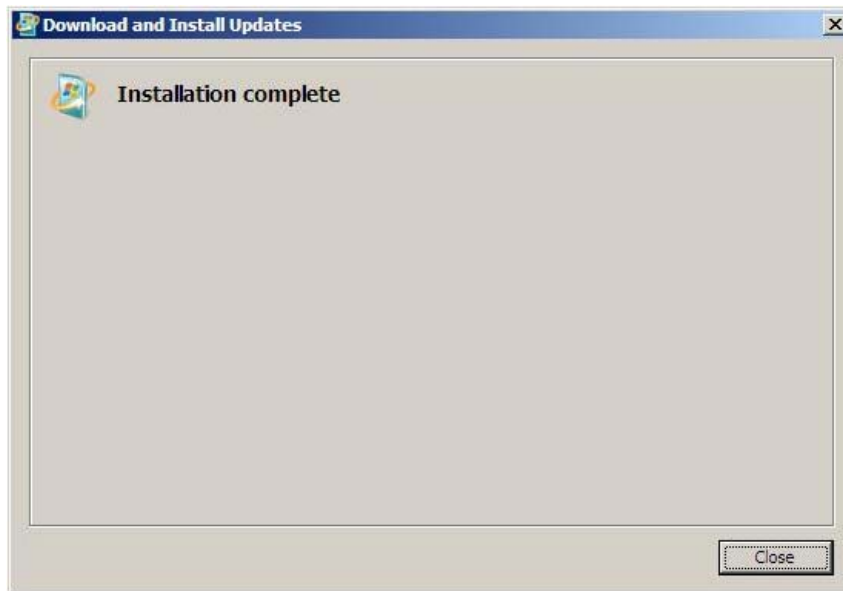
1. Double-click on Windows6.0-KB934518-x86-Server.msu. Then click OK.



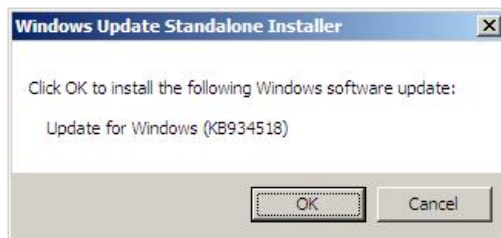
2. Click on "I Accept."



3. Click on Close.



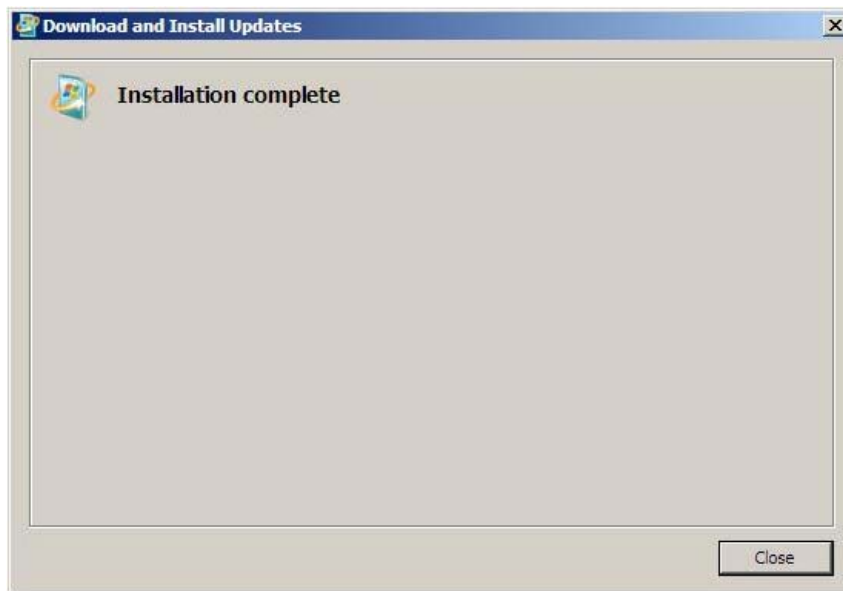
4. Double-click on Windows6.0-KB934518-x86-Core.msu. Then click OK.



5. Click on "I Accept."



6. Click on Close.



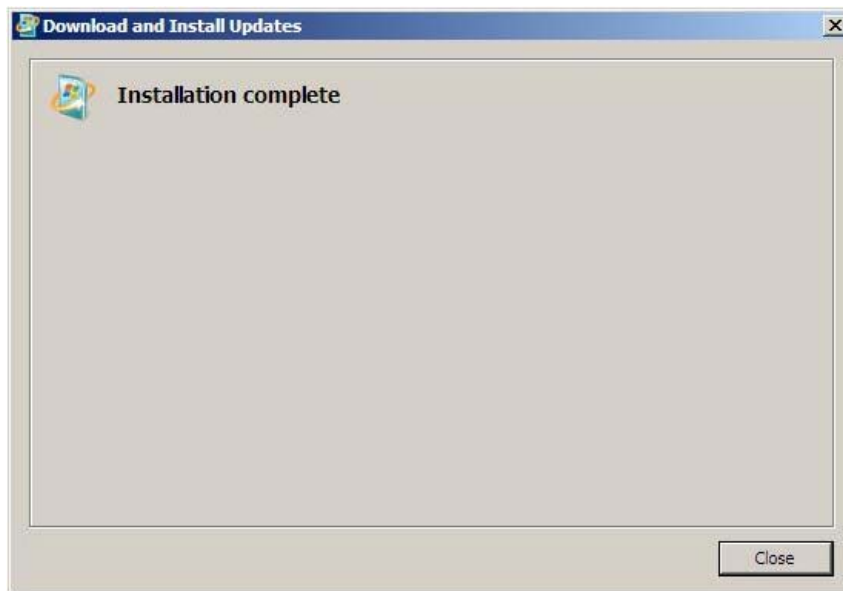
7. Double-click on Windows6.0-KB934518-x86-Admin.msu. Then click OK.



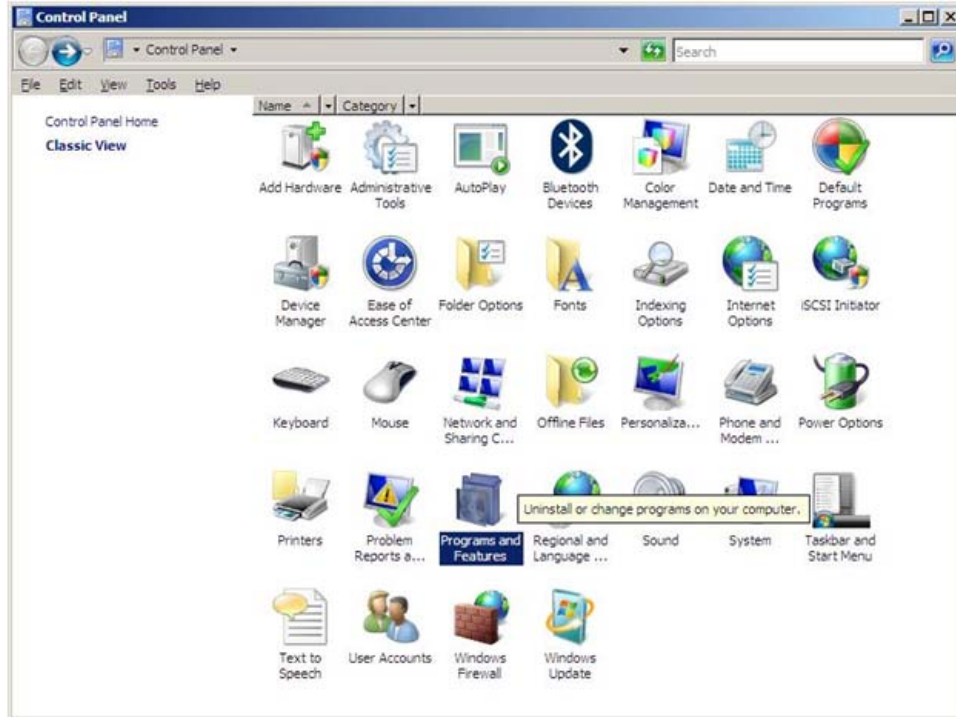
8. Click on "I Accept."



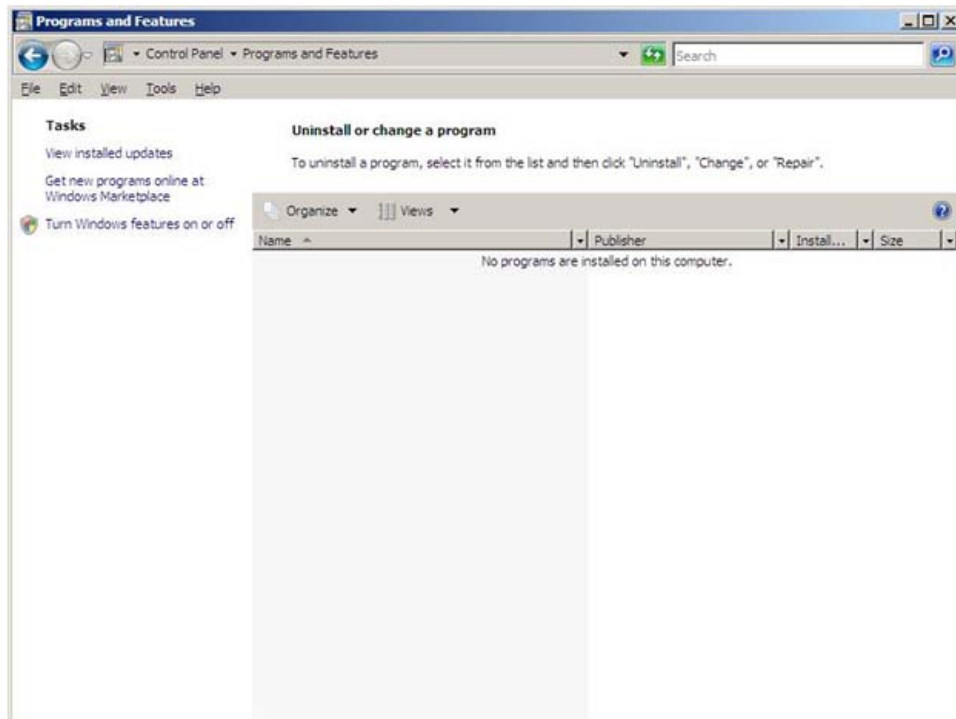
9. Click on Close.



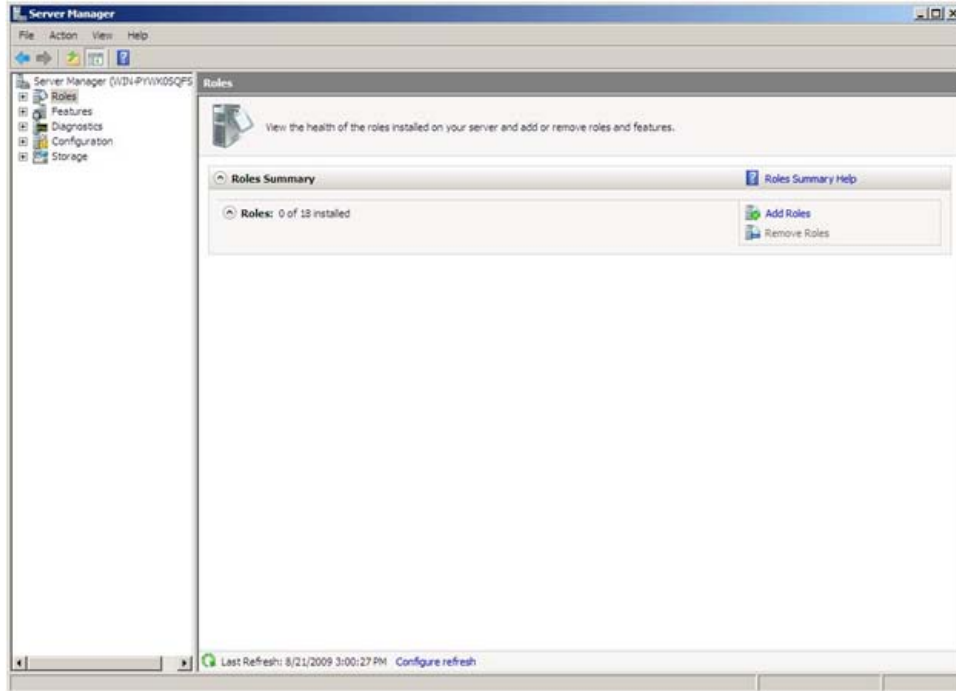
10. Go to Start > Control Panel > Programs and Features.



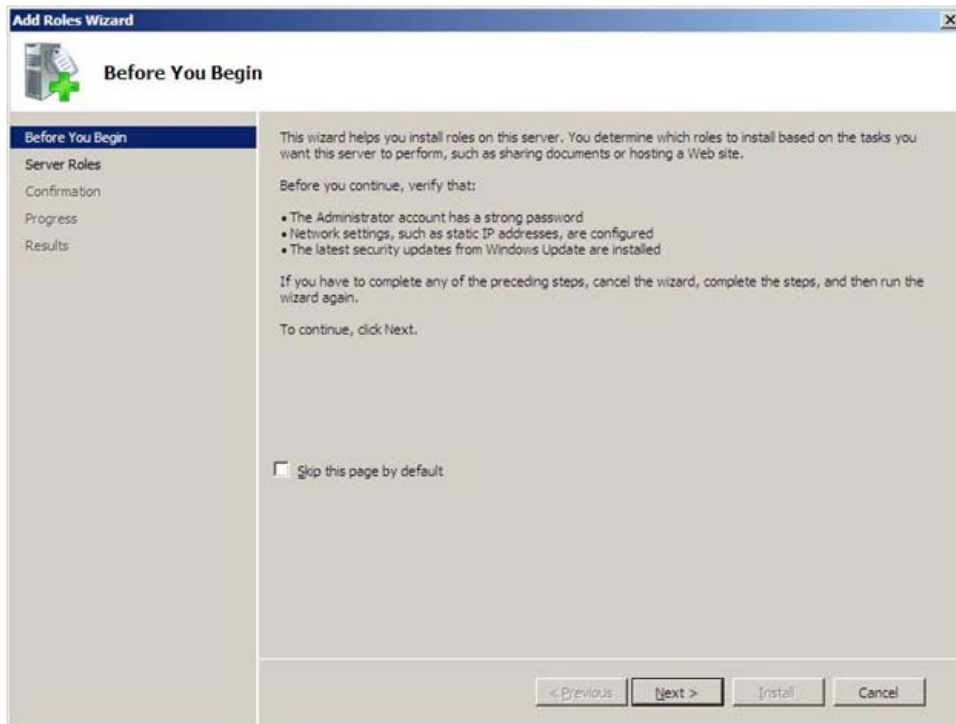
11. Click on "Turn Windows features on or off."



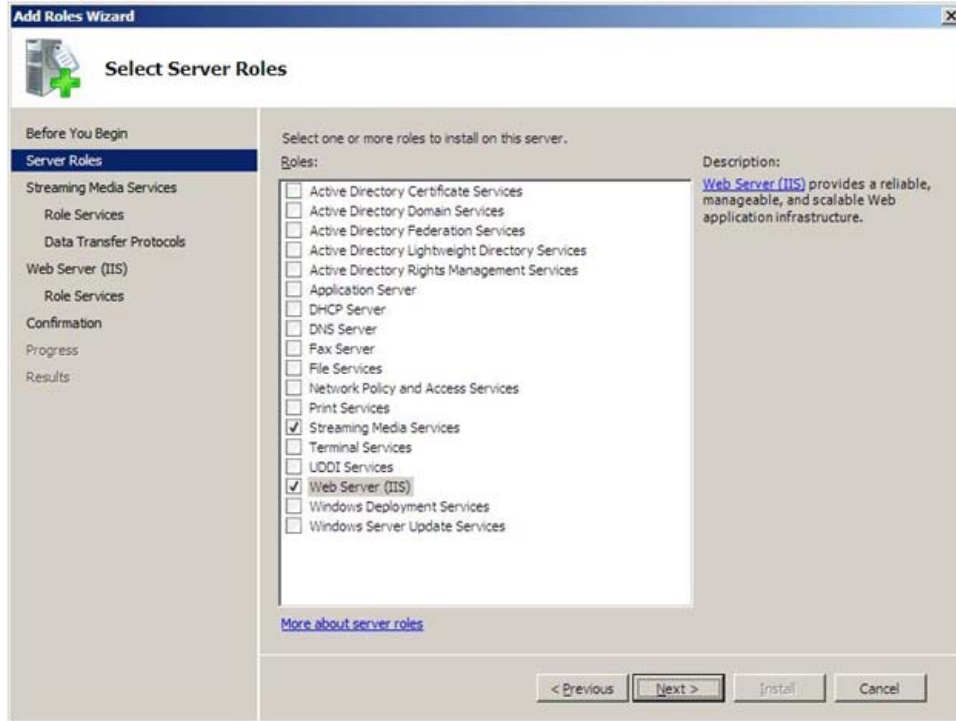
12. Select Roles on the left panel. Click on "Add Roles."



13. Click Next.



14. Check Streaming Media Services and Web Server (IIS). Click Next on Select Server Roles.



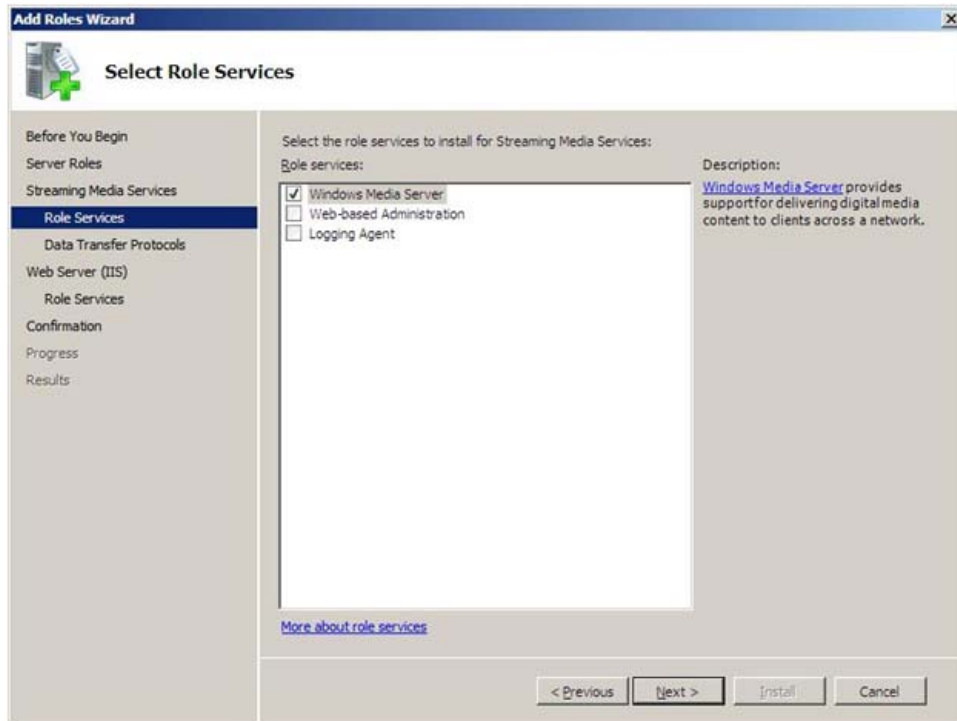
15. Click on "Add Required Features."



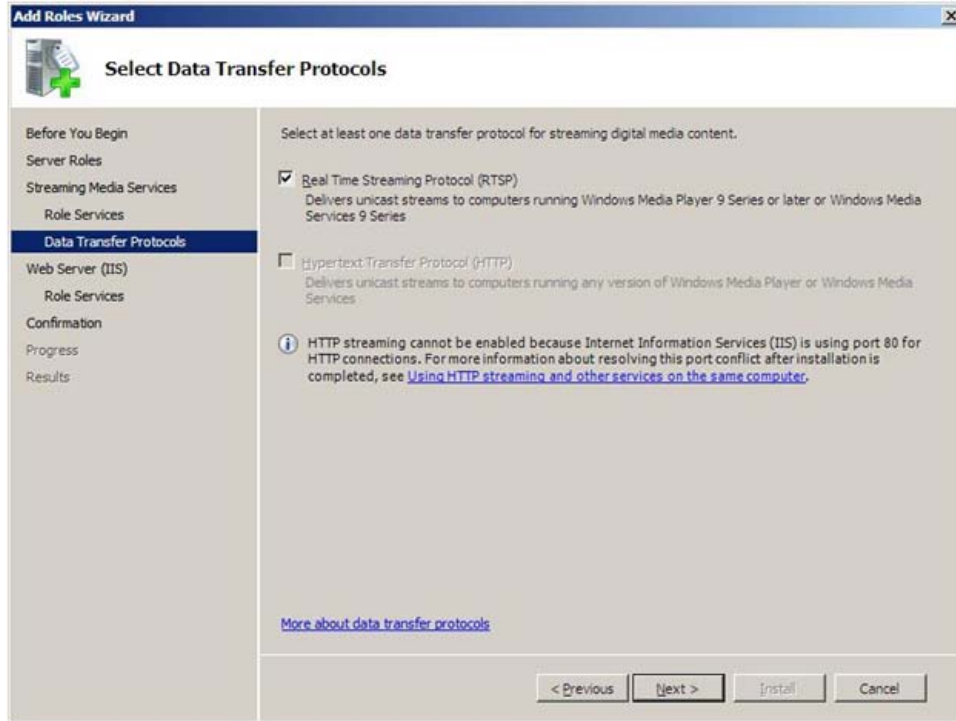
16. Click Next on Streaming Media Services.



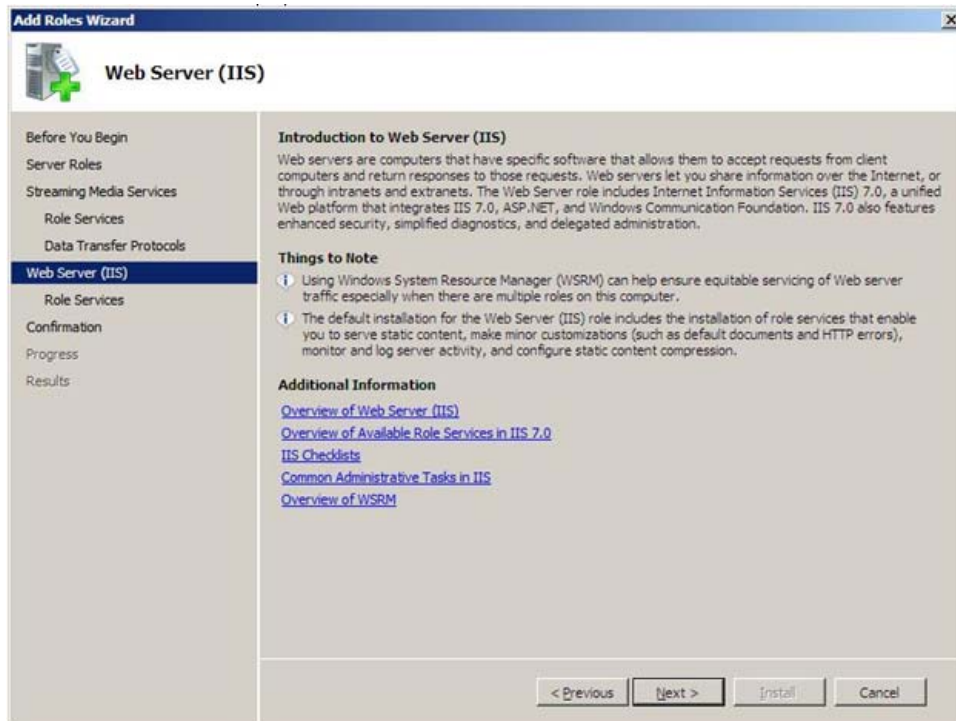
17. Click Next on Select Roles Services.



18. Click Next on Data Transfer Protocols.



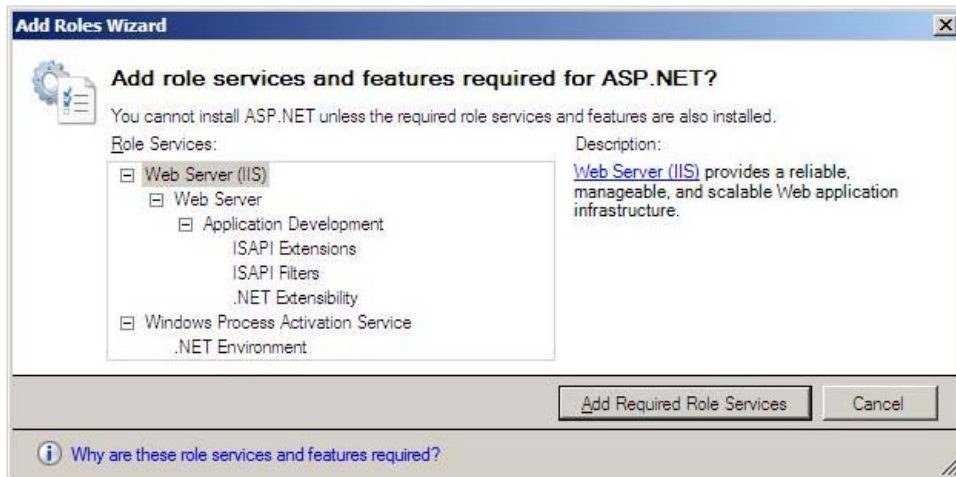
19. Click Next on Web Server (IIS).



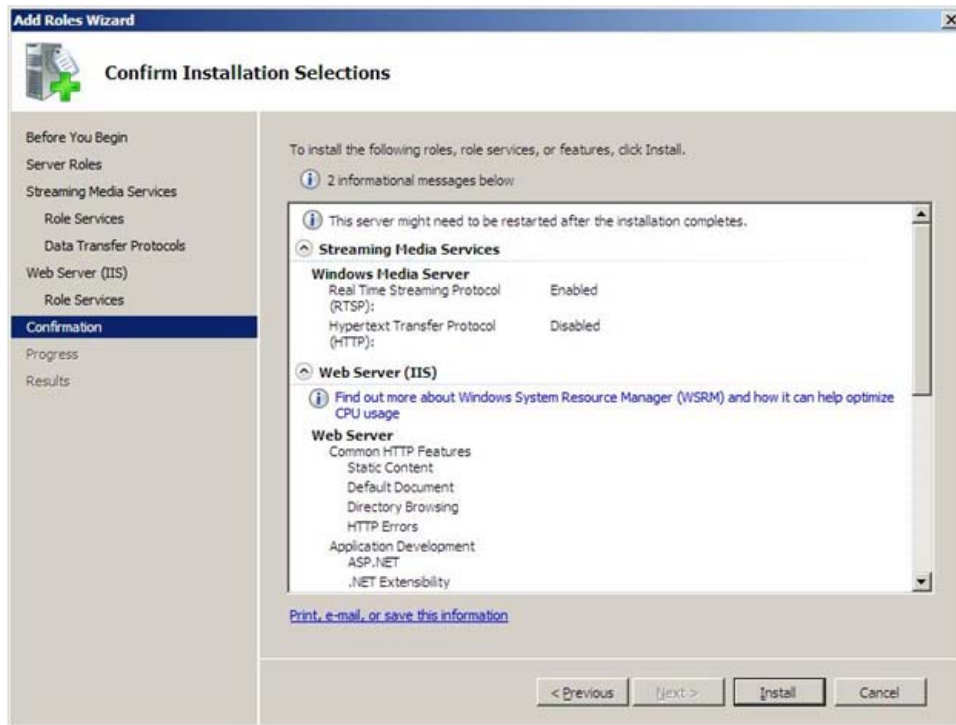
20. Select ASP.net and FTP Publishing Service then click Next on Select Role Services.



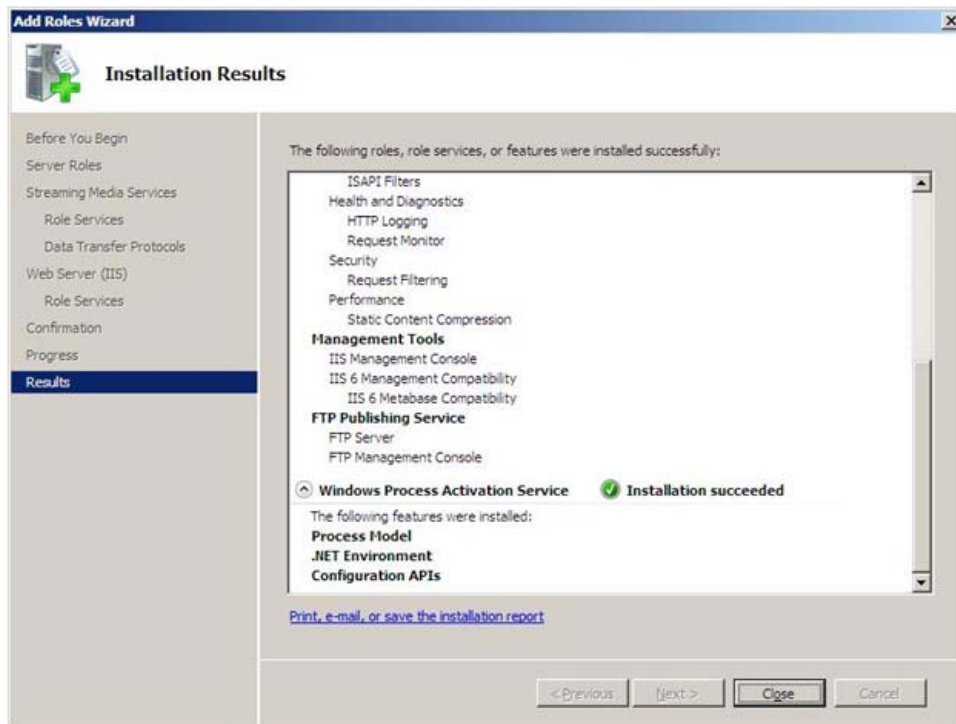
21. Click Add Required Role Services.



22. Click Install on Confirm Installation Selections.

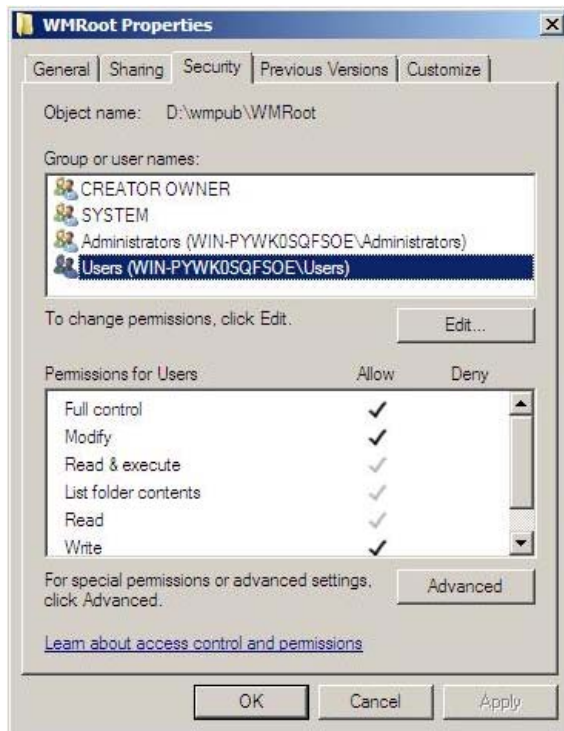


23. Click Close on Installation Results.

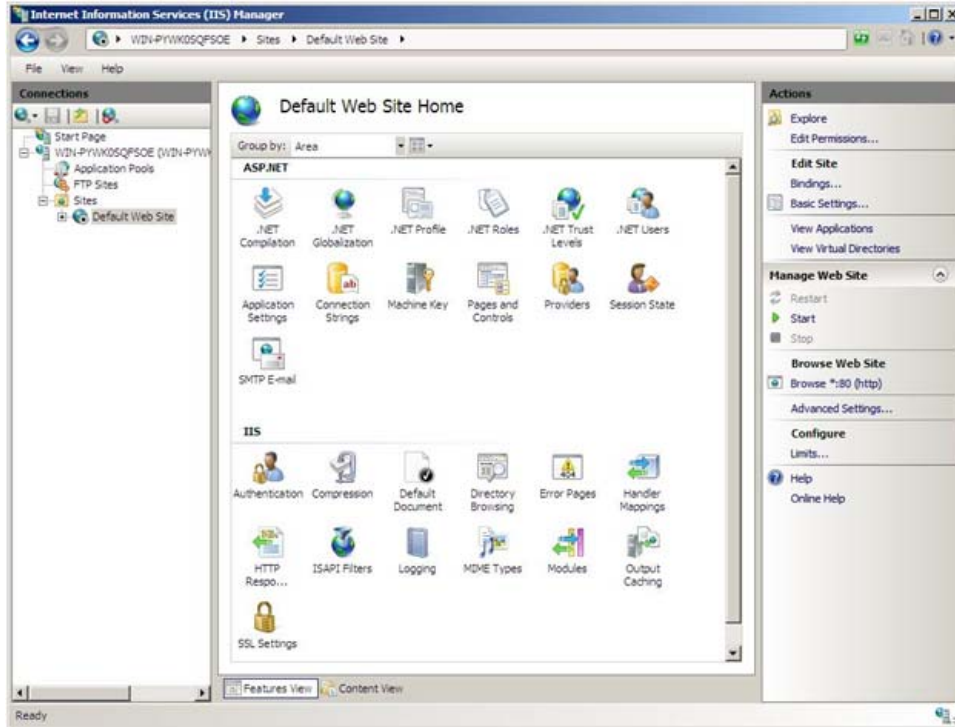


24. Using Windows Explorer, browse to drive "D:\\" and create a folder named "wmpub" then create another folder inside of wmpub named "WMRoot". Verify the correct path was created as "D:\wmpub\WMRoot" (verify correct case for WMRoot).

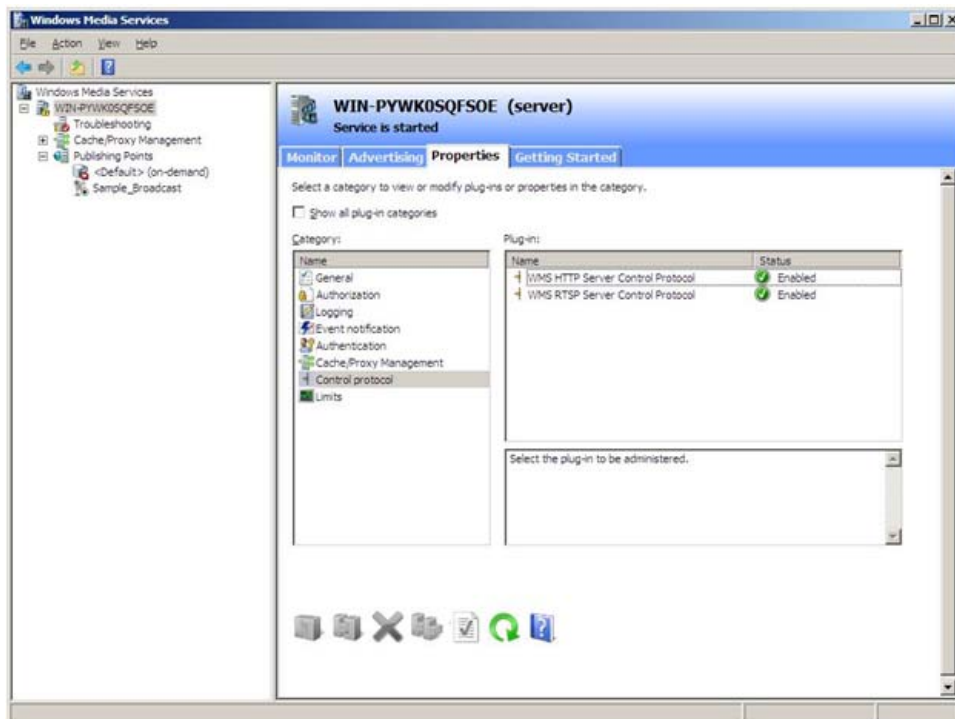
Highlight the "WMRoot" folder, Right click and select "Properties". In the Properties box select the Security Tab, click Edit, and highlight "Users (VODWm\Users)". Now select "Full Control" in the "Allow" column. Press "Apply then OK."



25. Go to Start > Administrative Tools > Internet Information Services (IIS) Manager. Select Sites and highlight "Default Web Site." Click "Stop" under manage Web Site on the right panel.



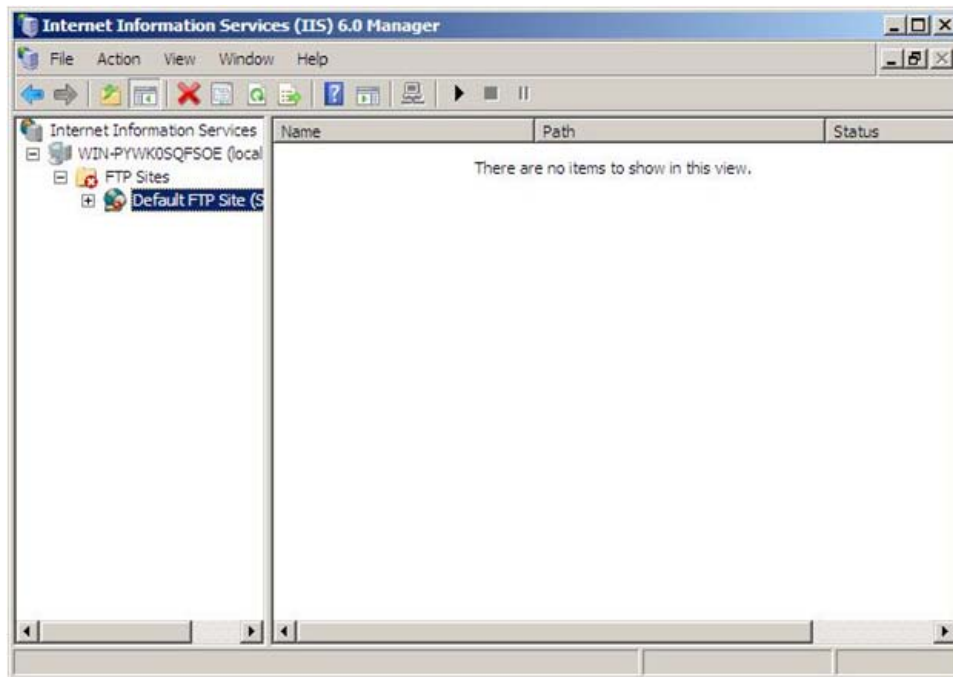
26. Go to Start > Administrative Tools > Windows Media Services and select the server name, and in the Properties tab, select Control protocol and enable "WMS HTTP Server Control Protocol." Highlight "WMS HTTP Server Control Protocol," right click and select "Enable". If there is an error popup verify the Default Web Services were stopped properly in an earlier step of the procedure (see step above).



27. Highlight the server name, right click and select "Add Publishing Point (Advanced)...". Select "On-demand" and type in "D:\wmpub\WMRoot" for Location of Content and press OK.

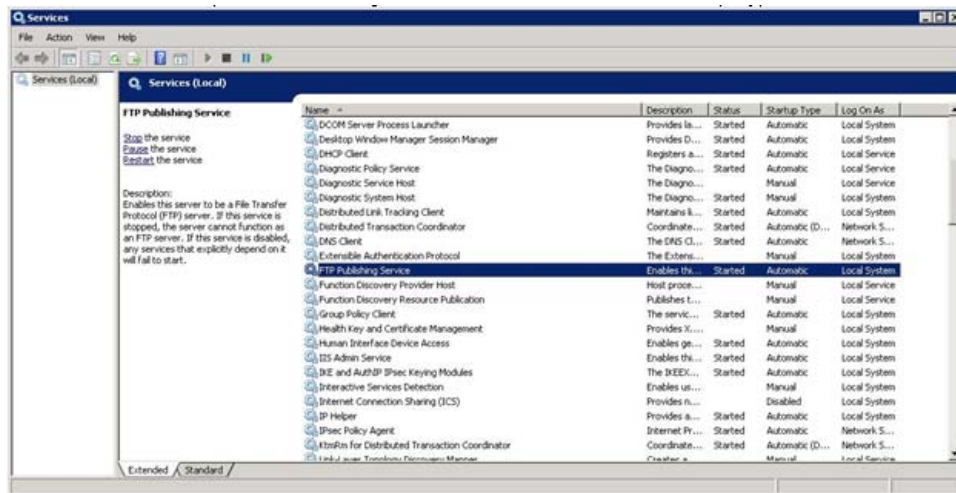


28. Go to Start > All Programs > Administrative Tools > Internet Information Services (IIS) 7.0 Manager. Select the server name and open the "FTP Sites" box and highlight the "Default FTP Site." Right click and select Start and click Yes.

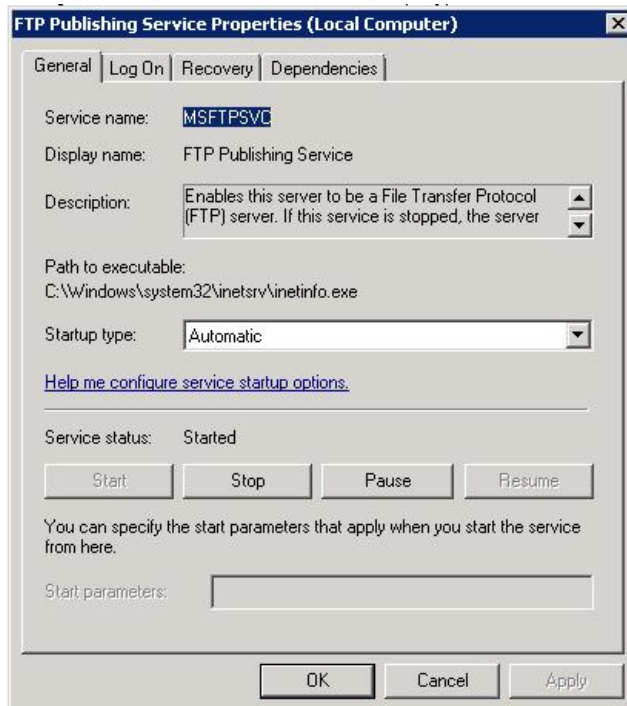




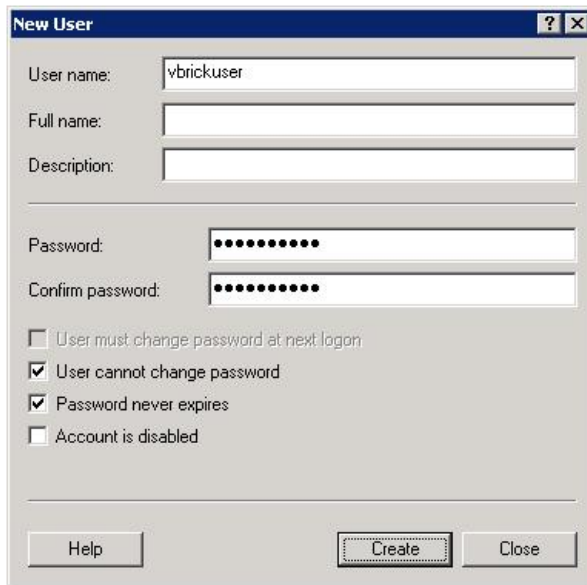
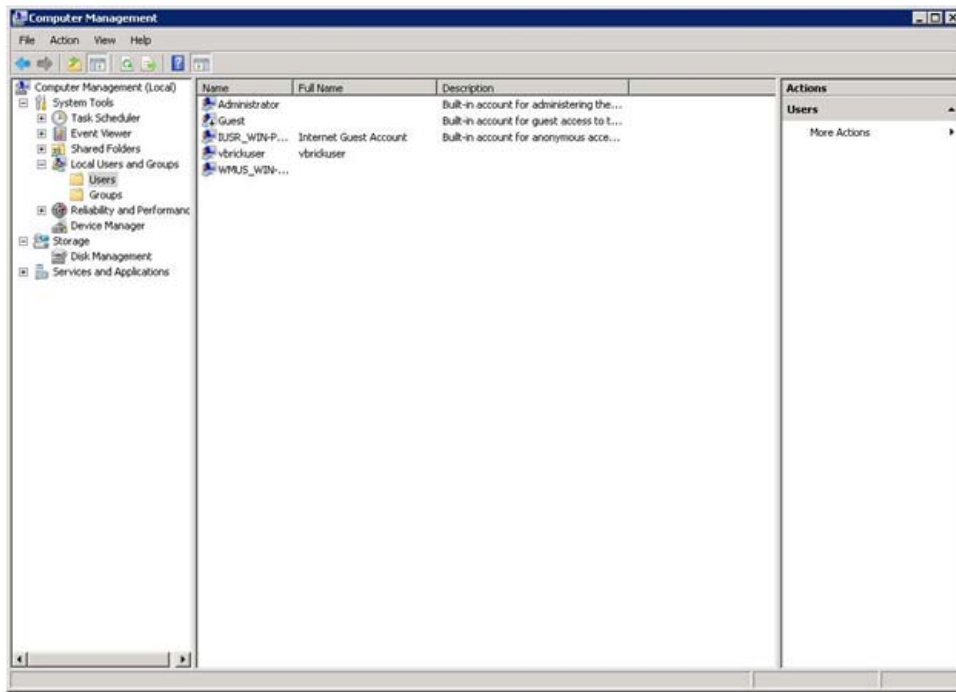
29. Go to Start > Administrative Tools > Services. Right click on "FTP Publishing Service" and select Properties then change from Manual to Automatic in Startup Type.



30. Change from Manual to Automatic in Startup Type then click OK.

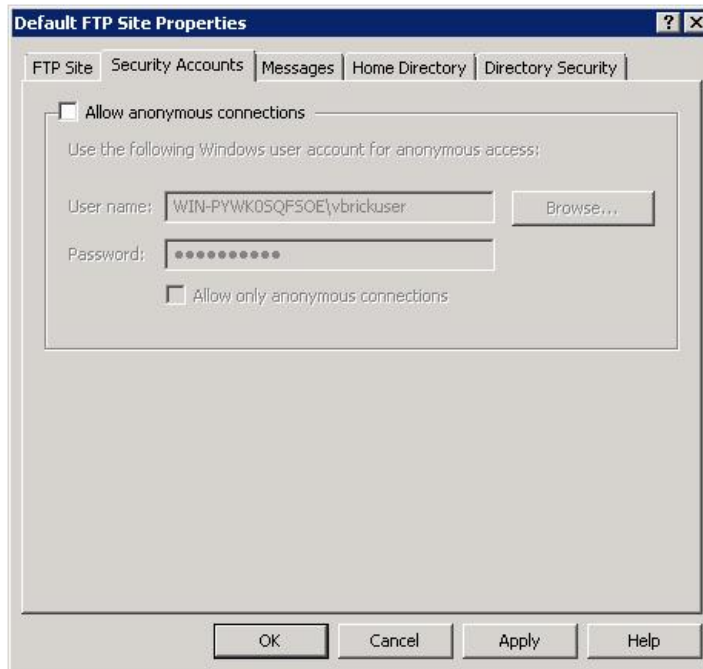


31. Go to Start > All Programs > Administrative Tools > Computer Management to open the "Computer Management" window. Select "Local Users and Groups" and highlight "Users". Right click on "Users" and select "New User."

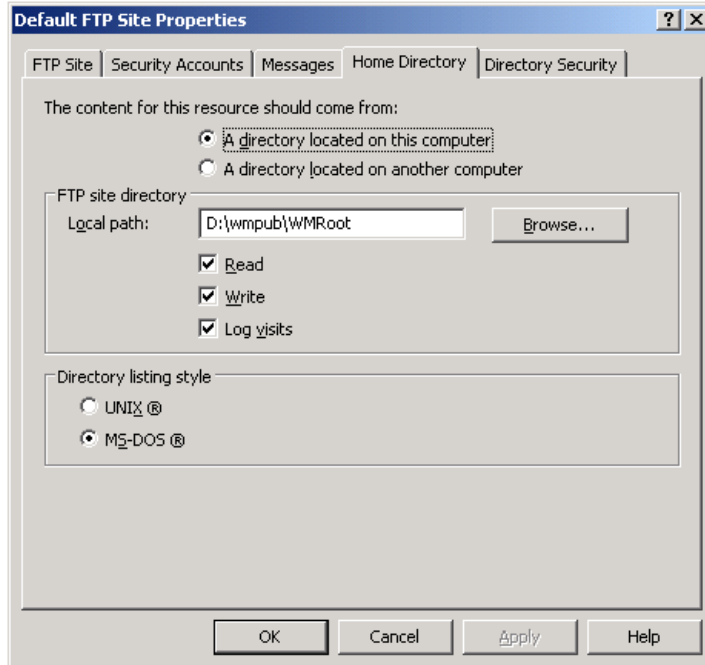


32. In the "New User" box enter User name: "vbrickuser" and the password "vbrickuser" and the confirmation password "vbrickuser" then press the "Create" button.
33. Highlight the User "vbrickuser" and select Properties. In the "vbrickuser Properties" box select the General tab. Deselect "User must change password at next logon" and select "Password never expires".
34. Select the "Member Of" tab and verify "Member of:" lists "Users". If not, select "Add", which opens the Select Groups box. In the Select Groups box select "Advanced..." then

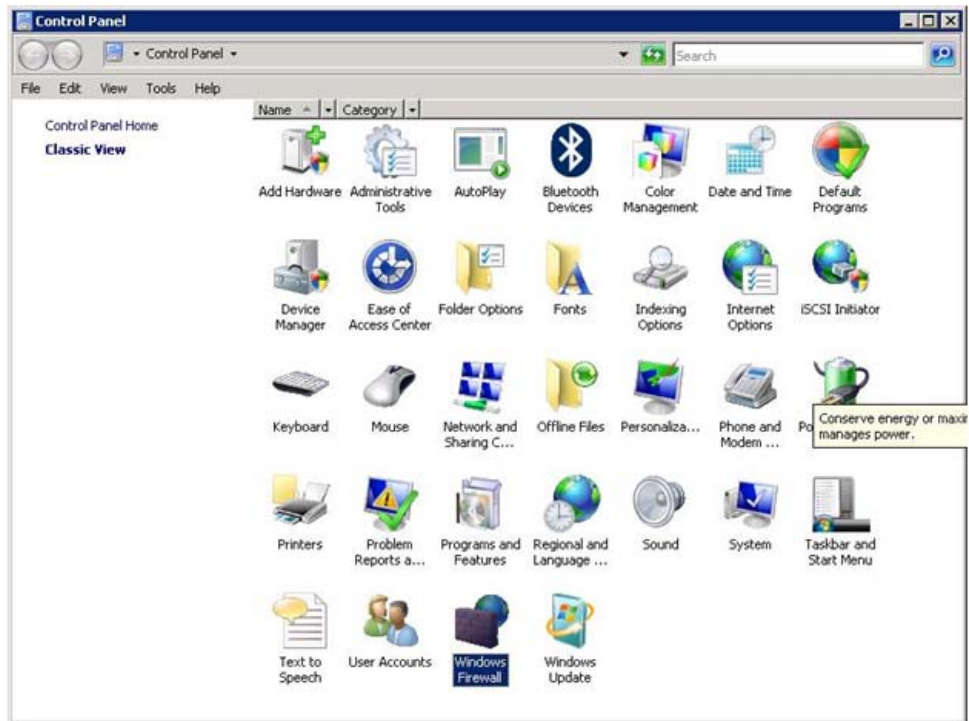
- press "Find Now". In the Search Results portion of the box select "Users" and press "OK", then press "OK" again. Press "OK" to close the "vbrickuser Properties" box.
35. Go to Start > All Programs > Administrative Tools > Internet Information Services (IIS) 7.0 Manager. Right click on the "Default FTP Site" and select Properties in, In Security Accounts change the User name: to "VODWM\vbrickuser" and set the password to "vbrickuser" Make sure the "Allow only anonymous connections" IS NOT checked. Press the "Home Directory" tab and you will be prompted to verify the password again, enter "vbrickuser" to verify the password. Make sure the "Allow only anonymous connections" IS NOT checked. Click Yes on SSL then OK.



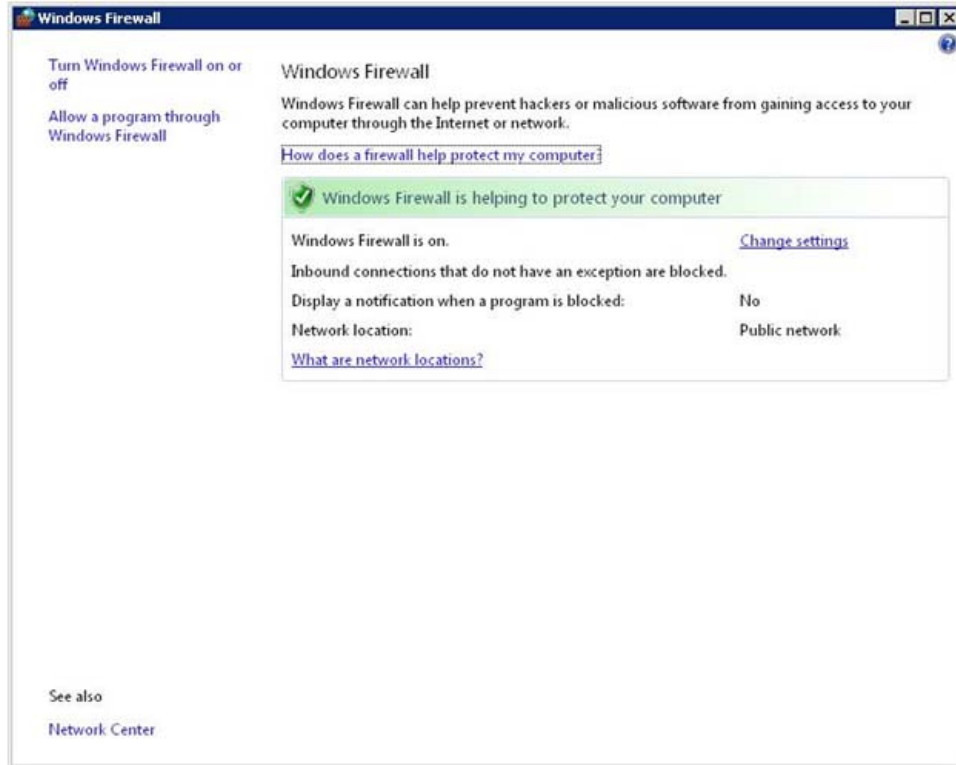
36. In the "Home Directory" tab, change the Local path: to "D:\wmpub\WMRoot" and select the check box next to "Write". Click "OK" to close the "Default FTP Site Properties."



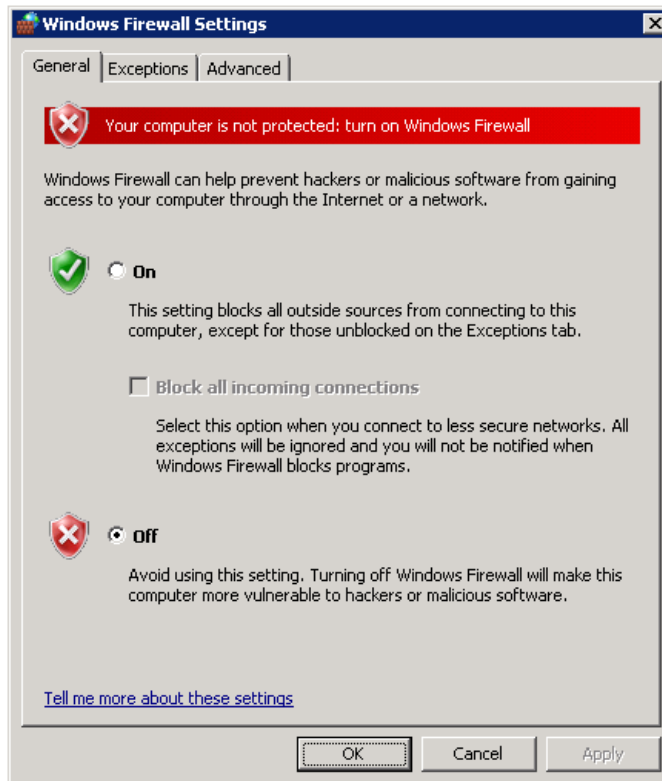
37. Go to Start > Control Panel > Windows Firewall.



38. Click on Change Settings.



39. Click on "Off" radio button then click OK.



The Windows Media Server configuration is now complete.

Adding Content to the Server

- ▼ To add content to the VOD-W server:
 1. Insert the Documentation CD into the CD-ROM drive of the server.
 2. Copy the video demo files from the CD-ROM (E:\video*.wmv) to D:\wmpub\WMRoot\ .

Viewing and Verifying the Content

- ▼ To view and verify the content:
 1. Launch Internet Explorer and open the Admin console of the VEMS Portal Server.
 2. Click on **Global Settings > Servers**.
 3. Enter the sever IP address, select **Server Type (VOD-WM-Standard or VOD-WM-Enterprise)**, then click **Modify**.
 4. Go **Global Assignments > Assign Polling Interval** and click **Sync Now**.
 5. Logout of the VEMS Portal Server and open a browser window.
 6. Launch the Portal Server and click on the **Asset Library**.
 7. This will display the content you added above. Click on one of the demos and verify that the video plays with good quality.



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