



EtherneTV VOD-W Video on Demand Server

VBrick v4.2.1 VOD 50/125/300W
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.

VOD-W v4.2.1 Release Notes

The EtherneTV VOD-W server is a robust, on-demand server that comes in three models depending on throughput and number of simultaneous users that are allowed. The license file you received corresponds to one of these models. To increase throughput or the number of allowed users, you must purchase a different model—you cannot simply upgrade the license file.

- VOD 50W – 50 Mbps, 50 simultaneous users.
- VOD 125W – 125 Mbps, 125 simultaneous users.
- VOD 300W – 300 Mbps, 300 simultaneous users.

This document contains release notes for v4.2.1 of the VBrick EtherneTV VOD-W server. Any information contained in this document is VBrick Systems customer confidential and should not be reproduced or distributed to non-VBrick customers. This document has the following information:

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What's New in 4.2.1

- HTTP tunneling of MPEG-4 content.
- RTSP interleaving.
- Password protected/encrypted communication with the Portal Server.
- Key-based content protection.
- Auto conversion of variable bit rate (VBR) MPEG-2 content to constant bit rate (CBR).

VOD-W Features

The EtherneTV VOD-W server is part of VBrick's EtherneTV family of products which includes the ETV Portal Server, MPEG-1/2/4 streaming encoders, and the ETV Set Top Box. The VOD-W is built on a Dell hardware platform and delivers stored MPEG assets as unicast or multicast streams across an Ethernet network. Some notable features include:

- Support for DVD-quality, standards-based video formats including MPEG-1/2/4 and Windows Media.
- Seamless integration with VBrick's ETV Portal server.

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- Graphical monitoring tools that let you view the status of all streaming sessions, view utilization statistics for each drive, set log levels, and view system events.
 - Remote server administration using a Remote Desktop Connection.
 - Fully-compatible RAID storage devices that are easy to install and configure.
 - Support for MPEG-1, MPEG-2, and MPEG-4 closed captions.

Installation

The EtherneTV VOD-W server is shipped from VBrick with Windows 2003 Server Web Edition (with Service Pack 2) and all VOD-W software already installed. If you need to re-install the software for any reason, see the "Reinstalling the Software" in the *VOD-W Server Admin Guide*.

Upgrade

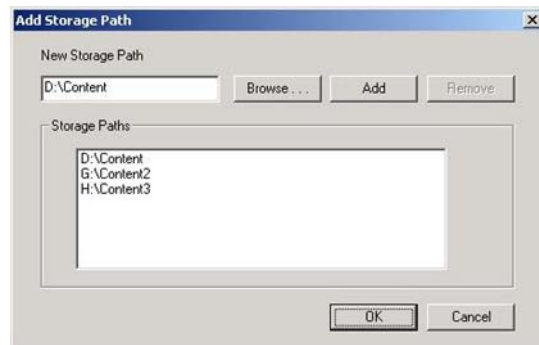
- ▼ To upgrade VOD-W Server software from v3.1 or v3.1.2 to v4.2.1:
 1. Note the paths to your external storage as indicated below.
 2. Insert the Product CD in the computer and navigate to the "VOD-W Software" page.
 3. Double-click on [VOD-W Server 4_2_1 Setup](#) and follow the prompts.

There will be an initial reboot and a final reboot. The prompts are self-explanatory: click **Yes**, **Next** or **OK** as appropriate and ignore the "License Registration" page.
 4. Click **Finish** to reboot the computer when prompted.

Upgrade Note

After upgrading the VOD-W software, your existing external storage may not be displayed on the "Storage Path" page in the InfoValue Product Configuration pages. This is an open issue. To work around this issue, you must manually add the Storage Paths to the Product Configuration page as explained here:

1. On the VOD-W server, go to **Start > Control Panel > InfoValue Quick Video**.
2. On the QVOD page, click on **Add Storage** and then **Browse** to your stored content.



3. Select the content folder on each drive and click **OK**. The content folders are typically lettered **G:\Content2**, **H:\Content3**, etc. For best results, note these Storage Paths *before* upgrading.

Compatibility

This VOD-W v4.2.1 software release is compatible with:

- VBrick 1000 and 3000 series of MPEG-1 encoders (v2.4 and higher).
- VBrick 4000 and 6000 series of MPEG-2 and MPEG-4 encoders (v2.1 and higher). MPEG-4 is supported with v3.0.1 and higher.
- EtherneTV Portal Server v3.1 or higher. Portal Server 4.2.1 or higher recommended.
- EtherneTV Set Top Box v3.7.2 or higher.

Backward Compatibility

VBrick recommends running VOD-W version 4.2.1 with Portal Server version 4.2.1. Default configuration parameters on the Portal Server and VOD-W are compatible with these two software packages. When running VOD-W version 4.2.1 with older versions of Portal Server, or when running VOD-W version 3.1.2 with Portal Server 4.1.0 or later, some manual configuration is required as explained below.

HTTP Tunneling

Portal Server clients in versions 4.1.0 or higher can request MPEG-4 streams from the VOD-W over an HTTP tunnel. This feature is only available on VOD-Ws running version 4.2.1 or higher. If you are running an older version of the VOD-W, disable HTTP tunneling for this VOD server from the Portal Server Admin interface. Go to **Global Settings > Servers**, then select the VOD Server running the older software, and verify that **Supports HTTP Tunneling?** is *not* checked.

Default FTP Configuration

The default FTP accounts changed from VOD-W v3.1.2 to v4.2.1 as shown in Figure 1. The FTP parameters will not match when:

- running Portal Server 4.2.1 with VOD-W 3.1.2 (or earlier)
- running Portal Server 4.2.0 or earlier with VOD-W 4.2.1.

In the case of a mismatch, reconfigure the Portal Server with the correct FTP username, password, and home directory in the Portal Server Admin interface (Go to **Global Settings > Servers** and select the VOD Server).

Table 1. Default FTP Accounts

	v3.1.2	v4.2.1
User name	anonymous	vbrickuser
Password	anonymous	vbrickuser
Home Directory	E:\AnonymousFtpHome	E:\StagingArea

Web Service Security

The web service security feature (default = disabled) requires Portal Server version 4.2.1 or later. *Do not enable Basic Authentication or SSL security on the web service when running an older version of Portal Server.*

Secure URL Password Protection

The secure URL password protection feature (default = disabled) requires Portal Server version 4.2.1 or later. *Do not enable URL Password protection when running an older version of Portal Server.* Note that Portal Server version 4.2.0 has a configuration parameter to enable URL password protection, but the 4.2.0 Portal Server feature is incompatible with VOD-W

version 4.2.1. Both the VOD-W and Portal Server must be running version 4.2.1 or later for this feature to be enabled.

Changing the Default FTP Password

Communication between the VOD-W and the Portal Server is protected by password authentication. The web service user name and password (**vbrickuser/vbrickuser**) used for communication is the same as the FTP password and username.

VBrick strongly recommends you change the default password after the VOD-W server is installed. **You must change the password in three different places as explained below:**

- Computer Management
- Internet Information Services (IIS)
- ETV Portal Server

▼ To change the password in **Computer Management**:

1. Get a new password from your system administrator.
2. Go to **Start > Control Panel > Administrative Tools > Computer Management**.
3. Highlight **Local Users and Groups** and double-click on **Users** in the right pane.
4. Right-click on **vbrickuser** and select **Set Password**. Click **OK** when done.



▼ To change the password in **IIS**:

1. Go to **Start > Control Panel > Administrative Tools > Internet Information Services (IIS) Manager**.
2. Expand the tree control, right-click on **Default FTP Site** and select **Properties**.
3. Select the **Security Accounts** tab.
4. Check **Allow anonymous connections**. (This is checked temporarily while you change the password.)
5. Enter a new password in the **Password** field, click **Apply**, and re-enter the password.
6. Uncheck **Allow anonymous connections** to disable anonymous FTP access.
7. Click **OK** and **OK** again.

▼ To change the password in **ETV Portal Server**:

1. Launch the ETV Portal Server configuration tool.
2. Navigate to **Global Settings > Servers**.
3. Change the **FTP Password** so that it matches the password you entered in Computer Management and IIS.

Using Secure URL Password Protection

The VOD-W can also be configured for secure, password-protected communication between players and the VOD-W server. Secure URL protection prevents users from bypassing Portal Server authentication and playing back VOD content directly from VOD-W servers.

Requests from players and devices (for example STBs, IPRs, and PCs) include a key that is generated by the Portal Server and validated by the VOD-W server. This feature must be configured on *both* the VOD-W server and on the Portal Server. For configuration instructions, see "Using Secure URL Password Protection" in the *VOD-W Server Admin Guide*.

VBrick Security Update Policy

VBrick has fully tested all of its server-based software products on Windows Server 2003 Web Edition (with Service Pack 2) with all current Microsoft security updates installed. It is standard VBrick policy to configure and ship our servers with all current service packs and security updates as of the shipping date of the product. We also run limited regression tests when new service packs and updates are released by Microsoft. Once VBrick software is installed at a customer site however, it becomes the customer's sole responsibility to install security updates and software patches as they become available. To protect against imminent threats, VBrick recommends you install and/or test all Microsoft security updates as soon as they are available.

- ▼ To see what security (and other) updates are installed:
 1. Go to **Start > All Programs > Windows Update**.
 2. In the right navigation pane, click **Review your 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.

Caveats

This section addresses known issues in this release, 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.

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- After upgrading the VOD-W software, your existing external storage may not be displayed on the "Storage Path" page in the InfoValue Product Configuration. See [Upgrade](#) on page 2 for more details.
 - MPEG-2 and MPEG-4 audio-only files are not supported and cannot be ingested from the ETV Portal Server. MPEG-2 audio-only files can be manually ingested from the InfoValue GUI. When ingesting manually, check **Do Not Process Content** to inhibit generation of index files.
 - MPEG-4 files should always be hinted prior to ingestion. Hinting is always on for recording with ETV Portal Server. Hinting is on by default in StreamPlayerPlus. Do not change this default setting if the files may subsequently be ingested to the ETV VOD-W.
 - The QVCS service on the ETV VOD-W server must be restarted after making any configuration changes.

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- MPEG-4 low bitrate files (less than 200 Kbps) streamed to the set top box begin and restart repeatedly within 2–3 minutes with the default configuration. To workaroud this issue, increase the **Data Buffering Seconds** parameter in the STB configuration.
 - When managing a RAID array, if you insert a drive into an array, make sure that enough time has elapsed to sync the RAID array before removing any disks. Contact VBrick Support Services if you need help adding a drive.
 - When the VOD-W server is ingesting files, there may be a brief video hit (for example several dropped frames) in a file that is streaming from the server at the same time. This happens each time an ingestion completes.
 - When ingesting MPEG-4 content, the currently playing MPEG-2 stream may freeze. Use the player controls **Stop** and then **Play** to resume streaming.
 - VBR (variable bit rate) content is automatically converted to CBR (constant bit rate) content during ingestion; this process deletes the original VBR file but increases the CBR file size. Note that poorly formed VBR files may have audio problems after conversion.



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