



Vbrick Multi-Format Set Top Box

vbrick mf-stb v2.2.9

Release Notes



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About Vbrick Systems

Founded in 1998, Vbrick Systems 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. Vbrick products are manufactured in an ISO certified manufacturing facility.

Multi-Format STB v2.2.9 Release Notes

This document provides release notes for Vbrick's Multi-Format Set Top Box. The Multi-Format Set Top Box plays live or stored streams from Vbrick encoders or VOD servers. It will decode and play the highest bit rate stream sent from the encoder or server. Be aware that any information contained in this document is proprietary to Vbrick and should not be reproduced nor distributed to non-Vbrick customers.

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What's New in v2.2.9

Issue	Resolution
Dropbear Vulnerability	The Dropbear version was updated to version 2017.75.

Security Scans

Vbrick takes security seriously. Each release of the STB is thoroughly scanned by industry standard scanners. We do not release with any HIGH findings. Specifics of our scanning includes:

- Retina: Scanned March 13, 2018, Scanner Version 6.3.0, Audits Revision 3382, Internal and External scans performed. There were 0 (zero) EXPLOITABLE or HIGH Level findings. There is a False-Positive where the distribution of Linux is incorrectly detected by the scans, and we are not carrying the vulnerable drivers.
- Nessus: Scanned March 13, 2018, Scanner Versions 7.0.2 (#110) WINDOWS, PlugIn Set 201803121615. Scans run: Badlock, Bash Shellshock, Basic, Drown, External, Internal PCI, and Spectre and Meltdown. There were 0 (zero) CRITICAL and HIGH findings. There is a False-Positive HIGH (from Internal Scan) but the MF-STB does not store any credit or banking information associated with PCI DSS compliance.

The Nessus findings above confirm that the MF-STB is not susceptible to recent Spectre or Meltdown vulnerabilities.

For an overview of the STB and a concise description of all features and functions, see the STB v2.2.9 Quick Start Guide. This document is included in the Online help and can be downloaded from the documentation pages on the Vbrick website.

Compatibility

Excepts as noted in the "Caveats," the Multi-Format STB is compatible with the following Vbrick products.

Table 1. Compatibility with Vbrick Products

Product	Revision Level †
VEMS Mystro	6.0.1
VEMS	5.3
VOD-WM Server	5.0.1
VOD-W Server	5.2
Vbrick WM Encoder	4.4
Vbrick H.264 Encoder	1.0
Vbrick MPEG-2/4 Encoders	4.4
Rich Media Studio (RMS)	1.2
Rich Media Desktop (RMD)	1.0
Distributed Media Engine (DME)	1.0
VBDirectory	5.2

† Use version shown or higher.

Software Upgrade

For customers wishing to upgrade multiple Multi-Format STB units from v1.0 to v2.x, an upgrade utility ([UPG.zip](#)) is available on the Product CD or from the [Downloads](#) pages on the Vbrick website. For detailed instructions, see the "Software Upgrade" topic in the *Multi-Format STB Quick Start Guide*. When upgrading from 1.x to 2.x you will need to perform a factory reset. This will allow you to take advantage of all new features but will overwrite all previous non-default configuration and channel settings. In order to retain your configuration and channel file, you must perform the following steps.

1. Save the following files from your previous release. If you have not made any configuration changes or modified the `channels.xml` file then you can safely ignore everything after Step 2.

```
/root/data/config.txt
```

```
/root/data/channels.xml
```

2. When you perform the upgrade, perform it with a full factory reset. You can do this after the unit reboots or by using the setup pages.
3. When the unit returns from reset, save the new `/root/data/config.txt` from the new release. This will become your replacement `config.txt` file. Compare this file against the one you saved in Step 1 and merge and save any of your changes into this file. Copy this file to your FTP file server so you can distribute it back to the STB units.
4. Repeat this process for the `channels.xml` file. In many cases the `channels.xml` file does not change between releases so you may not have to perform a merge.
5. FTP both `channels.xml` and `config.txt` back into the STB.

Caveats

This section addresses known issues in this release that are divided into several categories. For more information about any item, or help with an issue not listed here, please contact your reseller or Vbrick Support Services.

General

- Occasional dropped frames have been reported when playing content at 60 frames/sec. (427)
- Closed Captioning is not supported on Windows Media or MPEG-4 streams.
- VEMS 5.x bookmarks will not play on the STB.
- The **Power** button toggles the STB in and out of reset—it does not turn off the power.
- **Fast Forward** and **Rewind** functions do not work on RTP MPEG-4, H.264, and WM.
- As a general rule avoid using low frame rates (5 fps or less) on all MPEG and H.264 streams.
- Composite TV graphics exhibit interlaced line flicker between the channels on the Program Guide. The video display is not affected.

Windows Media Streams

- Windows Media multiple bit rate (MBR) is not supported.
- Windows Media does not support the MMS protocol or syntax.
- Windows Media RTSP-T protocol does not work when connecting to the VB6000 Series appliances.
- Windows Media does not support .wsx file extensions (server side playlists).
- Windows Media does not support .asx file extensions (client side playlist).

H.264/MPEG-2/4 Streams

- H.264 resolutions lower than 256x144 including 192x144, 176x128, 128x96 do not work.
- H.264 Audio AAC-HE is not supported for RTP streams.
- HTTP tunneling is not supported.
- MPEG-4 low video resolutions which are 80x48 or lower do not work.

HDMI

- The Program Guide can flicker when browsing through the program guide. The flicker occurs just after stream selection.
- When viewing HD 1080i, 1080p or 720p content on HDMI port, frame drops can occur.
- When configuring 1080p to output to the HDMI port, the EDID feature may prevent output to certain TV sets. If this occurs, set the EDID feature to 0 in `config.txt` file.