

VB4000-5000-6000 Series Network Video Appliances

VB4000-5000-6000 v3.3 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 over 20,000 video appliances installed across over 1,000 IP networks 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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VB6000 v3.3 Release Notes

Overview

This document describes the 3.3.0 release of the VBrick Model 4000-5000-6000, and VBSSM product software. The release is a self-extracting zip file containing a number of elements. This release allows configuration of the VBrick via a terminal interface, via the serial interface, Telnet, or via the Internet Explorer. VBrick Systems recommends using Internet Explorer 5.5, Service Pack 2 or better. Any information contained within this document is to be considered VBrick Systems customer confidential and should not be reproduced nor distributed to non-VBrick Systems customers.

Note The *VB6000-5000-4000 v3.3 Admin Guide* provides a more detailed description of the features incorporated in this release. The Admin Guide is available on the CD packed with your VBrick and on the VBrick website which can be easily accessed by using the Help link on the IWS.

Compatibility

1. This release cannot be loaded to a unit running any release prior to 2.0.0. To upgrade a unit running a release older than 2.0.0 you must first upgrade to release 2.0.0 and reboot the unit before attempting to upgrade to this release.
2. This release uses a different default address for Conferencing SAPs than previous production releases (1.2.3 and earlier). If you upgrade to this new release on older VBricks, the conferencing SAP address will automatically be changed to the new default – this is the recommended course of action. If you plan to use the conferencing feature between VBricks running an old release and VBricks running a new release, you must change the conferencing SAP address on the old VBricks to match the address on the new VBrick's. The old address for Conferencing was 224.2.127.254. The new address for Conferencing is 224.2.133.133. The port remains the same: 9874.
3. This release package includes a management application called VBDirectory, which provides quick reference and access to all VBrick Appliances on a network. VBDirectory is installed with each new software release. To access VBDirectory, go to **Start > Programs > VBrick . VBDirectory**. This directory tool was developed for use with DHCP and will identify VBricks on the network running code 2.0.0 and higher. It is not backward-compatible with previous versions of code.
4. When using the new MPEG-4 feature, if SAPs are enabled and using the ISMA Compliant SAP option, all VB3000 series VBricks should be upgraded to Release 2.5.1 to avoid negatively effecting the Program Guide Feature. Similarly all VB6000 series VBricks should be upgraded to Release 3.0.0 or newer to avoid negatively effecting the Program Guide Feature.

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5. In order to play MPEG-4 streams, StreamPlayerPlus 4.0.0 or later is required. In order to play MPEG-4 Closed Captioning StreamPlayerPlus 4.2.0 or later is required. In order to use the MPEG-4 tunneling features, StreamPlayerPlus 4.2.0 or later is required.
 6. MPEG-4 Encoder VBricks should be running 3.2.0 or newer to take full advantage of all features of the MPEG-4 decoder.

Upgrade Instructions

VBrick appliances are shipped with PC applications to allow for easy upgrade. All release material should be installed on a PC running Internet Explorer 5.5 or higher and using Service Pack 2 or higher. Once the release is installed, the upgrade tools become available in the VBrick program group, located under Start > Programs. The upgrade procedure can be invoked by using either the VBDownload application or the VBDirectory application. Either application can be used as the starting point for updating the appliance's flash memory (TCP/IP FTP transport services are used for this). Using VBDirectory is an easier method as it lets you choose the appliances by name instead of IP addresses. When VBrick appliances are not accessible to VBDirectory, the VBDownload application must be used.

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- Notes**
- All saved configuration parameters are preserved when you upgrade your VBrick. There is no need to reconfigure the unit after the upgrade other than to take advantage of new features in the release. The upgrade process does require the unit to be reset, so it is important that your configuration be saved prior to the upgrade if you want to preserve the settings.
 - Part of the process takes place during the first boot after the upgrade of a new release. During this time you must avoid powering off the unit. This process may take 2-15 minutes and may include an automatic reboot of the unit. You can tell that the VBrick is ready for operation when you are able to login via IWS or CLI.
 - **VBrick strongly recommends against loading a previous version of code.** Some new features can cause problems for old code versions. For example, if DHCP is enabled and you load a previous version of code that does not support DHCP. Also many newer boards contain newly manufactured flash devices which are not supported in older code versions. In either case, the VBrick may fail to re-start properly at which point the unit will need to be returned to the factory for repair. Before attempting to load any previous version of code, it is highly recommended that all parameters be set to defaults.
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Upgrade Process

Follow these steps to upgrade the VBrick Appliance. (The Admin Guide contains additional information on how to use VBDownload and VBDirectory.)

- ▼ To upgrade the appliance:
 1. Run the release executable (SetupVB6000_3_3_0.exe) to install the release on your PC. It is recommended that you accept the default destination folder for the release which is in **Program Files > VBrick > VB6000 > Download\ReleaseV3_3_0.**

2. The setup programs for VBDownload and for VBDirectory will automatically run after the release files have been extracted. Follow the on-screen instructions to complete the installation.
3. For tips on VBDirectory usage, follow Steps 4–6 otherwise proceed to Step 7.
4. From your Start menu, run **Programs >VBrick > VBDirectory** to start the management utility. The VBDirectory program should start and open a window, showing all VBrick appliances that are available for upgrade.
5. Select the device to be updated by highlighting the name, and then select the UpGrade button. If the user name and password are not set properly, a dialog box will appear after this step. Configure the username and password (under the Edit Username/Password button) to the appliance's username and password.
6. The VBDownload application will start after a few moments. If VBDirectory is configured for Manual Download, (default setting under UpGrade preferences) proceed to Step 10. If set for Automatic Download operation, VBDownload will begin downloading the image to the appliance, automatically. Proceed to Step 12. For tips on VBDownload usage, follow Steps 9–12.
7. From your Start menu, run **Programs > VBrick > VBDownload** to start the download utility.
8. Type in your VBrick's IP address, login name, and password (The default login name is admin and the default password is admin, case sensitive).
9. If you installed the release to the default directory, that directory will be selected automatically. Otherwise, Browse to the directory that contains the unzipped files from the release package.
10. Press OK to start the download. Since the default mode of VBDownload set to Intelligent, the utility will query the VBrick to determine which release components need to be downloaded. Press OK to allow VBDownload to upgrade the suggested components.
11. When the download completes, reboot the VBrick using the VBDownload Reset Unit radio button selection.
12. Please note that part of the upgrade takes place during the first boot after the download, which can cause that boot to take up to 15 minutes. You can tell that the VBrick has completed the upgrade and is ready for operation when you can login via IWS or CLI, or when its name entry re-appears on VBDirectory.

What's New in v3.3

- JPEG Snapshots – This feature lets you configure an MPEG-4 encoder to take JPEG snapshots at a specified interval. They can be viewed in a web page or uploaded to a server.
- Text Insertion – This MPEG-2 feature requires a new plug-in module that lets you configure text messages that overlay the video stream during encoding. This feature is also available for MPEG-4 in the special 9172-4400-0023 model, which provides text insertion on both slots (MPEG-2 and MPEG-4).
- Network Time Synchronization – This feature allows the VB6000 to automatically configure the internal time and date according to an SNTP time server. The time server may be situated locally or remotely across the Internet. Both a primary and a secondary server is supported.

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- A new feature (**Disable Transmit on Video Input Problem**) has been added which prevents an MPEG4 encoder from transmitting packets on a multicast or configured unicast service when the video input is lost.
 - Passthrough Enhancements – Available on newer hardware revisions, the features include:
 - Built-in support for RS-422/485 serial devices (i.e. camera control as well as RS-232).
 - Added control leads to Com2 (DTR,RTS,DSR,CTS)

Caveats

- This release includes a change to RTSP SAPs and RTSP Internet SAPs that is not compatible with the StreamPlayer Plus 4.1.x and earlier. Note that MCS 2.0 is compatible with the newer SAPs.
- StreamPlayer Plus 4.1.x and earlier and MCS 2.0 and earlier may have audio/video synchronization issues when playing metered streams.
- StreamPlayer Plus 4.1.x and earlier and MCS 2.0 and earlier should not be used to record metered streams. Audio/video synchronization issues may arise on playback using any player.
- StreamPlayer Plus 4.1.x and earlier and MCS 2.0 and earlier will fail to correctly record MPEG-4 streams which have closed captioning enabled.
- StreamPlayer Plus 4.1.x and earlier and MCS 2.0 and earlier will fail to correctly record or play MPEG-4 streams that have Metadata information.
- StreamPlayer Plus 4.1.x and earlier and MCS 2.0 and earlier will fail to correctly record or play MPEG-4 streams that Random Access Headers.
- Limit MPEG-4 video bitrates to 1 megabit or less when video is transported to a VBrick decoder, using a NAT'ed address (ex. thru a firewall across the public Internet).
- Mpeg2 conferencing between releases 3.0.x and 3.1.x is inoperable. Upgrading to the latest revision solves this issue.
- Excessively increasing the number of closed caption AUs contained in one RTP packet could result in a slight delay in closed captioning data reception
- All VB6000 3.x.x releases are incompatible with Stream Player II versions 3.0.0 and earlier. The incompatibility prevents the discovery of SAP info from these versioned appliances.



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