



EtherneTV-NXG2 Video on Demand Server

NXG2 v3.0.0 VoD Release Notes



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November 1, 2005
4410-0110-0003

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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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NXG2 v3.0.0 Release Notes

Overview

The EtherneTV-NXG2 Video on Demand system supports live-stream and stored file access, providing a single portal for unified access. This state-of-the art deployment supports many advanced features, including scheduled playback, Live feed ingestion, true Video-On-Demand and more. The purpose of this document is to provide release notes for the EtherneTV-NXG2 VOD server. 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.

Compatibility

This release is compatible with:

- VBrick 1000 and 3000 series of MPEG-1 Encoders (Release 2.4.0 and higher).
- VBrick 4000 and 6000 series of MPEG-2 and MPEG-4 Encoders (Release 2.1.0 and higher). MPEG-4 is supported with release 3.0.1a and higher.
- EtherneTV Portal Server v3.0 or higher
- Release is based upon Redhat Enterprise Linux 3, MediaBase XMP 7.2.1 and the installation script contained in `vbrick_kasenna_dell_3_0_0.tar`

Login

With the EtherneTV Portal Server, the EtherneTV system provides access to live, and stored video. Administrative access to the EtherneTV-NXG1 VOD server is accomplished by pointing your web browser to the location of the EtherneTV-NXG server:

<http://NXGServer/mbase/admin>

The default user name/password is admin/admin. Additional instructions are available in the *EtherneTV-NXG1/2 Quick Start Guide*.

Installation Instructions

- ▼ To reinstall from release media:
 1. Place CD 1 of 4 into the CDROM drive and (re)boot the system.
 2. At the restore prompt, enter **nuke**. The "Mondo" utility to restore a disk image from the CDs will run. For instructions that call for selecting a "Yes" or "No" button, note that the selected button will be entirely grey, and the unselected button will be grey with the "Yes" or "No" boxed in red.
 3. Insert CD's 2 and 3 when prompted.

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4. When finished installing from the three recovery CDs, reboot the system.
 5. After reboot, you will be prompted to configure the network parameters. Type **n** for no to skip this step.
 6. Log in as user **root**, password **omnibase**
 7. Type **/opt/vbricksetup/init_swraid_step1**
 8. Insert the license floppy into the system.
 9. Type **mount /dev/fd0** to mount the floppy drive.
 10. Type **cp /mnt/floppy/license.txt /var/kasenna/license.dat** to copy the license file.
 11. Type **/opt/vbricksetup/build_xfs_step2**
 12. Steps 7 and 11 above begin the initialization of the RAID file systems. This lasts about an hour. To monitor the progress of this initialization, type **cat /proc/mdstat**. When the initialization is in progress, the output will include the percent complete for each filesystem. When the initialization is complete, the output will look as follows:

```
Personalities : [raid1] [raid5]
md5 : active raid5 sdc[0] sdf[3] sde[2] sdd[1]
      430123776 blocks level 5, 256k chunk, algorithm 2 [4/4] [UUUU]
md1 : active raid1 sdb3[1] sda3[0]
      123828928 blocks [2/2] [UU]
md0 : active raid1 sdb1[1] sda1[0]
      152512 blocks [2/2] [UU]
unused devices: <none>
```

13. Type **umount /dev/fd0** Remove the floppy disk from the server and store in a safe place.
14. Type **init 6** to reboot the system.
15. After reboot, you will be prompted to configure the network parameters. This time type 'y' to proceed. Have your IP address, netmask, hostname, and DNS server IP address ready. Consult your network administrator if you are unsure how to answer these questions.
16. Log in as user **root**, password **omnibase**
17. Insert CD 4 into cd-rom drive
18. Type **mount /mnt/cdrom** then hit return;
19. Type **cp /mnt/cdrom/vbrick_kasenna*.tar /tmp/** then hit return;
20. Type **cd /tmp**, then hit return;
21. Type **tar xvf /tmp/vbrick_kasenna*.tar** then hit return;
22. Type **/tmp/vbrickinstall.sh** then hit return. This starts the installation script, and a log of it's actions is created in /vbrick.
23. After each task the script will print whether it was successful in performing it. If there was an error in performing a task please notify VBrick Support Services.
24. When the script is done it will say: **Script is finished**.
 - a. Type **eject**, then hit return to eject the CD.

Upgrade Instructions

There is no release prior to 3.0.0 for the Dell 2850 platform, so an upgrade is not possible.

Caveats

Note Files are stored in the root area of the EtherneTV-NXG2 Video-On-Demand server prior to ingestion. If this area becomes filled, it can overwrite and corrupt system files causing a catastrophic failure. Please monitor the amount of disk space remaining at all times and frequently remove unnecessary files.

Adding Content to the Server

- Spaces and quotes (both forward and backward) cause system instability problems. All spaces and quotes must be removed from MPEG file names before they are transferred to the EtherneTV VOD NXG . Also, do not use spaces or quotes in the video name field of newly added video content.
- To ingest a pre-recorded MPEG-1, 2 or 4 file, use the **Add Video** feature of EtherneTV Portal Server.
- All assets that are installed into the server should have backup copies available in the event of disk corruption. This will allow for an easy restoration of the system.
- The MPEG-1 and MPEG-2 video only files cannot be ingested onto the NXG-2.
- MPEG-2 audio only files cannot be ingested onto the NXG-2.

General Notes

- When adding, creating, or renaming video assets, the asset name must be 63 characters or less with no special characters or embedded spaces.
- In order to view an MPEG-2 multicast file from the EtherneTV Video on Demand server, using a VBrick MPEG-2 6200, packet ordering and the jitter queue must be enabled. These parameters are set in the VBrick in Configuration: **Decoder > Network** settings.
- In order for the time to appear correctly in the EtherneTV Portal Server user interface, it may be necessary to set the time zone (depending on the installation location). Directions for changing the time zone are in the *NXG1/2 Quick Start Guide*.
- EtherneTV-NXG2 server multicast port numbering starts at 5000. VBrick Multicast port numbering ranges start from 1040 to 65535, and the default is 4444. The VBrick default multicast port number should be changed to a value of 5000 or larger if the VBrick encoders and decoders are being used as a source (record) or destination (playback) by the EtherneTV-NXG2 server.
- For MPEG-1 recordings, the audio doesn't work for EtherneTV-NXG2 server playback if the file was recorded using VBrick -xxx0 hardware encoders with the audio is set to Mono (Left to Stereo). All other VBrick encoder Audio modes work.
- The Client Test Tool does not work correctly on Linux. It displays the connection to the client of the active file being played, but disconnects during the ping test.

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- A user must close the browser after logging out from the EtherneTV-NXG2 server.
 - On systems configured with external storage, attempts to record files larger than 2GB may fail when there is less than 2GB of space available on one of the filesystems.
 - If the mbsnmp service is turned on, core files may appear in the root directory. Turn off mbsnmp to avoid this.
 - On the NXG-2, streaming at or below 125Kbps is not supported. Rates of 128Kbps or higher are recommended.
 - The "find videos" query on the mediabase admin pages will display a maximum of 1000 assets. For installations that exceed 1000 assets, the use of folders and keywords is recommended. Queries can be performed by keyword, or assets can be viewed by traversing the folder heirarchy.
 - The mediabase managed filesystem configuration parameter "Removal Enable" has no effect. Assets can be removed regardless of the setting of this parameter.
 - Removal of MPEG4 assets may intermittently fail.
 - For the MediaBase GUI in Release 7.21, in order to use the graphical tools for monitoring the CPU, storage, etc., it is necessary to install the latest Java plugin for your browser, Java 2 Runtime Environment, SE v1.4.2_01. This can be downloaded from <http://www.java.com/en/index.jsp>.
 - For the StreamPlayer client to work properly, the client PC cannot have the Cisco VPN enabled.
 - On the Monitor Service Status screen, it is normal for the IP Multicast Routing Daemon "LED" to show up as red.
 - The default passwords on all accounts should be changed. There are five accounts of interest:
 - User account vbrickuser, with default password `vbrickuser`
 - User account admin, with default password `admin`
 - Superuser account root, with default password `omnibase`
 - Web management account mbase, with default password `mbase-admin`
 - Web management account admin, with default password `admin`
 - The bitrate subject to the licensed bandwidth limitation is the maximum bitrate of each asset being streamed, rather than the nominal bitrate of each asset. For example, an asset with a nominal bitrate of 200Kbps and a peak bitrate of 330Kbps consumes 330Kbps of the licensed 250Mbps of bandwidth.
 - On the mediabase "Configure Filesystems" management page you have the option to individually disable asset installation, playback, and or removal. You must not disable all three options or the filesystem will become unusable.
 - The network monitor and bandwidth monitor features stop providing useful information when there are more than 136 clients.
 - MPEG-4 files with Closed Captions cannot be ingested.

If you have any questions regarding installation or operation, please contact your authorized VBrick reseller from whom you have purchased this product. You can also obtain on-line

support for EtherneTV-NXG2 FAQs at <http://www.vbrick.com/support/faq.asp> Or visit our technical support page at http://www.vbrick.com/support/technical_support.asp



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