



Image Capture

VBrick MPEG-4 Video

A decorative graphic consisting of a grid of squares. The top-left corner of the grid is cut off by a diagonal line. The grid is composed of light green squares, with several squares highlighted in a darker green. One of these dark green squares, located in the second row from the top and the second column from the left, contains the text "White Paper".

White Paper

Introduction

VBrick appliances that include MPEG-4 encoding support a novel feature called “JPEG Capture” (Firmware version DNA 3.3 and above). This feature is very useful for several applications, but especially for security and monitoring

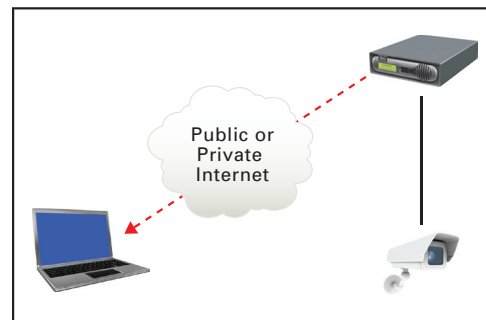
Models

The JPEG feature is available in all VBrick appliances that support MPEG-4 encoding, including the VB4000, VB6000 and SSM series.

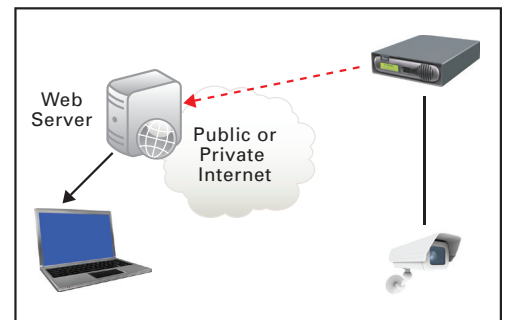
How It Works

The VBrick appliance receives live video, encodes it into MPEG-4, and delivers the audio/video using several live streaming methods (e.g. direct serving, multicast, unicast).

The video input is also presented to an internal JPEG image capture engine. The capture engine periodically saves one frame of the live video as a “snapshot” in compressed JPEG image format. The saved image is then available for viewing directly from the VBrick’s internal web server, and the image can be automatically transmitted via FTP to any external web server.



Direct JPEG Viewing



Web Server JPEG Viewing

Direct Viewing

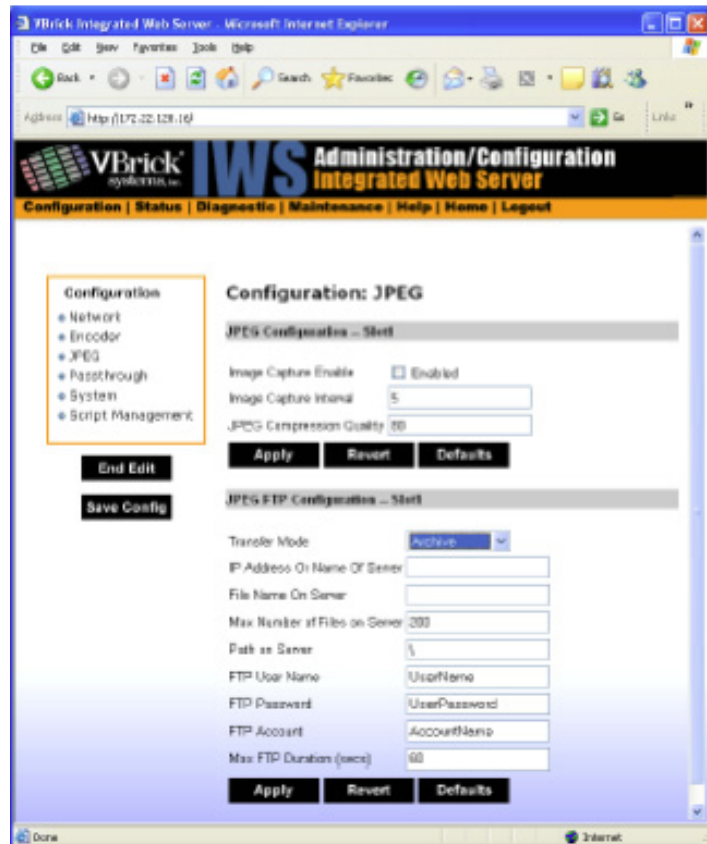
The captured image can be viewed directly from the VBrick by simply entering “[http://VbrickIpAddress\[:port\]/vbs1snapshot.jpg](http://VbrickIpAddress[:port]/vbs1snapshot.jpg)” in a browser (“vbs1” is for VBrick slot 1, “vbs2” is for VBrick slot 2).

Web Server Viewing

Commonly, the source VBrick is behind a firewall that would prevent direct viewing of the captured image. Moreover, the application may call for heavy usage beyond the bandwidth available to the source VBrick (for example, displaying highway traffic images for the general public). In this case, the VBrick will automatically capture and then send the image to any server via conventional File Transfer Protocol (FTP). Viewing capacity is then limited only to the performance of the web server. Furthermore, the viewing page placed on your web server can have any attribute desired (e.g. password security).

Archiving Images

For security and monitoring, it is often desired to archive each captured image. The VBrick can do this automatically on your server, and will also allow you to control the maximum number of images that are archived. When the JPEG FTP Configuration is set to Archive mode, the name of the image placed on your server is appended with a trailing sequential number (e.g. "image1.jpg", "image2.jpg", etc.) for each capture. This will occur up to the "Max Number Of Files On Server" value, after which the sequence will repeat. For example, if you capture an image every 60 seconds and you want to maintain 48 hours of images on your server, you would set the maximum number to 2,880: 48 hours x 60 minutes = 2,880 images



The Archive mode is also commonly used to improve overall image viewing performance for certain web servers. It is possible that a viewer may attempt to view the image from your web server while that same image is being updated. To improve performance, it is common to alternate between "image1.jpg" and "image2.jpg" (by setting the Max. Number of Files On Server" to 2), thus reducing the chance that a viewer will hit the server while an image is in transit.

Desktop Viewer/Archive

The "Security Image Viewer & Archiver" application automatically retrieves the captured image from up to four VBricks and displays them on your desktop in real time.



Each image is retrieved, displayed, and optionally saved on your computer with the date and time of capture. An integral archive viewer allows you to rapidly view images one at a time or in "time lapse" with motion detection, allowing you to easily and rapidly review monitored areas.

Archiving images in this way is often more desirable than archiving the full motion video for several reasons:

- Less disk space is required
- Less network bandwidth is required
- No view player is required
- For security and monitoring, most of the time there is no motion – making video recording unnecessary

For example, each morning you can rapidly view the "video" from each camera and know exactly (hour, minute second) when any event occurred.

You can obtain the Security Viewer & Archiver from:

<http://www.videoalive.com/securityarchiveviewer/setupVBSecurityArchiveViewer.zip>



About VBrick Systems, Inc.

VBrick is the leader in Enterprise IP Video solutions, with over 6,000 corporate, education and government customers and 60,000 installations worldwide. VBrick solutions work over standard IP networks and the Internet to deliver rich media communications that connect people everywhere – from employees and customers, to partners and shareholders. Our comprehensive product suite and end-to-end solutions are used in a wide range of live and on-demand applications including meeting and event broadcasts, distance learning, digital signage, TV distribution, video surveillance, and Web-based marketing campaigns. Headquartered in Wallingford, CT, VBrick's products and services are available through industry-leading value-added resellers.

For more information, visit www.vbrick.com