

Vbrick® Distributed Media Engine

Turnkey Edition

The Vbrick Distributed Media Engine (DME) forms the backbone of the Rev® enterprise-wide content delivery network (eCDN). It enables efficient video broadcasts to large audiences by supporting a variety of endpoints, including popular smartphones and tablets. People in regional offices or on remote campuses can view high-definition video, either live or stored, without taxing data connections to a central site.

The DME intelligently provides media redistribution, edge caching, media transformation and the serving and storage of video-on-demand content. A typical deployment has one or more central DMEs connected to edge DMEs. A single stream of media from a central site can support tens of thousands of live views and then be stored locally for on-demand access by thousands more.

The DME also integrates with SIP-based video conference systems to stream conferences to thousands of employees, including to their mobile devices. Transrating stream and Vbrick® Mix mobile streaming application options also are available.

APPLICATIONS

The DME is deployed on the network edge to support endpoints requiring RTP, RTMP (Flash), Flash Multicast (RTMFP), HDS, HLS (Apple Adaptive), MPEG2TS (Transport Stream) and Smooth Streaming streams as well as firewall-friendly HTTP progressive downloads.

Live Meeting and Event Broadcasting - Provides ubiquitous access to high quality broadcasts and corresponding rich-media content at the network edge. DMEs can use video conference endpoints as a source.

Training and Lecture Capture - Supports multiple live streaming protocols as well as progressive download via HTTP for distribution of content to a wide variety of video endpoints including mobile devices.

On-demand Content Management and Distribution - Provides local content serving and storage to reduce burden on WAN. DME solutions enable recording of video conferences (requires Vbrick video management system).

Surveillance & Security - Share sensitive video content more effectively without requiring specialized equipment or cabling. The DME ingests and reflects Transport Stream including critical KLV metadata.

PRODUCT AT A GLANCE

MEDIA REDISTRIBUTION

- ▶ Ingests and reflects media streams, unicast to unicast or unicast to multicast. One stream serves thousands. Mix SD and HD live streams supported.

MEDIA TRANSFORMATION

- ▶ Converts standard H.264 RTP to Flash, Flash Multicast, HDS, Apple Adaptive, and Transport Stream providing video to PCs, Macs, tablets, and smartphones. Dynamically transforms resolutions and bitrate of a stream for devices/locations requiring a smaller stream.

VIDEO ON DEMAND

- ▶ Local content storage and video serving allow frequent content to be accessed locally without burdening data connections to larger central sites.

VIDEO CONFERENCE EXTENSION

- ▶ Optional solution enables SIP-based integration with popular video conferencing equipment. Allow thousands to watch a video conference from anywhere including popular mobile devices.

INTEGRATED SOLUTION

- ▶ Integrated with the Rev video management platform, assuring that only authorized users have secure access to content and that central reporting is available regardless of the user's location.

FEATURES AND BENEFITS

Media Transformation - Stream high-quality H.264 content once and leverage the DME at distributed locations to deliver multiple formats including Flash, Flash Multicast, HDS, HLS (Apple Adaptive), Smooth Streaming as well as Transport Stream and HTTP progressive download; DME delivers video to multiple types of endpoints concurrently.

Mobile Device Support - Enables delivery of live H.264 content to mobile devices as Flash, Apple Adaptive and Smooth Streaming or supports HTTP progressive download of video-on-demand content.

Robust Appliance Design - Requiring only a web browser for management, the DME eliminates the need to separately manage patches and security updates on commercial server operating systems.

Secure - Designed to meet the security requirements of demanding government and enterprise information assurance policies.

Enhanced User Experience - The DME easily accommodates increased user demand without degrading performance or the viewing experience.

LICENSING

	MODEL 7530	MODEL 7550	MODEL 7570
LICENSE LEVEL	H 7.87" (200 MM) W 1.85" (47 MM) D 8.85" (225 MM)	H 1.68" (4.28CM) W 8.99"(48.24CM) D 28.97"(73.6CM)	H 1.68" (4.28CM) W 8.99" (48.24CM) D 28.97" (73.6CM)
WEIGHT	WEIGHT (MAX): 2.42LBS (1.1 KGS)	WEIGHT (MAX): 41LBS (18.6KGS)	WEIGHT (MAX): 41LBS (18.6KGS) (MAX41LBS(18.6KGS)
TURNKEY HARDWARE APPLIANCE	8000-0222	8000-0223	8000-0224
VMWARE IMAGE (VSPHERE 4.1 OR 5.0)	7500-0250	7500-0251	7500-0252
RECOMMENDED USERS	100 OR LESS	1000 OR LESS	2200 MAXIMUM
MAXIMUM THROUGHPUT	250 MBPS	500 MBPS	3 GBPS
CPU	INTEL I3	INTEL XEON (1)	INTEL XEON (2)
MEMORY	4 GB	16 GB	32 GB
CONTENT STORAGE (DRIVES)	(1) 250 GB	(4) 500 GB RAID 5	(6) 1TB RAID 5
CHASSIS	SHELF MOUNT	1RU - RACK MOUNT	1RU RACK MOUNT
NETWORK INTERFACE	1 GIGABIT ETHERNET	4X1 GIGABIT ETHERNET	4X1 GIGABIT ETHERNET
SERVERS OS	EMBEDDED	EMBEDDED	EMBEDDED
POWER SUPPLIES	65 WATT POWER SUPPLY	REDUNDANT 750 WATT POWER SUPPLY	REDUNDANT 750 WATT POWER SUPPLY

PRODUCT SPECIFICATIONS

HYPERVISOR VERSION

- ▶ ESXi 4.1, 5.0, 5.1, 5.5
- ▶ Windows Hyper-V Server 2012, 2012R2

PLAYER SUPPORT

- ▶ Adobe Flash Player
- ▶ HTTP Dynamic Streaming (HDS)
- ▶ Apple Adaptive Player on iPhone and iPad using HTTP Live Streaming (HLS)
- ▶ Windows® Media Player 12 or Vbrick plug-in
- ▶ QuickTime Player (Windows & Mac)

INCOMING PROTOCOLS

- ▶ RTP
- ▶ RTMP
- ▶ MPEG2TS with KLV
- ▶ FTP for VOD file transfer
- ▶ Smooth Stream from IIS Server
- ▶ SIP (optional)

OUTGOING PROTOCOLS

- ▶ RTMFP Flash Multicast
- ▶ RTP - unicast & multicast
- ▶ RTMP - unicast
- ▶ MPEG2TS with KLV - unicast & unicast
- ▶ HDS - unicast
- ▶ HLS - unicast
- ▶ HTTP (Progressive Download)
- ▶ Smooth Stream
- ▶ Stored Windows Media via Progressive Download

MANAGEMENT

- ▶ HTTP/HTTPS for management
- ▶ GMPv3
- ▶ SNMP v1, 2, 3