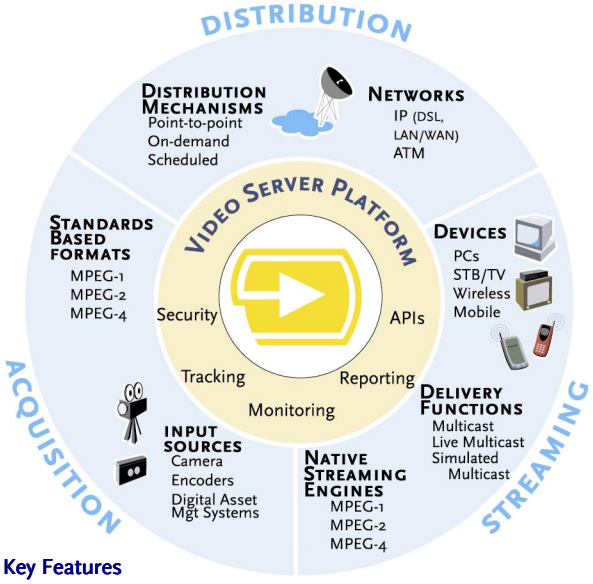
DATASHEET

KASENNA™ MEDIABASE XMP

THE EXTENSIBLE MEDIA PLATFORM



Key Features

- Standards based format support – MPEG-1, MPEG-2 and MPEG-4
- Streaming data rates to support narrowband, broadband, and broadcast quality streaming
- Unicast, multicast and simulated multicast delivery modes
- IP (UDP, RTP), ATM (CLIP, LANE and native SVC/PVC)
- Best of breed server/operating systems– Sun Solaris, Intel LINUX & SGI IRIX
- Integrated with leading set-top boxes
- Bundled Microsoft Direct Show based Windows player for MPEG-1 and MPEG-2 (with optional MPEG-2 software decoder)
- Integrated database and web-based video content management tool
- Web-based server administration GUI
- Remote Server Management using scriptable programming interface
- Remote server monitoring using SNMP
- Security – robust Authentication, Authorization and Access Control API for managing administrators and users through external databases. Bundled with LDAP database.
- Easily integrated into existing billing and reporting systems via Accounting API
- RTSP and content management API's for integration into vertical or horizontal applications
- Scheduled and on-demand content distribution through Kasenna VCD™ technology
- Network, bandwidth, and file system management for guaranteed quality of service.

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Kasenna™ MediaBase XMP ("XMP") provides the core software platform for building and deploying video delivery (on-demand, live, distribution) applications on best of breed open computing platforms and storage systems. Built to manage the complexities of delivering broadband and broadcast quality video, XMP is the only solution that integrates into one unit the core functions needed to implement an end-to-end workflow – video content acquisition management, metadata management, content distribution and streaming delivery. Latest in a proud line of time and field-tested products from Kasenna, XMP adds key features to significantly reduce the time, cost and risk of building and deploying commercial-grade video applications over a variety of networks.

Extensible MPEG Platform for Standards-Based Streaming

XMP is the industry's first industrial strength product that provides broad coverage for deployments in narrowband, broadband and broadcast networks using standards-based streaming formats: MPEG-1, MPEG-2 and MPEG-4. Supporting bit rates from 64 Kbps MPEG-4 (ISMA Profile 0) to 11 Mbps MPEG-2 and beyond, XMP delivers video via unicast, scheduled multicast or simulated multicast. XMP has the capability for live streaming with or without recording to disk and supports delivery over IP and ATM networks.

Video Content Management for Extensible Video Applications

XMP provides sophisticated video content management capabilities that enable you to integrate video-serving systems into your business workflow. Efficient, web-based content management tools enable video acquisition (from encoders, digital asset management systems or independent applications), installation, management, tracking, monitoring, and distribution. Integrated with industrial-strength relational databases, XMP allows the creation of metadata for easy browsing and retrieval of a media file from large volumes of audio and video content.

Back-office integration using new Authentication, Authorization, Access Control and Accounting Service

XMP introduces a robust Authentication, Authorization, Access Control and Accounting (A4) framework for integrating the video server into back-end accounting, billing, reporting, and security processes through a plug-in architecture. The A4 service secures the system and the content by validating user access via credentials (for example username/password, etc.). For easy out of the box usage, XMP is bundled with an LDAP authentication/authorization/access control plug-in along with an open source LDAP server. In addition to creating a stream of highly detailed usage data that can be fed directly into an external billing system, log data can also be captured in a W3C compliant log files to be read by standard reporting applications. APIs are available for developers to create custom plug-ins through the Kasenna Developer Program.

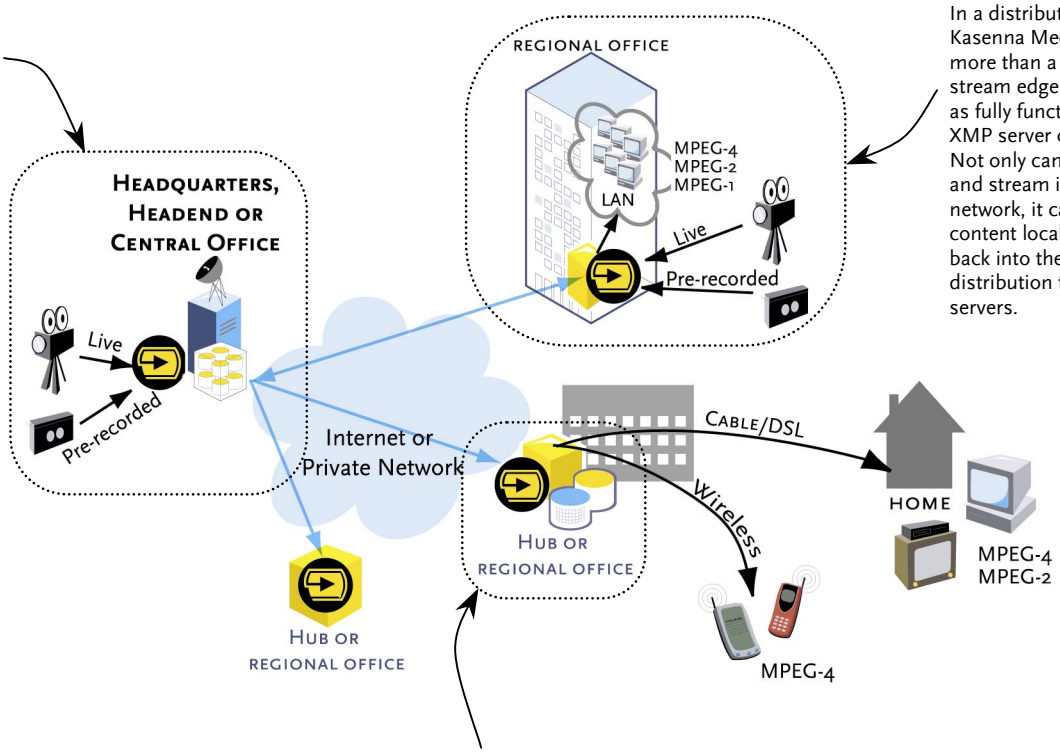
Multi-dimensional scalability using Video Content Distribution Architecture

Kasenna's unique Video Content Distribution (VCD) architecture can create a "seamless" video network by connecting distributed XMP servers. Kasenna VCD™ enables the deployment of "origin-server" and "edge-server" based architectures by using collections of small servers deployed "closer" to end users to address quality, bandwidth and scalability constraints. Coupled with Kasenna's patent-pending Video Prefix Caching technology, the VCD architecture allows the video network to scale cost-effectively by optimizing edge storage vs. network bandwidth by distributing a mix of metadata and content between servers. Prefix Caching enables partial storage of the video file at the edge servers and intelligent storage management functions to fetch the remaining content on-demand.

Example of Distributed Video-on-Demand environment with Kasenna MediaBase XMP

Stand-Alone or Distributed

Kasenna MediaBase XMP can function independently where it can acquire content from various sources such as digital asset management systems or encoders and stream it out to users on the local network. Or in can work in conjunction with other servers by distributing content on-demand or scheduled content to remote XMP servers closer to the end user.



Beyond Caching

In a distributed mode, Kasenna MediaBase XMP is more than a "dumb cache and stream edge device". XMP is as fully functional as any other XMP server on the network. Not only can it receive content and stream it on the local network, it can also acquire content locally and injecting it back into the system for distribution to other XMP servers.

Multiple Delivery Channels

By putting Kasenna MediaBase XMP servers in remote locations that are "closer" to the end users, providers can optimize the bandwidth in their network and reach a broad range of audiences. Whether it is a home user accessing content through an RTSP enabled set-top box or a Windows based PC client or a cell phone with an MPEG-4 player, Kasenna MediaBase XMP provides the broadest reach with standard-based formats on standard platforms and operating systems.

Kasenna™ MediaBase XMP Technical Specifications

Streaming Format Support:	MPEG-1 (system), MPEG-1 Layer 3 audio (MP3), MPEG-2 (Transport stream), MPEG-4 (ISMA Profile 0 and Profile 1)
Streaming Modes:	Unicast, Multicast (live capture and broadcast, scheduled broadcast of stored video, simulated multicast, multicast/unicast switch)
Content Distribution:	Point-to-point distribution via Kasenna VCD™ with Prefix Caching™
Content Management:	Metadata and video asset management via a web-based utility.
Authentication, Authorization:	Packaged LDAP server for administrator and user authentication/authorization.
Reporting:	W3C compliant logs. Report templates packaged with freeware reporting tool.
System Monitoring:	SNMP v.2.0 compliant monitoring daemon
Database Support:	Bundled Informix database, support for an external Oracle database (Solaris)
Player Support	Kasenna Broadband Player, Kasenna DirectShow source filter for Windows Media Player
Bit-rate Support:	8 Kbps to 11 Mbps (certified), higher bit-rates possible
Server Operating Systems:	LINUX Red Hat 7.2; Sun Solaris: 8 & 9; SGI Irix 6.5.8 and above
Web Servers:	Bundled Apache Web server
System Administration:	Web-based (Netscape, Internet Explorer)
Network Interfaces:	IP (10BaseT to Gigabit Ethernet), IP/ATM (CLIP, LANE for IRIX & Solaris), native ATM (IRIX & Solaris only. Marconi/Fore cards only.)
Streaming Control Protocols:	RTSP, CORBA Compliant
Streaming Data Protocols:	UDP/IP (MPEG-1 & MPEG-2), RTP/UDP/IP (MPEG-4), native ATM (IRIX & Solaris)

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