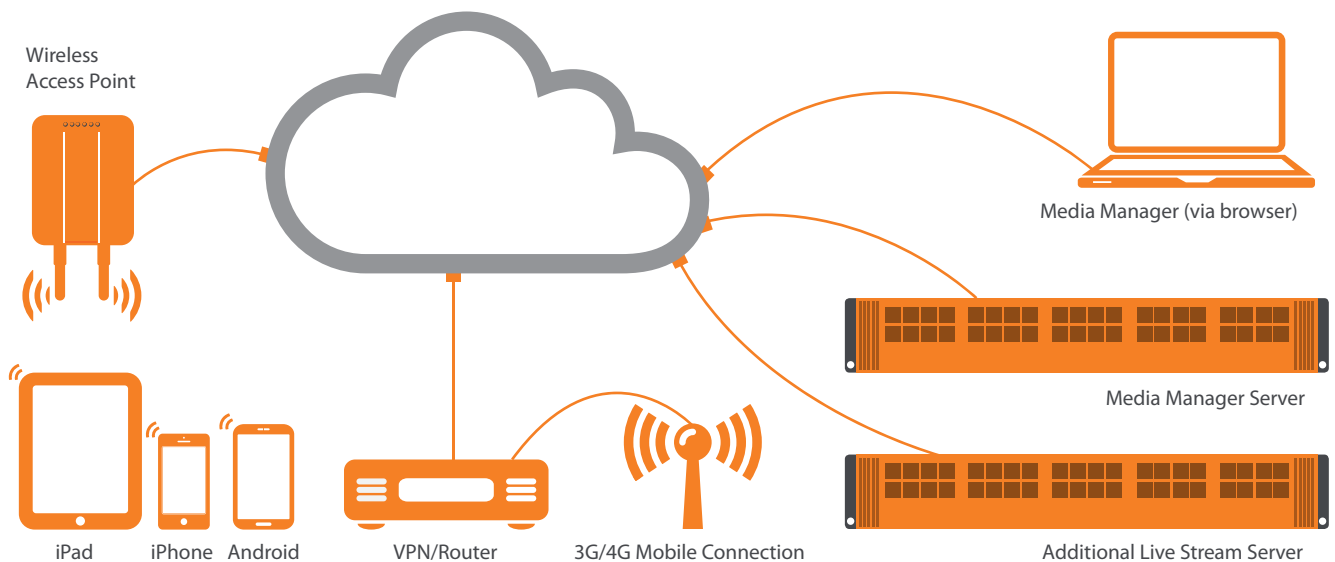


> MediaStar Interactive Video on demand (iVOD)

The MediaStar system offers two different types of iVod solution. Users can use a 'traditional' centralised Video server with clients on iOS, Android, PC and MediaStar Digital Media Decoder (DMD) platforms, or a 'distributed iVod' system where selected content is downloaded and stored in MediaStar DMDs that are local to each public display screen. The centralised server solution is ideal when immediate access to a very large content library is required and there is good LAN connectivity in place. The 'distributed iVod' system is ideal for large scale deployments where full-time, high bandwidth central network connectivity is not available, or the most cost effective iVod solution is required.

- ▶ iVod operation with a central video server or 'distributed iVod' content model
- ▶ Easy viewing of iVod server content on PCs and portable iOS and Android devices using the MediaStar Media Portal web page
- ▶ Full control of iVod media accessibility on MediaStar DMDs using Media Manager timed playlists and user selection lists, containing iVod file content
- ▶ Full play/pause/skip iVod file viewing with on-screen controls
- ▶ iVod media files are ingested by 'drag and dropping' files on the Media Manager workspace or copying them into the ingestion folder on the Media Manager server
- ▶ A wide variety of media file formats are automatically converted into a suitable iVod format, using Media Manager's built in file conversion facilities
- ▶ Once ingested, iVod files are represented by file icons in the Media Manager media library that can be simply 'drag and dropped' onto Portal pages, playlists or user selection lists for controlled user access



> MediaStar Interactive Video on demand (iVOD)

When a Linux based MediaStar iVod server is introduced into the MediaStar system, it is automatically detected on the network, and a server icon is generated in Media Manager. The MediaStar Server will monitor the server and show any warnings on the server icon.

When a new Media file is dropped onto the Media Manager workspace, it will be automatically copied to the Media Manager server and will be converted into a format suitable for server and distributed iVod use. The iVod file will then be automatically copied onto the iVod server itself.

A media icon will be created in the media library that represents the iVod server content, and a similarly named icon will represent the distributed iVod content.

The system administrator can drop the iVod server media icon onto any MediaStar portal page, then publish it and distribute the Portal page URL to selected users. These users can then access the Portal page with their browser on their portable device or PC, and click on the media icons to view the iVod file with full pause/play/skip facilities.

Both iVod server media icons and distributed iVod media icons can be dropped on the playlists and user selection lists that are used to control MediaStar 780 DMD units. This provides the system administrator with powerful time and user selection based controls to define both the iVod and 'Live' Media that is available for viewing by users.

A 780 user can use the IR remote control (or keyboard and mouse) to select individual or sequential groups of iVod clips, and then use the IR buttons or wireless mouse with on-screen controls to play/pause/skip through the iVod content as required.

When a 780 DMD is instructed to use distributed iVod content, it will download the relevant files from the Media Manager server, and will store them in its on-board flash memory. When required, it will then play the media from its local memory without accessing an external server. This is particularly useful when the network link has limited bandwidth, poor QoS, or is not available all the time. Where a group of 780 units are working across a limited LAN connection, they can be configured to make a single download of distributed iVod media from the server, and then immediately copy the content between local 780 units as they require. This 'communal media sharing' has the advantage that there is no need for any local server equipment or any single point of failure in a (remote) distributed system.

A MediaStar iVod server is licensed according to its maximum data output bandwidth, and may contain as much HDD file storage capacity as the customer chooses to fit. Licenses are available for 60, 200, 500 and 1000 Mbps output data rates. The 780 DMD has 8GB of on-board flash memory as standard, but units with up to 128GB may be ordered.

Product Specification

iVod server requirements

Debian or Redhat Linux distribution 32/64 bit, based on libc6

Central iVod Server Hardware Requirements

60 or 200Mbit/sec streaming: 2-core processor, 2GB RAM, single SATA drive (or 2 in RAID-1 for redundancy)

500Mbit/sec streaming: 4-core processor, 4GB RAM, 4 * SATA drive in RAID-5 or RAID-0+1

Typical Rackmount servers are Dell R210 (2-drive) / R320 (4 drive) or HP DL320e (either 2 or 4 drive)

Off-air SD content (6Mbps MPEG2) typically requires storage of 45MB/s = 2.7GB/hr

High Quality HD content (10 Mbps H264) typically requires storage of 75 MB/minute = 4.5GB/hr

Distributed iVod Hardware Requirements

780 -SL or AV units, with V3.6 (or higher) software

780-4GB units, with V3.6 (or higher) software

780-SL or AV units come with 8GB of on-board flash storage as standard, but can be ordered with up to 128GB flash memory

Companion models and accessories

462	Media Manager software with 100 780 DMD License
467-xx	Media Manager software additional license for xx 780 DMD units
470-xxx	MediaStar Media Portal page software license for xxx clients/devices
472-xxx	MediaStar iVod server software with a streaming bandwidth of xxx Mbps (60, 200, 500, 1000)
473-1000	MediaStar iVod server software streaming bandwidth upgrade to 1000 Mbps
700-462	Dell R210 1U Rackmount server with Media Manager software pre-installed with a 100 780 DMD license