VitalStream DataSheet

Live lecture capture, recording and streaming solution

Technical specifications and salient features
A system for lecture capture, live streaming, archiving and playback of lectures of audio, video and presentation.

Broadcasting and Recording
- Supports Live Streaming and recording of lectures from multiple classrooms

- Support Client Operating System Windows and MAC.

- Support H.264 and RTSP Protocol

- Users can view live class room sessions or On-Demand.

- Supports Dual screen recording.

- Supports FULL HD Video Streaming and Recording

- Supports recording of SIP based video calls

- Solution can be deployed on public internet or a private closed network.

- Solution can be deployed on Physical Hardwae or Virtual Machine

- Facility to enable live stream to authorized user.

- Facility for end user to watch any of the available live streams from server using standard browser like chrome or firefox.

- During live Q & A session, remotely connected user can ask questions (hand raising) using their Laptop, Tablet or mobile phone.

- Supports Chat between users during live broadcast.

- Supports screen sharing during a broadcast.

- Supports unicast and multicast.

- Simple dashboard Streaming and recording with one click.

- Supports broadcasting of Audio, multiple Videos and Presentation.

- Facility to have picture-in-picture for presentation and presenter video.

- User can switch between presentation / presenter video.

- Supports capturing and streaming from USB cameras.

- Supports Audio input from 3.5 mm or 6.3 mm (mono) and USB microphones.

- Live capture of presentation using VGA / HDMI.

- Supports HD and SD recording of the lecture [Audio, video and presentation] in mp4/webm format.

Digital Library [Content management]

- Solution contains an inbuilt digital library for storing and playback of videos.

- Playback of video from digital library on standard browser like chrome/ firefox on desktops, laptops, smart phones and tablets.

- Facility for authorized users to upload videos into the digital library.

- Facility for authorized users to import videos from other servers like youtube or ftp from any other video server into the digital library.

- Thumbnails are automatically generated for the recorded or uploaded video.

- Video preview is shown on mouse over of thumbnail.

- Facility to resize video for streaming at lower bandwidths.

- Facility to watermark/LOGO the video for branding purposes.

- Facility to embed owner information into the recorded video header for copyright purposes.

- Videos can be trimmed.

- Metadata can be added to Videos

- Videos are searched on title, author, category, date and time of recording, institute and other special keywords tagged for the video.

- Videos can be sorted by popularity (view count), author, title, duration.

- Solution supports self registration for users.

- Administrator can mark videos as private / public. Private videos can be given access to certain users while public videos are available to all users.

- Admin/privileged user can recommend videos to other users/groups.

- While playing a video, other relevant videos are shown for the benefit of users.

- Facility for users to add personal notes for a video. The notes can also be shared with other users.

- Users can bookmark at various times in the video. This helps in seeking to different parts of the video quickly.

- Facility to have categories for the recorded lectures for classification.

- Supports load balancing using multiple servers.

Content Enhancement

- Facility for adding quiz to a video. Users can take up the quiz at any time.

- Facility to enhance video by adding questions, pdf or images at any point in video, this increases interactivity of the lecture video.

- Facility to add micronotes along the video time line. Micronotes appear during playback. Students can search for micronotes and seek to exact point in video.

Analytics

- Admin can view usage details about who watched what videos and when did they watch.

- Admin can watch dashboard of the current live streams, video upload counter, online users list.

- Admin can see the quiz reports of users.

Server Software: Ubuntu 14.04

Solution Diagram