
Distance Education and e-Learning Subscription Service

SAMPLE

Lecture Capture Solution Capabilities Comparison Matrix

Detailed information about customer premise and hosted offerings from leading vendors

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Notes and Disclaimers

1. This comparison matrix includes information from leading vendors of customer premise and hosted offerings of lecture capture solutions. This document is NOT intended to be a comprehensive guide to *all* available vendors and solutions.
2. Included vendors are: Accordent, Cisco Systems, Echo360, Panopto, Polycom, Qumu, Sonic Foundry, TechSmith, Tegrity, and 323link.
3. The information contained in this document has been provided by each of the participating vendors via an online data capture tool and compiled by Wainhouse Research. Any questions not answered by a vendor were noted with an **NA** (Not Answered) notation. Vendors were provided liberal opportunity to include additional explanatory comments. In the course of compiling this document the editors highlighted in ***(parenthetical statements)*** comments vendors provided we feel add value to buyer understanding of the vendor approach to the market and its offerings. Where appropriate, we add our own notes when we are concerned that a vendor may have misinterpreted the question.
4. Although every effort has been made to review the data for logical consistency, and we visited many vendor websites to ensure that answers made sense, Wainhouse Research cannot guarantee the validity or accuracy of the information included in the matrix. Readers are encouraged to verify company and solution details before making purchasing decisions.
5. *Wainhouse Research believes that lecture capture buying decisions should be made with care, and encourage end user organizations to look beyond this specific document to enter into discussion with selected vendors. This document is best used for understanding the universe of offerings, the variety of company approaches, and creating short lists of vendors for investigation and proposal requests.*
6. Two vendors not traditionally thought of as included in the lecture capture universe are included here – Polycom and TANDBERG – with a note that typically their approach requires dual solutions combining multiple platforms. Where possible we note when other technologies are necessary to accomplish cited tasks.
7. Please report errors and omissions to agreenberg@wainhouse.com

This document is a subset ONLY of the full 35-page comparative matrix, meant to illustrate platform and vendor content.

Document Updates: July 30, 2010 ***Original Document Release***

Company	Accordent	Cisco	Echo360	Panopto
Product	Media Management System	Cisco Digital Media Suite	EchoSystem	CourseCast
Website	www.accordent.com	www.cisco.com	www.echo360.com , www.lecturecapture.com	www.panopto.com
Contact name	Darian Germain, Marketing VP	Ben Culp	Mary Young, Director, Marketing	Eric Burns / Chief Operating Officer
Contact email	dgermain@accordent.com	beculp@cisco.com	myoung@echo360.com	eburns@panopto.com
Year company founded	1999	1984	2005	2007
Number of employees	60	650000	not disclosed	not disclosed
General Product / Service Information				
Solution type / Deployment model (CPE-On-premise equip, ASP/Hosted/SaaS, Hybrid/Both)	CPE-On-premise equip.	CPE-On-premise equip.	Hybrid/Both (<i>Core lecture capture is deployed on premise. Hybrid model is advantageous for certain features of the system, for ex. indexing. It is a fiscally scalable model that can be utilized on case-by-case basis.</i>)	Hybrid/Both (<i>Panopto Recorder is a client application and must connect to a Panopto server. The server may be either an on-premises software installation or a Panopto Hosted SaaS server.</i>)
Date of initial product release	Oct-06	Sep-06	Dec-06	CourseCast (Carnegie Mellon internal project): 2002 / Panopto (commercial product): 2007
Current software version or hardware revision level (if applicable)	3.5	5.2	2.6	3
Languages supported	English	US-English	English, Spanish, German, Japanese, Arabic (Translation kit available for resellers or customers that want to do their own translation.)	English, French, search in all languages (via Unicode)
Platform Capabilities				
Supports on-demand distribution	Yes	Yes	Yes	Yes
Supports live, real-time distribution	Yes	Yes	No	Yes
Max # of simultaneous playback connections	4000 (<i>Per single license - multiple licenses can be clustered to support unlimited users</i>)	Unlimited	Scalable architecture allows for on-demand playback to be handled by external web and streaming servers. These can be clustered for maximum load distribution. Exact number of concurrent connections based on client's implementation.	Determined by outgoing network bandwidth. 2000 simultaneous clients on 1 Gbps local network, practically unbounded with CDN via Limelight.
Lecture Capture Device (in room)				
Capture software for Instructor's PC	No	Yes	Yes (<i>EchoSystem personal capture</i>)	Yes
Capture software for Instructor's Mac	No	Yes	Yes (<i>EchoSystem personal capture</i>)	Yes
Capture software for Windows-based podium	No	No	Yes (<i>EchoSystem capture software for Podium computers</i>)	Yes
PC-based appliance	Yes	No	Yes (<i>EchoSystem capture software runs on any PC. WR: not appliance</i>)	Vendor: Yes (<i>software-only - install on any PC to create a remotely scheduled recording appliance. Works with most major capture hardware.</i>) WR: <i>not appliance</i>

Company	Accordent	Cisco	Echo360	Panopto
Product	Media Management System	Cisco Digital Media Suite	EchoSystem	CourseCast
Purpose-built, room installed appliance	No	No	Yes (<i>Patented</i>)	No
Purpose-built appliance - Portable	No	No	Yes	No
Capture software for Student's PC	No	Yes	Yes (<i>Personal capture is used by instructors and students alike</i>)	Yes
Capture software for Student's Mac	No	Yes	Yes	Yes
Capture audio	Yes	Yes	Yes	Yes
Capture video (Camera, DVD/VCR)	Camera,DVD/VCR	Camera,DVD/VCR	Camera,DVD/VCR	Camera,DVD/VCR
Capture visual aids (Whiteboard,PC/tablet PC,Doc camera)	Whiteboard,PC/tablet PC,Doc camera		Whiteboard,PC/tablet PC,Doc camera	Whiteboard,PC/tablet PC,Doc camera
Capture video and visual aid simultaneously	Yes	Yes	Yes	Yes
Remote monitoring	Yes	No	Yes (<i>Remote monitoring provided both system wide and on classroom basis. EchoSystem allows operator to remotely view capture status in all classrooms simultaneously & provides visual, in-room view of input signals remotely through a browser and via in-classroom room control systems.</i>)	No
Comments about capture device architecture	The Accordent Capture Station is available as a turnkey appliance (Dell is standard and Mobile Edition with built-in screen also available.) However, it can be sold as software-only solution if clients choose to install on their own hardware in order to leverage their organization's IT support and maintenance contracts / expertise. The turnkey systems might be considered 'closed' in sense that they have everything the client needs for operation - but not considered 'closed' because all Accordent solutions are standards-based and require no proprietary software or hardware for their operation.	Support for Upload of a variety of file formats capture from S-Video, Composite, SDI, etc sources.	Single platform that addresses the diverse recording needs of the entire university community with options to "capture everywhere." Echo360 provides universities with 2 flexible options (hardware and/or software) for fixed classroom installments based on cost, technology sophistication of the classroom and the type of curriculum being taught. Personal capture allows instructors to easily create and publish learning objects, tutorials and other course content to augment their in-class instruction and recordings.	All-software capture - Unlimited number of primary (high-fps/low-res, with audio) media streams recorded across any number of computers, one primary stream displayed at a time during playback (if multiple are recorded, this is selected in editor). Unlimited number of secondary (low fps, high res, no audio) streams or PowerPoint/Keynote slides recorded across any number of computers, user can select which stream to display at view time.

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Company	Accordent	Cisco	Echo360	Panopto
Product	Media Management System	Cisco Digital Media Suite	EchoSystem	CourseCast
Lecture Capture Launch & Recording				
Instructor launch ad hoc / on-demand recording: (Front panel button/touch panel,IR remote,web/PC UI,Thumb drive)	REMAINING CONTENT AVAILABLE TO SERVICE SUBSCRIBERS IN 35 PAGE DOCUMENT	REMAINING CONTENT AVAILABLE TO SERVICE SUBSCRIBERS IN 35 PAGE DOCUMENT	REMAINING CONTENT AVAILABLE TO SERVICE SUBSCRIBERS IN 35 PAGE DOCUMENT	REMAINING CONTENT AVAILABLE TO SERVICE SUBSCRIBERS IN 35 PAGE DOCUMENT
Launch via PC/Mac client (No,Yes-enter course parameters,Yes-select from course list)				
Launch via web browser (No,Yes-enter course parameters,Yes-select from course list)				
Launch via centralized streaming management system				
Launch via audiovisual control system (AMX/Creston/Calypso) -- (Yes-API,Yes-turnkey,Yes-both,no)				
Pause and re-start recording				
Schedule launch via Outlook				
Schedule launch via SIS or LMS integration (No,Yes-schedule import,Yes-real time data exchange)				

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Company	Accordent	Cisco	Echo360	Panopto
Product	Media Management System	Cisco Digital Media Suite	EchoSystem	CourseCast
Scheduling parameters (Date/time, classroom, instructor)				
Schedule data input? (No, Manual entry, Batch import,real time data exchange,NA)				
Record without network connection?				
Student personal recording option (Yes-private, Yes-instructor view, Yes-class view,Not available)				
Audio Visual Support for Capture/Encoding				
Total number of selectable analog video inputs (composite/s-video) per device				
Total number of selectable digital video inputs (DVI/HDMI) per device				
PC/data input via XGA connector				
PC/data input via DVI/HDMI connector				
Supported video formats (16:9,4:3)				
Supported video frame rate @CIF (max)				
Supported video resolutions [1080p,1080i,720p,640x480,480x360,320x240,352x288(CIF)]				
Other supported video resolutions				
Supported screen capture frame rate @ 1024x768 (max) [30fps,25fps,20fps,15fps,10fps,<10fps]				

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Company	Accordent	Cisco	Echo360	Panopto
Product	Media Management System	Cisco Digital Media Suite	EchoSystem	CourseCast
Supported Encoding Formats				
Supported encoding bit rates (min and max - in kbps or Mbps)				
Windows Media (WMV)				
RealMedia				
Flash				
Apple QuickTime				
MPEG-1				
MPEG-2				
MPEG-4				
H.264 / AVC				
AVI				
PowerPoint presentations (No, Yes-live screen capture, Yes-uploaded file)				
Support for capture of closed caption information (Section 508 and ADA)				
Playback / Review				
Download required (for full feature set)--Some plug-ins may be required				
Client operating system				
Browsers supported				
Web browser - network connection				
Web browser - dial up connection (No, Yes-Slides and audio only, Yes-Slides video and audio)				
Multiple playback formats generated & used depending on device?				

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Company	Accordent	Cisco	Echo360	Panopto
Product	Media Management System	Cisco Digital Media Suite	EchoSystem	CourseCast
Audio podcast (iPod/MP3player)				
Video podcast (audio+video)				
Enhanced podcast (audio+video+slides)				
Smartphone client (phones supported)				
Smartphone client capabilities				
CD/DVD				
Set bookmarks during class (No, Student, Instructor, Both)				
Set bookmarks while viewing (No, Student, Instructor, Both)				
Annotate during class (No, Student, Instructor, Both)				
Annotate while viewing (No, Student, Instructor, Both)				
Submit questions during class				
Submit questions while viewing on demand				
Interactive Polls (No, Yes-during class, Yes-while viewing on demand, Both)				
Survey tool				
Print slides (No, Student, Instructor, Both)				
Content Editing Capabilities				
Video and/or audio editing (Audio, video, both audio and video)				
Slide sync editing				
Editing capabilities (<i>cut, insert, crop, replace audio, replace video, replace slides</i>)				
Manual entry/editing of metadata and keywords				

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Company	Accordent	Cisco	Echo360	Panopto
Product	Media Management System	Cisco Digital Media Suite	EchoSystem	CourseCast
Manual entry of closed captioning				
Automatic generation of closed captioning (No, Yes-speech-to-text, Yes-external service, Both)				
Insert external video clips / content with included editor				
Web/browser-based editing				
Comments				
Indexing Capabilities				
Thumbnails (Yes-Timeline, Yes-Screen snapshot, Yes-Presenter changes application)				
Search time-stamped text				
Manual Metadata entry				
Automatic Metadata capture - method (OCR, Text from Applications)				
Metadata search				
Search scope (Single lecture, Single course, All courses)				

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Company	Accordent	Cisco	Echo360	Panopto
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Search result listing (<i>None, Lecture only, Place in lecture</i>)				
Instructor bookmarks				
Learner bookmarks				
Public/private bookmark options				
Publishing / Notifying				
Publish session to Blackboard (<i>No, Yes-IT initiated, Yes-instructor initiated, Yes-automatic/no clicks</i>)				
Publish session to Desire2Learn / Sakai				
Publish session to Angel				
Publish session to Moodle				
Publish session to PeopleSoft / Oracle / eCollege				
Publish session to SCT				
Publish session to WebCT				
Publish session to iTunesU				
Publish session to existing web portal / catalog (<i>No, Yes-manual, Yes-via API, Yes-Both</i>)				
Publish selected sessions for public access (<i>No, Yes-by IT, Yes-by instructor, Yes-both</i>)				

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Company	Accordent	Cisco	Echo360	Panopto
Product	Media Management System	Cisco Digital Media Suite	EchoSystem	CourseCast
Notification of new recordings (No, Yes-email, Yes-RSS, Yes-both)				
Re-publish single class archived recording to current course (No, Yes-by IT, Yes-by instructor, Yes-both)				
Re-publish entire course archive to current course (No, Yes-by IT, Yes-by instructor, Yes-both)				
Authentication				
Authenticate against LDAP directory (No, Yes-import, Yes-real time API, Yes-real time turnkey)				
Organization's Active Directory (No, Yes-import, Yes-real time API, Yes-real time turnkey)				
Access via single sign on				
Access from Facebook login				
Course Authorization				
Access student/instructor roster for courses (Manual, batch import, directory integration, CMS Integration)				
Student/instructor data via SAML 2.0				

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Student/instructor data from Blackboard				
Student/instructor data from Desire2Learn				
Student/instructor data from Sakai				
Student/instructor data from Angel				
Student/instructor data from Moodle				
Student/instructor data from PeopleSoft/Oracle				
Student/instructor data from eCollege OR SCT				
Student/instructor data from WebCT				

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Company	Accordent	Cisco	Echo360	Panopto
Product	Media Management System	Cisco Digital Media Suite	EchoSystem	CourseCast
Set course level content access policy				
Reporting options				
Summary timeframes				
Watching activity by students (across all courses)				
Watching activity by course (No, Yes-all Students, Yes-by Student, Yes-Both)				
Media creation activity (No, Yes-by Instructor, Yes-by Other, Yes-Both)				
Outcome analysis				
User Portal / Community				
Support for customization of portal look and feel				
Presence indication of course peers				
Real-time chat with course peers (No, one-to-one, course wide)				
Pointer to lecture context within real time chat				

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Company	Accordent	Cisco	Echo360	Panopto
Product	Media Management System	Cisco Digital Media Suite	EchoSystem	CourseCast
Course-based threaded discussion				
Pricing Model and Options				
Pricing options (Number of classroom installations, Student FTEs, Concurrent users, Site license, Other)				
Other pricing options (comment)				
Site license options (if applicable)				
Describe your pricing model				
Representative configuration with price (on-premise or hosted)				
List of additional components needed for a full deployment not included in above configuration / price				
Support and Training				
Internal support staff required				

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Company	Accordent	Cisco	Echo360	Panopto
Product	Media Management System	Cisco Digital Media Suite	EchoSystem	CourseCast
On-site deployment support				
CMS integration services available				
Custom development services available				
On-site training availability (Instructors/Educators,application administrators,help desk,all)				
Remote training availability (Instructors/Educators,application administrators,help desk,all)				
Online tutorials available				
Other				
Are there other ways in which your product provides extra support to administrators?				
Describe ADA / 508 compliance				

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