Guidelines for Video Conference Systems at Emory

Equipment Standards:
Customers should purchase standards compliant video conference systems (H.323/H.320) to ensure interoperability. AAIT recommends Tandberg video conferencing equipment. Tandberg systems integrate well with room audio/video installations, are not susceptible to virus attacks off the network, offer enterprise wide solutions, are reliable and user friendly, and are low maintenance. Today, most new video conferencing codecs (encoder-decoder) ship with high-definition (HD) capability. New video conference codecs should have H.264 capability for optimal video compression (H.264 is a standard video compression algorithm).

Connectivity:
Video conferencing end-points can be IP only or have a combination of IP/ISDN connection capabilities. With Emory’s phone switch migrating to an IP system, future video conference user endpoints will be primarily IP only. Customers should partner with AAIT, Network Communications, and Emory Healthcare IS in their planning stages to evaluate their connection needs and to ensure communication between IP video conference endpoints through Emory’s University and Healthcare network firewalls. A central firewall traversal solution may be implemented in the near future.

Currently bridging IP and ISDN calls is accomplished using AAIT’s Multipoint Control Unit (MCU). AAIT and Network Communications will look at a centralized Gateway solution in the near future. A Gateway is a device that allows seamless bridging of IP/ISDN connections.

Customers wanting to host multi-site video conferences may request the use of AAIT’s MCU. The number of sites connecting depends on the speed (data rate) of the conference and each connecting site. Availability is on a first come first serve basis. Support charges apply if the customer’s video conference needs to be actively monitored. Details of the service can be found at: http://it.emory.edu/showdoc.cfm?docid=1009&fr=1012

Most new codecs have integrated HD capabilities so customers need to review their network connectivity and local bandwidth as HD requires higher bandwidth to transmit and receive. Actual HD call rates vary according to vendor products.

Existing Services:
Details of existing video conference services provided by AAIT and Network Communications as well as other video conference locations at Emory can be referenced on our website: http://it.emory.edu/showdoc.cfm?docid=921&fr=1012

Room Design Standards:
The design of video conferencing spaces depends on many factors requiring careful planning and consideration – room lighting, acoustics, space dimensions, layout, color and infrastructure requirements (i.e., connectivity running to and from your building). We offer room design consultation services within our AAIT Video Services team. AVYVE, our audio visual systems integrator, works in tandem with AAIT to form custom design recommendations to support your needs and will meet existing campus requirements.
**Recommended Vendors:**

**Stand alone Equipment and Room Integration:**

AVYVE  
Fred Mitchell  
404-209-8600  
fmitchell@avyve.com

Wire One Technology  
Carolyn Martin  
770-972-0556  
cmartin@wireone.com

Southern Business Communications  
Carol Cook  
770-449-4088  
ccook@sbcg.com

**Outside Conferencing Services (connectivity):**

InterCall – Global Conferencing Solutions  
Christy Britt  
706-645-8600  
cbritt@intercall.com

**Support and Maintenance:**

Customers need to consider ongoing support and maintenance of their video conference systems. If the systems are mission critical, customers might consider purchasing annual maintenance contracts for their video conference codecs (this would be a separate annual contract from room maintenance contracts). On-site, daily support should be considered and is based on customers needs. Because of our experience with Tandberg products AAIT may be able to assist in troubleshooting Tandberg installations. AAIT and Network Communications provide connectivity support and assistance with more in-depth troubleshooting support for departments that maintain their own systems.

**Desktop Videoconferencing:**

There are few standards compliant desktop video conference systems that work cross platform. Currently, we base recommendations on customer needs. H.323 standard clients include vPoint HD (PC), Polycom PVX (PC), Microsoft NetMeeting (PC – NetMeeting will not be supported with Vista; end users would need to use Microsoft Live Meeting), and XMeeting (Mac). Customers would need to purchase a desktop “package” including codec software/hardware, a webcam, and a headset or echo-cancellation microphone for their computers. We recommend Logitech cameras and Plantronics headsets. Again, firewall issues may be a concern depending on the network location of the user endpoint. Collaboration software, listed in the next section, also offer two-way video conferencing in their package of collaboration tools.
Collaboration Tools:
AAIT’s long term strategy is to support Windows, Linux, and Mac operating systems. Currently, AAIT recommends collaboration tool systems that are cross platform and integrate with current enterprise systems such as Blackboard and LDAP. AAIT recommends Elluminate and Horizon Wimba which include tools for text chat, document sharing, whiteboard capabilities, two way video/audio communication, etc.