Videoconferencing and webcasting is available to EQS-STAR Center partners for collaborative meetings, presentations and academic classes related to creation and dissemination of NYSTAR funded research. A Polycom™ multipoint conferencing unit (MCU) is used for standards-based videoconferencing at universities and research centers, including integrated telephone conferencing with desktop or cell phones. A Starbak™ server was recently added to enable global participants to view videoconference proceedings via webcasting with Windows Media Player™ or QuickTime™ desktop client software.

This poster describes the technological infrastructure and instructions on how partners can access the system to initiate videoconferences or webcasts.

Facility and staff survey research identified the telecommunications service priorities as:

1. Ease of operation
2. Ability to connect multiple locations regardless of transmission speeds or network infrastructure (IP or ISDN)
3. Ability to conference in phone participants
4. Participant-time zone flexibility through webcasting, video-on-demand and content storage
5. User-initiated ad hoc videoconferencing
6. DEVO administration of large, multi-site scheduled conferencing
7. Concurrent conferencing
8. Future system expansion
9. Data file exchange during videoconferences
10. Reliable hardware and vendor support

Videoconferencing can be accomplished through IP networks (H.323) or ISDN digital telephone lines (H.320). IP networks are preferred due to cost savings and quality — but require more extensive advance testing.

The core of the system is a “gatekeeper” (OK) — a database coupled with the MCU that registers users and enables maximum service flexibility (e.g. user-initiated conferencing/webcasting “on the fly”).

IP videoconferencing systems (desktop or conference room) must NOT be blocked by a central or departmental firewall. It is also highly desirable to be connected to a 100Mbps switched network data port (not a hub or pocket switch). Switched ports sometimes need configuration changes, which can usually be detected/diagnosed through the MCU during initial certification testing.

DEVO will assist university or departmental IT support personnel through equipment certification and videoconference equipment configuration.

To certify your site and use the system, contact the following people at the University at Buffalo:

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Results

McU utilization statistics (pictured above) reflect growth in demand for videoconferencing/webcasting over the first year. Additional features and capacity upgrades are scheduled for implementation.