ITRMC Information Technology Achievement Award Application 2009

Category: Group Award

Title of Nomination: Efficient Support of Classroom and Meeting Room Technologies via a Creative Control, Monitoring, and Preventive Maintenance System

Responsible Organization: Information Technology Services, University of Idaho

Project/System Manager: Charles “Chuck” Lanham  Nominated by: Harvey L. Hughett

Executive Summary: Situational awareness is a key factor when supporting the University of Idaho’s 70 technology-enhanced classroom systems with only a small group of technicians. High daytime utilization of these “smart” classrooms, along with a high ratio of rooms-to-technicians, generally precludes support personnel from making first hand observations of every room throughout the day. A well planned system utilizing control and monitoring elements was created and has enabled a small group of technicians to receive up-to-the-minute status of all campus classrooms at a glance and provide unprecedented support service.

With budget cuts and only a few technicians to oversee many rooms, it became necessary for Information Technology Services to adopt new support strategies to ensure that the classrooms remained well supported and reliable. ITS built a highly effective support program by integrating a few key components into each classroom.

The Constant Awareness and Quick Response System is actively monitored by technicians in the office, in the field, and at home via a Web-based status page, email and text alerts. Constant monitoring provides early warning and enables support technicians to repair, replace or provide a workaround to a problem quickly so classes almost never have to be cancelled or impaired due to equipment problems.

Multiple parameters are monitored including ping status for IP-controlled devices, projector on/off, filter hours, lamp hours, current user logged into system, last user logged into system, log-in date and time, PC status and server status. The Web page also has links to archived information, maintenance journals, system drawings and inventory data.

Touch panels, controllers and integrated systems can be fully controlled from anywhere that technicians have Internet connectivity via secure VPN access. IP addressable power controllers make it possible to remotely power-cycle an entire system in the case where a simple reboot isn't effective.

In summary, the University of Idaho was able to capitalize on in-house programming and electronics knowledge to create its own classroom technology support system. By doing this, the team saved a significant amount of money. Also, the program allows ITS personnel to receive instant alerts, rapidly take action to assist faculty users, resolve issues without having to travel to classrooms, and spot service trends which help keep operating costs low. The system also allows for development of preventive-maintenance strategies to help ensure that classroom technology systems are optimally supported and reliable throughout the year.