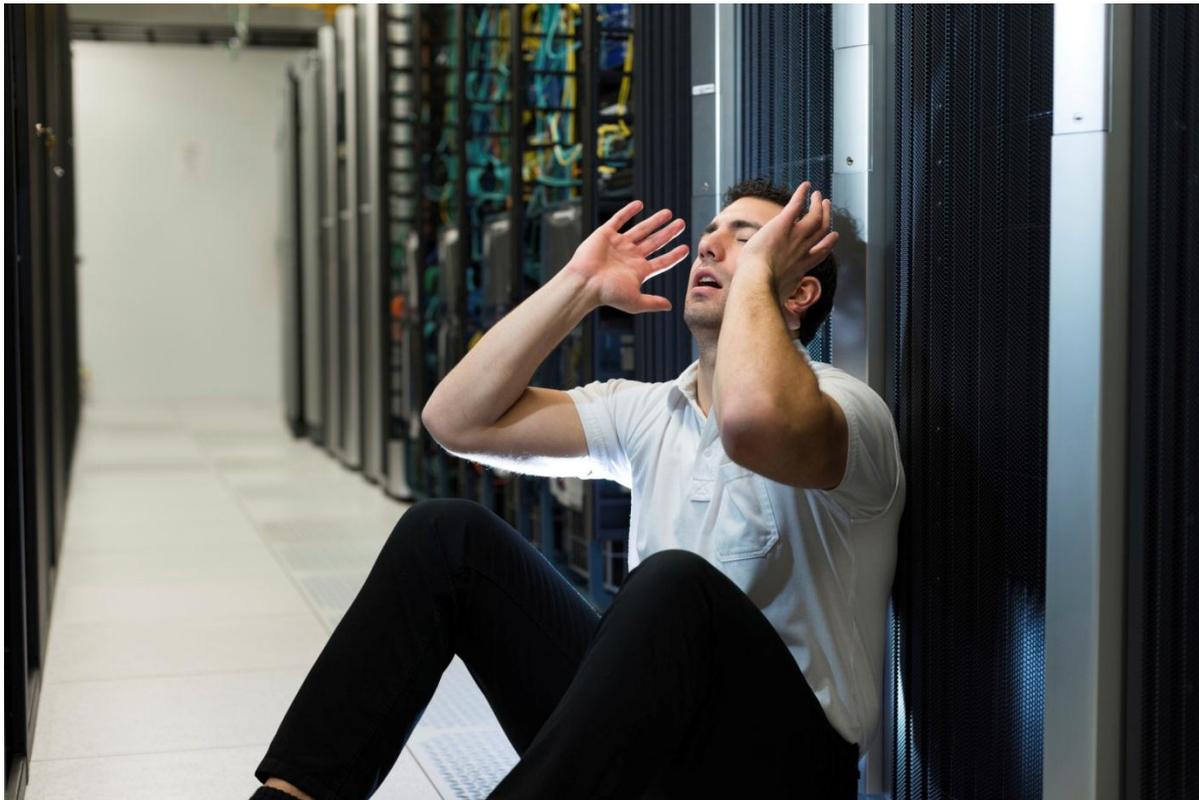


Ending the AV Tech Support Nightmare

All About AV Control and Conference Room Automation



Sophisticated conference room automation technology can work wonders: Control video conferencing equipment, connect mobile devices, switch easily between different inputs and outputs, control environmental features like lighting, control audio volume and much more. But it's essentially worthless if it's too difficult to use or maintain. This White Paper explains conference room control and automation, and shows how meetings are much more productive in controlled versus uncontrolled meeting environments.

It truly is a nightmare:

Why did those jokers in IT buy this lousy equipment? Where's the remote that operates this thing? Why won't that thing turn on? Call Tech Support now!

Studies have shown that 25 – 30% of all meetings are considered a waste of time due to issues with controlling or troubleshooting conference room technology like video conferencing systems, display projectors and mobile devices. For the IT or AV support person, this means an unending flood of urgent support calls, as well as taking the blame when things go wrong in an important meeting.



A SHORT HISTORY OF CONFERENCE ROOM DISASTERS

Not too long ago, a conference room was nothing more than a collaborative space with a table, chairs, white board and an easel with flip charts. This was soon followed by the advent of the Overhead Projector, a wonderful device that made overhead slides the focus of the business world. Then came a quantum leap in technology that made meetings much more exciting, productive and potentially disastrous: The Laptop Projector.

With the laptop projector came the PowerPoint presentation, along with the first wave of conference room technology problems. Why can't I get my slides to appear on the screen? How do I turn this thing on? Hey, this cable won't reach my computer! The projector bulb just burned out! Am I supposed to be able to read that gibberish on the screen?

Time to place an urgent call to Tech Support!

But it got worse from there. After many years in which the PowerPoint presentation and overhead projector were the center of the meeting universe, companies added an arsenal of capabilities to their meetings: Video and audio clips, internet access, document cameras, video conferencing systems, interactive presentations from multiple sources, and so on.

And so the modern conference room was born – along with a whole host of problems for the IT and AV support teams.

A BETTER WORLD: CONFERENCE ROOM CONTROL

To properly define conference room automation, we must first describe conference room *control*. A control system is an interface that includes a finite number of options for controlling the devices in the room. Think of a universal remote: It's where you press buttons to make your system take specific actions like show content from a laptop on a certain display, or dial a number for a video conference. Conference room control is valuable because it provides a simple way for a meeting participant to take command of all the room's technology.



An effective conference room control system centers around the user interface (UI). In most cases this is a touch panel or keypad on which a user presses buttons to execute certain commands. For example, a typical conference room UI might consist of a touch panel that includes buttons for turning on the projector, switching between a laptop computer and room PC, and a button (or sequence of buttons) for activating and controlling the video conference system. By providing an intuitive interface for controlling the meeting, you're reducing the number of support calls and dramatically improving user satisfaction.

WHAT IS CONFERENCE ROOM AUTOMATION?



Conference room *automation* is the next logical step that wraps a layer of intelligence around the control system. It's a smart system that combines multiple tasks into a single automated action. It's also where you add the valuable concepts of *scheduling* and *macros* to your control system. With automated scheduling, you can book a room and integrate its overall schedule with the schedules of meeting participants. You can also pre-configure a room so that the system is ready to use when attendees arrive so that there's no time wasted on waiting for a device to warm up.

With macros, you can combine several tasks into a single push of a button or scheduled command, as seen in the table below.

Desired Action	Series of Commands	Automated System
Prepare the room's lighting for a typical meeting	<ol style="list-style-type: none"> 1. Dim lights to medium 2. Close window shades 3. Turn on table lighting 	<ol style="list-style-type: none"> 1. Prepare lighting (Single action that encompasses steps 1-3)
Start Video Conference with West Region	<ol style="list-style-type: none"> 1. Raise light level to all on 2. Turn off table lighting 3. Power on VTC system 4. Power on LCD display 5. VTC audio volume to loud 6. Move camera view to center of table 7. Display phone keypad 8. Dial 1-800-555-5555. 	<ol style="list-style-type: none"> 1. Video Conference: West Region (Single action that encompasses steps 1 – 8)
Shut Down the Room	<ol style="list-style-type: none"> 1. Power off display 2. Power off projector 3. Reduce VTC audio volume to low 4. Power off VTC system 5. Power off DVD player 6. Turn off lights 7. Raise blinds 8. Display "Room Available" on panel outside door 	<ol style="list-style-type: none"> 1. Perform Room Shutdown (Single action that encompasses steps 1 – 8)

An automated conference room gives users the absolute best experience, and eliminates most of the problems that result in support calls.

A BUSINESS MEETING WITH NO CONTROL SYSTEM OR AUTOMATION

To best describe control and automation, look at how the same meeting might take place in three different conference room environments. Our first environment is a room with no control or automation – it's simply a meeting room with a laptop projector, a display, a DVD player and a video conference system – all with a separate remote control.



The first thing that happens is that people start showing up, not really sure if they're in the right place at the right time, since there's no room schedule displayed outside the room. Once that's resolved, the first presenter connects their laptop to the projector, only to find that the presentation won't show up on the display. They reach for the three remotes sitting on the table and start pressing buttons, not even certain which remote goes with which device. Somebody turns the projector on and off. Finally, through blind luck, they get the presenter's content to show up. Or, more commonly, they call for tech support.

But then another participant wants to show their content on the screen, so the first participant unplugs her laptop from the projector and hands the cord to the second participant. Sometimes it works, sometimes it doesn't. It's another opportunity for a call to tech support.

Then another participant wants to show a video clip from the room's DVD player, which is connected to a small display. Time to shut down the projector, turn on the display, turn on the DVD player and dim the lights. This all takes considerable time, because these devices need time to warm up.

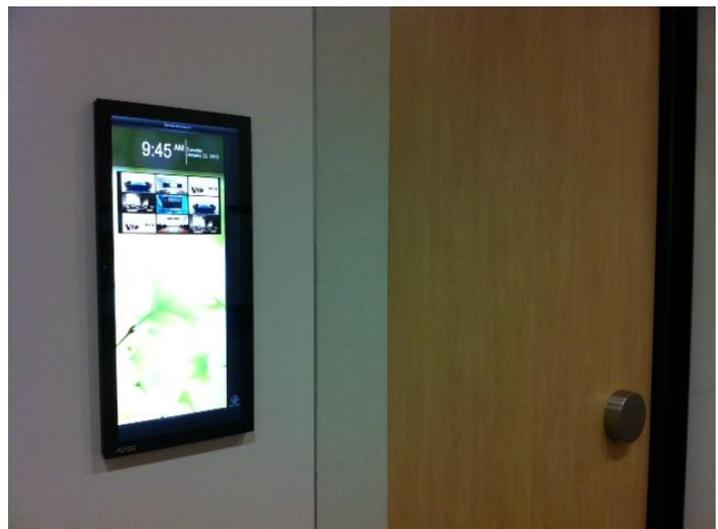
When the meeting's finally over, the participants file out of the room, leaving the lights and equipment powered on and wasting energy.

I think you get the picture: A conference room without control is a conference room out of control.

A BUSINESS MEETING WITH A CONTROL SYSTEM

The contrast between a meeting held in a room with a control system and a room without one is striking. In this case, the conference room has a touch panel outside the door that displays the room's schedule. Attendees glance at the schedule and know that they're in the right place at the right time.

In this room there's a touch panel on the table that controls all the room's equipment, along with an architectural connectivity solution that



provides users with a quick and easy method for connecting their devices to the system. To start the meeting, the first attendee connects a laptop to the cable extending from the connectivity solution. They touch a button on the touch panel, the projector powers on, and after a minute or so of warm-up, the content appears.

When it's time to switch to the second presenter, that person simply connects the cable to their PC, and their content instantly appears. When it's time for the DVD, they press another button while an attendee dims the lights. After a minute of warm-up, the video is playing.

When the meeting's over, the meeting organizer presses a "shut down" button on the touch panel, and everything in the room turns off. All in all, it's a vastly superior experience for the attendees, with far fewer chances for a support call to IT.

THE PERFECT MEETING: A BUSINESS MEETING IN AN AUTOMATED CONFERENCE ROOM



Now it's time to envision our meeting as it would take place in an automated conference space. Whereas the first action we saw in our previous scenario was the arrival of the attendees, we need to go further back in time for the automated meeting. That's when our meeting organizer scheduled the meeting and requested that the system prepare the room in advance so that the meeting is ready to start once attendees arrive.

Five minutes before the scheduled start time, the system automatically powers on the lights, projector, DVD player and display. It only takes a few seconds for the first presenter to connect her laptop and start her presentation. And it takes no time at all to switch to the second presenter.

Since the DVD player and display are already warmed up, it takes no time to switch to that content source. With the single push of a button, the lights dim, shades lower and the DVD starts playing. And when the meeting's over, the conference room automatically shuts down the system to save energy costs or powers equipment on and off based on the parameters required for the next meeting. No problems, no delays, and no support calls or angry employees pointing fingers at the IT staff.

TAKING ACTION

Now is the time for IT and AV staff to be the heroes. It's easy and cost effective to automate or upgrade the existing equipment in a conference room. AMX offers the entire solution for eliminating the IT or AV support person's nightmares, including an intuitive, easy-to-use user interface, reliable switchers and controllers, effective and elegant architectural connectivity solutions, and enterprise software that allows support teams to remotely troubleshoot, monitor and manage their AV assets.