



AVOCENT® SOLUTIONS FOR THE  
BROADCAST CONTROL ROOM

Driving Innovation in  
Omni-Platform Broadcasting





“Consumers increasingly seek new, immersive digital experiences in which they control the action, from any device in any location. To achieve high performance while engaging the connected consumer, broadcasting companies must provide innovative, end-to-end multi-screen video services while reducing time to market and operational costs. Thriving in this environment means finding new ways to engage audiences, monetize those engagements, and better manage the user experience and content workflow.”

*“The Digital Experience: Engaging the Connected Consumer”, Accenture*

### The Control Room Challenge in an Omni-platform World

The simple broadcast world of getting a tape or satellite feed, preparing it, broadcasting it at a fixed time and filing it away is long gone.

Now, broadcasting is a complex web of content coming over every possible device from viewers’ mobile phones and audio recordings posted on social media to professionally produced, high-definition video sent via the web. Post-production and broadcasting are equally complicated as all this content must be edited, stitched together and then optimized and delivered on demand to multiple channels and devices including televisions, computers smart phones, tablets, and even smart watches.

It’s been hard for broadcast control rooms to keep up with the warp speed of change to an omni-platform broadcasting landscape. Too often, they are hot, noisy, crowded places that thwart efficiency. Users are forced to move from place to place—and wait their turn—to access video editing, color correction and all the other systems and applications they need to get work done. Collaboration is nearly impossible with one-at-a-time access to each machine.

Equally problematic are escalating control room costs and risks. Broadcasters must purchase expensive systems in multiples to meet users’ needs. IT struggles to maintain the equipment and control over access, while equipment in control rooms is exposed to accidental or willful damage. And—as too many recent news reports demonstrate—organizations that maintain broadcast systems as part of the overall corporate network are easily brought down by hackers.

## Avocent® Drives Innovation in the Broadcast Control Room

Only Avocent solutions for the control room make it easy to manage and use all the tools needed to prepare and deliver content in an omni-platform broadcasting environment.

Avocent supports critical business applications with the highest performance, reliability and scalability, delivering the power to improve time-to-market, streamline work and substantially reduce risks and costs.

Avocent offers solutions for every type of broadcast control room. With Avocent, you are not forced to purchase technology that either doesn't deliver the power and flexibility you need, or demands unnecessary expense. Whether you require a direct connection environment for using mouse, keyboard and video; want the ability to use digital technology running over your network; or need a direct connection capable of supporting digital technologies, Avocent offers solutions to fit your needs.

And Avocent can grow and evolve right along with your business. All of the Avocent high-performance solutions can be sized to deliver an operating environment that exactly matches your business requirements.



Photo: Featured project by the Azzurro Group for Time Warner Cable News, YNN Albany, NY.

## KEY AVOCENT CAPABILITIES FOR THE BROADCAST CONTROL ROOM

- Enables instant, transparent access to every control room system from local and remote locations
- Delivers a high-fidelity, pixel-perfect experience to every user
- Promotes collaboration by allowing users to share systems
- Effectively manages user access to systems and applications with fine-grained access controls
- Enables IT to centrally manage every control room system from a single console
- Increases security and reduces risk by isolating control room systems from corporate networks
- Offers seamless failover in seconds with a high-quality user experience

## Accelerate User Efficiency and Productivity in the Control Room

With Avocent®, broadcast control rooms can become models of efficiency and productivity. Avocent makes it easy to manage the digital workflow by providing fast, high-quality access from the workspace to all the systems needed to get work done.

- **Avocent provides quick, simple access to an unlimited number of systems from the user's workspace.** No need for users to physically move from place to place—they can switch between systems in seconds and with just a few keystrokes, while Avocent's switching assures instantaneous access.
- **High-performance extension technology** eliminates the need to keep machines in the control room itself, creating a far more comfortable, work-conducive environment.
- **Avocent solutions provide seamless migration from VGA to DVI connections,** reducing time and costs for evolution from analog to digital technologies.
- **Platform-agnostic technology delivers pixel-perfect quality for a broad range of inputs** from all types of systems and peripherals such as touch screens, control surfaces, USB devices and high-definition video. Even when target computers are remotely located, Avocent can provide a high-fidelity user experience just as if the user were directly connected to the system.
- **The flexibility to share expensive resources promotes collaboration,** as both local and remote users can instantly switch between targets and share screens and sessions.
- **Instant switching to hot standby machines eliminates downtime.** Users can switch in seconds without having to wait for IT assistance, ensuring work can continue without interruption when an equipment failure occurs.





Photo: Featured project by the Azzurro Group for RTTV, Washington, DC.

## Simplify IT Management and Reduce Risk

Avocent® streamlines control room technology management. IT organizations can reduce the time and costs to install, provision, monitor and troubleshoot systems while increasing the security of the environment.

- **Centralized remote management provides a single source of truth** about all control room assets—regardless of type, vendor or location. IT can automate the process of finding, connecting to and administering systems through a single console.
- **Real-time status information and instant diagnostics** help IT simplify monitoring and maintenance, as well as forestall downtime and rapidly diagnose problems.
- **Plug-and-play installation** brings new equipment and systems online faster.
- **High-performance extension capabilities allow systems to reside in a separate, secure location** to minimize the potential for damage and increase availability in a properly maintained environment.
- **Fine-grained access controls** ensure the right user has access to the right system. Avocent's tiered, role-based access control for devices, data and USB-attached peripherals can authenticate users against existing authentication services, such as LDAP or Active Directory.
- **Avocent analog and digital solutions minimize risk.** By isolating your broadcast systems from the rest of your network, Avocent can prevent hacking or penetration via entry elsewhere on the corporate network.
- **Instant switching to hot standby machines delivers seamless failover** while eliminating any single point of failure and continuing to deliver a pixel-perfect experience. IT staff can repair systems during normal working hours to reduce costs without impacting availability.
- **Options for command line system management via serial console and service processor** increase IT flexibility and responsiveness.
- **Vertiv offers extensive, highly experienced support services** to make your implementation of Avocent solutions for the broadcast control room as rapid and cost-effective as possible.

## Build a More Efficient Control Room with Avocent Broadcast Solutions

- Increase user productivity with simple, rapid access to multiple systems and peripherals
- Gain true image reproduction and display flexibility with support for ultra HD systems and mobile devices
- Simplify IT with plug-and-play installation and instant access to any local or remote system
- Reduce costs with the ability to share equipment, reducing purchases
- Optimize availability by removing systems to a secure location, minimizing the potential for damage and increasing availability with proper thermal management
- Maintain uptime with seamless failover to hot standby machines in seconds

## Reduce Capital Equipment and Operating Costs

Avocent® helps broadcast owners and executives achieve a far more nimble control room environment at significantly lower cost. Broadcasters can share resources easily to increase user productivity, boost IT efficiency and reduce the number of systems and control rooms required to support the business.

- **Gain the flexibility to share mission-critical systems.** Local and remote users can transparently switch between and share systems and applications, doing away with the need to move people and systems around, as well as build multiple control rooms.
- **Achieve more efficient, lower-risk redundancy over virtual machines.** When a failure occurs and hundreds of users must switch to a virtual standby system, performance and productivity quickly degrade. Avocent eliminates the risk with the ability to direct each user to a different hardware target. If the target fails, just one user needs to switch to a hot standby machine.
- **Lower the costs of “over-redundancy.”** Typically, each workstation has its own hot standby, requiring a large investment in expensive duplicate equipment. With Avocent, users can share standby machines, cutting the number of duplicate systems to as low as two because every user in the control room can access them.



Photo: Featured project by the Azzurro Group for RTTV, Washington, DC.

## Avocent® Solutions for Broadcast Control Rooms

Vertiv offers the most comprehensive portfolio of High Performance KVM solutions designed to meet a range of customer requirements. Learn more about the family of High Performance Solutions at: [VertivCo.com/AvocentKVM](http://VertivCo.com/AvocentKVM)

**The Avocent Matrix High Performance KVM** is a solution for environments where security and quality are paramount. The Matrix solution is a self contained high performance switching system, that includes the matrix switch, as well as the receiver and transmitter. The system supports both digital and analog video input, as well as switching of USB devices, audio and microphone.



*Avocent Matrix 5132*

**The Avocent HMX High Performance KVM** delivers industry-leading image quality and flexibility. Avocent HMX is a digital system that utilizes standard IP network switching for extension. The addition of the HMX Manager enables any-to-any connections without complex switch designs. Also, connections can be managed and permissions can be defined and enforced all from a centralized console.



*Avocent HMX 5000*

**The Avocent LongView KVM Extender Solution** provides point-to-point extension for digital and analog applications that require high quality over great distances. With each LongView 3000 extender, the distance from the target system can be extended up to 300m. The LongView 5000 Series is designed for a desktop experience and provides full-function connection for up to six human interface devices and delivers video resolutions up to 4K.



*Avocent LV 3000*

*Avocent LV 4000*



*Avocent LV 5000*



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