Multi-tenant data center providers have a single focus: the service they provide their tenants. Generally, that service view is centered on the data center: power, cabinets, thermal controls, security, and the necessary bandwidth to adequately meet the needs of their tenants.

AV solutions are also part of that overall service. Many times, AV solutions and requirements are overlooked or put off until the rest of the facility is complete. However, by incorporating AV needs into the infrastructure planning and design, it is easier and less expensive to add the AV solution when the time comes. The AV infrastructure and equipment is a natural extension of the infrastructure put in place during the initial construction.

When you design other Panduit solutions into the MTDC facility, is the right time to incorporate the Atlona AV solutions and the infrastructure to support them.

Where is AV found in a typical MTDC? There are several common applications:

- Digital Signage
- Network Operations Centers
- Office Conference Rooms

Each of these applications have their own unique requirements and equipment designs.
Digital Signage

Frequently, a main building or office at the MTDC site will serve as a place to greet potential tenants, offer customer tours, or host visitors for meetings. In those spaces, digital signage plays a critical role in getting the right message across to prospective customers.

Atlona OmniStream™ is a flexible, scalable, and cost-effective AV over IP distribution platform that is ideal for digital signage deployments.

The AT-OMNI-112 dual-channel networked AV encoder handles encoding of two HDMI sources at resolutions up to 4K/UHD HDR onto a gigabit Ethernet infrastructure. Sources connected to the encoders are a mix of computers, set-top boxes, and media players, allowing a wide array of content to be available for display on the digital signage displays. This includes corporate promotional videos, tour messaging and videos, social media feeds, news, event schedules, and more.

AT-OMNI-121 single-channel networked AV decoders handle decoding of network streams and image processing, as well as provide AV content up to 4K/UHD HDR and control signals to their assigned displays.

OmniStream endpoints support logo and scrolling text overlay as well as display of stored images. This allows content such as logos, contact details, or other general information to be shown when an active stream is not required.

The Atlona AT-VGW-HW-3 Velocity™ hardware gateway acts as the central control processor for the system. Over network connections, the gateway handles routing for the encoders and decoders, as well as display power and audio level controls. The Atlona AT-VTP-800 touch panel provides intuitive user access to select sources to display.

Network Operations Center (NOC)

Centrally located for organizational support to ensure data center integrity, the Network Operations Center (NOC) is an important application for AV infrastructure. Options include bringing signals into the NOC from far end locations, to multi-screen video walls for operational dashboards and systems monitoring.

These video walls are an adaptation of digital signage, so the design for the NOC would utilize similar AV over IP solutions from Atlona and Panduit. OmniStream encoders and decoders take the stream from the source computer to the video wall displays. With visually lossless technology built in, video streams never appear to be delayed in getting to the video wall or other AV over IP connected display in the NOC, ensuring real-time responsiveness.
Multi-tenant data centers need office and conference spaces for tenants to perform onsite work and hold meetings. Since these conference rooms and offices might have multiple people from different organizations using them, the AV technology must accommodate multiple inputs and outputs in a way that’s cost-effective and easy to use. Adding video conferencing capabilities allows teams to be spread over geographical distances while collaborating.

The Atlona Omega™ Series is designed for today’s meeting and gathering spaces. It is ideal for AV presentation, collaboration, and video conferencing applications.

The Atlona AT-OME-MS52W 5×2 matrix switcher with USB and wireless link is the heart of the AV system. Mounted at the conference table, it provides USB-C, HDMI®, and DisplayPort connections, which allows users to connect to the system from any BYOD device or the resident PC in the room. It also supports native wireless AV casting so users can mirror content from their devices without needing to download and use a proprietary app. The AT-OME-MS52W manages all audio sources and levels, providing the content to the amplifier through a stereo audio output.

The Atlona AT-OME-MS52W also features both HDMI and HDBaseT video outputs which can display either the same or independent content. This matrix capability is crucial for viewing two sources simultaneously, such as when evaluating different ideas, or during video conferencing when presentation and participant gallery views are required.

The Atlona AT-HDVS-CAM delivers professional-grade video that is superior in image quality to a conventional webcam. Motorized pan, tilt, zoom, and preset support allows precise framing and recall for various meeting configurations.

Atlona’s Velocity™ Control System makes it easy to control the AV system. An intuitive graphical user interface, or GUI, on the Atlona AT-VTP-1000VL touch panel provides convenient access to system power, audio levels, source selection, camera presets, and room scheduling. The Atlona AT-VGW-HW-3 Velocity hardware gateway acts as the central control processor for the system. Over network connections, the gateway takes user input from the touch panel or a BYOD device and sends commands for display power, source input selection, audio level settings, and a variety of other functions.
## Product Information

<table>
<thead>
<tr>
<th>Atlona Part Number</th>
<th>Product Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AT-OMNI-112</td>
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</tr>
<tr>
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</tr>
<tr>
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<td>Atlona PTZ camera with USB</td>
</tr>
<tr>
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<td>Atlona Velocity System hardware gateway</td>
</tr>
<tr>
<td>AT-VTP-800</td>
<td>Atlona Velocity 8” touch panel</td>
</tr>
<tr>
<td>AT-VTP-1000VL</td>
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</tbody>
</table>

Whatever your AV needs are in the MTDC, Panduit and Atlona can help. Contact us today to learn more about incorporating AV solutions in your colocation data center.