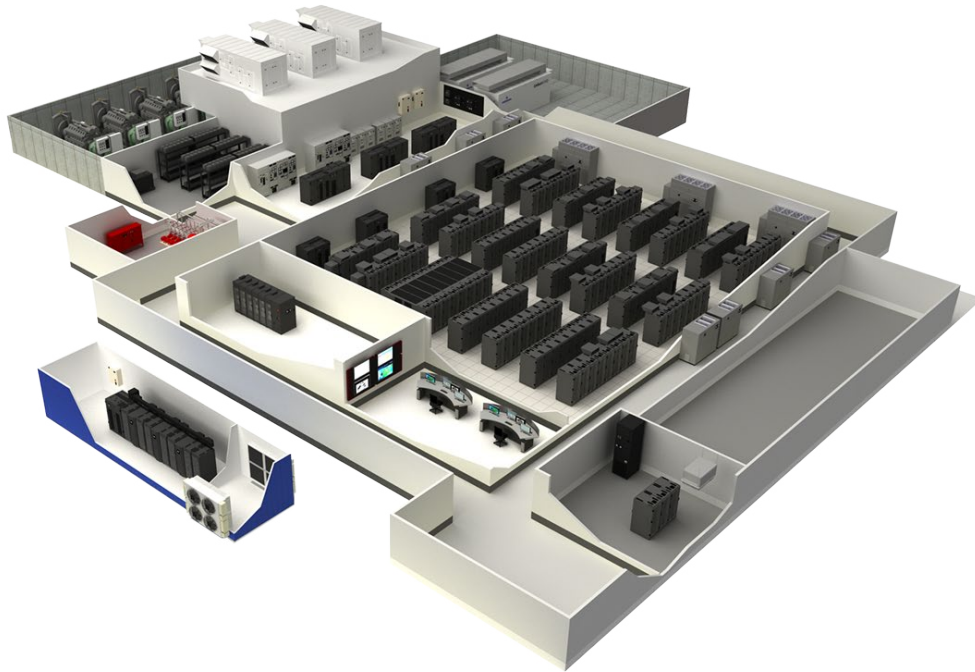## AV in Multi-Tenant Data Centers

Add AV Capabilities During Initial Build to Improve Efficiencies

Multi-tenant data center (MTDC) 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, it's the right time to also 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.

In an AV over IP system, signals are distributed over a data network, which allows very flexible scalability for serving numerous signage displays throughout the facility. OmniStream offers several performance and AV presentation features, including the advanced VCx™ codec, which delivers pristine-quality, 4K/60 graphics and video content for digital signage and other applications.

OmniStream features ultra-fast switching between 4K/60 video streams, the ability to view multiple sources on a single display, processing for video walls, and the option to overlay a corporate logo, scrolling text, or a full-screen image.

An OmniStream system includes **AT-OMNI-111** or **AT-OMNI-112** networked AV encoders and a series of **AT-OMNI-121** networked AV decoders. A typical digital signage AV over IP system comprises one or a few AV sources and encoders serving a large number of decoders and displays.

The Atlona **AT-VGW-HW 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-700VL** touch panel provides intuitive user access to

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. Signal sources are typically brought into the NOC from far end locations, to multi-screen video walls and other displays for operational dashboards and systems monitoring.

AV over IP is ideal for distributing AV content throughout the NOC. OmniStream encoders and decoders route the streams from source computers to the video walls and other displays. The advanced VCx codec delivers ultra-low latency from source to display, enabling real-time responsiveness for staff members.

Office/Conference

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-MS42** 4×2 matrix switcher with USB hub 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. The **AT-OME-MS42** manages all audio sources and levels, providing the content to the amplifier through an analog audio output. The addition of the **AT-WAVE-101** allows wireless AV casting, so users can share content from their mobile devices.

The **AT-OME-MS42** also features two 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 **Captivate**™ **AT-CAP-FC110** delivers high-quality video with pan, tilt, zoom, and preset controls along with convenient auto-framing capability for one or more meeting participants.

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** 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

Atlona Part Number	Product Description
AT-OMNI-111	Atlona OmniStream networked AV encoder
AT-OMNI-121	Atlona OmniStream networked AV decoder
AT-OME-MS42	Atlona Omega 4×2 matrix switcher with USB hub
AT-CAP-FC110	Atlona Captivate 4K ePTZ auto-framing camera
AT-WAVE-101	Atlona wireless presentation platform
AT-VGW-HW	Atlona Velocity System hardware gateway
AT-VTP-700VL	Atlona Velocity 7" touch panel with side-mount bezel LED lighting
AT-VTP-1000VL	Atlona Velocity 10" touch panel with surround bezel LED lighting

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.