Panduit

## How a Physical Technology Leader Innovates Plant Network Visualization

Born from innovation over 60 years ago, Panduit is a trusted industry leader and global manufacturer of physical technology equipment.

Real-Time Visualization of Industrial Environments

Industrial IT professionals manage multiple connected devices in their day-to-day; this can cause detection, diagnosis, and problem resolution to become a costly and time-consuming task. To bridge the gap between IT and the plant floor, Panduit created the IntraVUE™ platform.

The platform is an Ethernet support tool for automation engineers and technicians in industrial environments. It provides network administrators with visibility into critical plant network infrastructure.

IntraVUE™ addresses the challenges unique to industrial environments by leveraging real-time visualization, monitoring and capturing data at-a-glance, diagnosing network problems from any location and accelerating troubleshooting with advanced analytics.
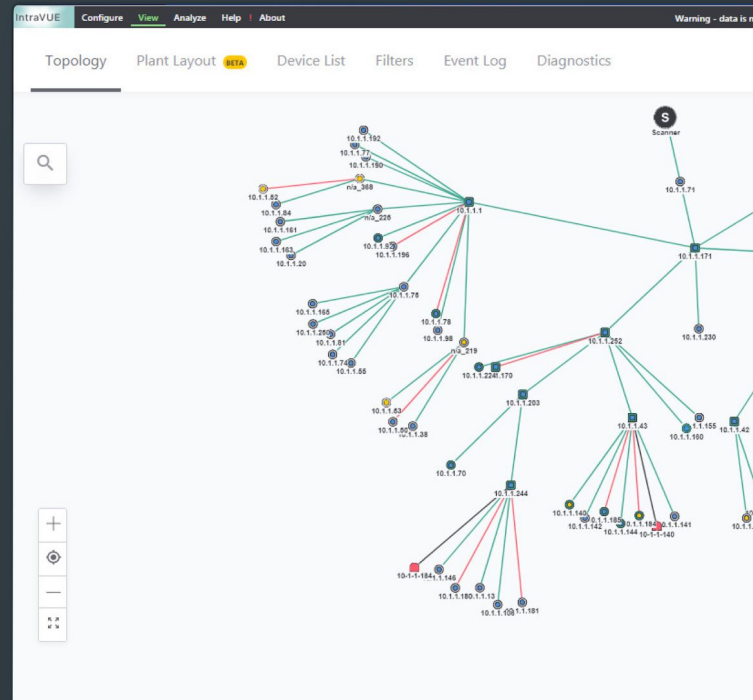
Making the Move to a Modern Tech Stack

Panduit's existing IntraVUE™ platform included challenges that were impairing network administrators' ability to complete necessary tasks. They required a more intuitive and modern user interface to give them the information they needed at a glance.

Panduit wanted a centralized hub for customers to access where they could visualize and extend their infrastructure. These requirements required modernizing the technology stack to improve performance and development efficiency.

As a fellow innovator, Panduit chose to work with Rangle due to the company's past experience modernizing legacy technology, as well as a proven understanding of design process and usability. Rangle's track record establishing partnerships with clients, enabling teams, and following a continuous delivery model made it the right fit for bringing IntraVUE™ into a modern tech stack with a fresh design.
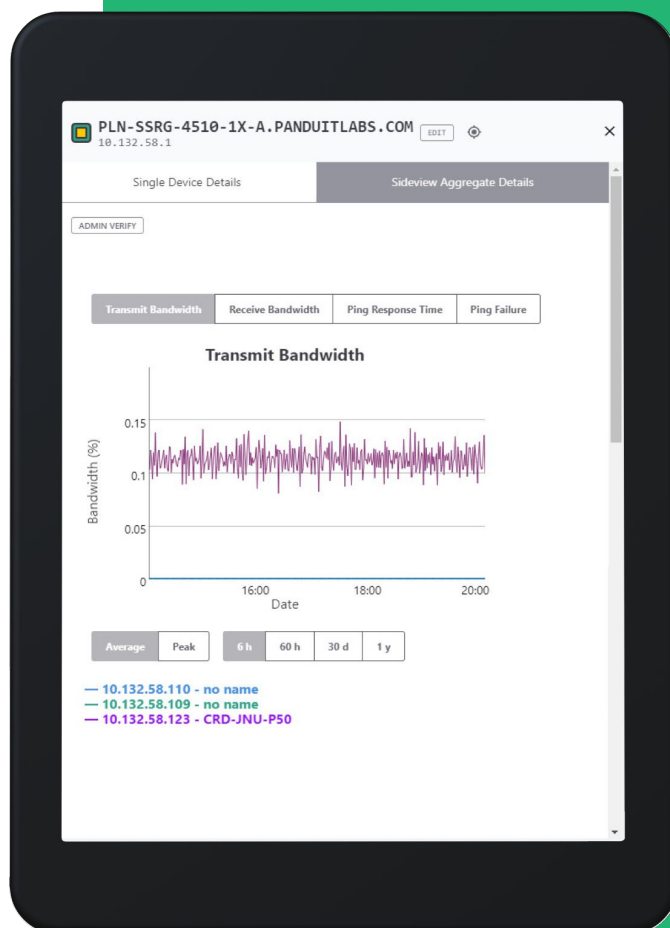
> The Rangle team brought a high level of expertise in a way that felt like they were a part of our own team. Throughout the process, there was little need for working through management because the team was self-organizing and 100% dedicated to our customer's goal.

Jim McGlaughlin

Software Delivery Manager, Panduit

Intuitive, User-Friendly Design for Presenting Complex Information

Understanding that design is about more than just the look of a product, Rangle and Panduit prioritized accessibility criteria by familiarizing themselves with industry standards.

Providing a tool that functions in an intuitive way is important, but it also has to be legible to users with vision impairments, and display properly across different screen sizes and operating systems.

No detail went unexamined when it came to color contrast, typography, and overarching web standards. The final result is a highly accessible tool that is easy on the eyes, both literally and figuratively.

Driven by User Feedback

After having created the previous version of IntraVUE™, Panduit had a good understanding of what was required to bring it up to date and improve usability.

One of Rangle's core beliefs is to test early and often, so the Rangle team employed that approach throughout the process. Constructive feedback is helpful in these cases, as beta tests revealed more in-depth information from the perspective of the Network Administrators who are the end users of the software.

By incorporating user testing throughout the design and development process, usability and product requirements were refined quickly. Armed with this knowledge, the Panduit and Rangle teams focused on what matters and didn't waste time traveling down the wrong path.

Bringing Developers Up to Speed

The new technology stack enables Panduit to address and incorporate customer feedback more quickly and easily than their earlier platform. Their development team was also trained on the new technology stack, enabling them to continue enhancing the platform in-house.

Business Benefits

➔ Armed with these capabilities, IntraVUE™ empowers professionals to shift to a proactive approach to documentation and uptime, which can greatly improve both the uptime and performance of critical, real-time networks.

➔ Positive feedback from Panduit customers on how IntraVUE™ is helping them improve their business:
- "I really like it. Instantaneous view of how everything is connected."
- "I've started using the new version on my laptop and am enjoying the improvements a lot!"
- "Greatly improved tool over the old one. I like the double-click instead of dragging."

➔ A hint into the future of the platform and how it will continue to evolve to solve Panduit's customers' needs.

> " Rangle mirrored our approach to start where our customers wanted to grow, rather than the current offering capabilities. As a result, we not only brought our offering generations ahead, but at the same time were able to orient our value proposition toward new customer challenges. "

Mike Vermeer

Manager of Industrial Software and Services, Panduit