Accelerating 400GE Adoption with IxNetwork
Founded in 2007 and located in São José do Rio Preto, in the state of São Paulo, Brazil, WZTECH Networks is a high-tech solution provider that works with Tier 2 Internet service providers (ISP) and enterprises with a focus on networking innovation, state-of-the-art solutions and attractive financial arrangements for their customers and business partners.

WZTECH Networks integrates backbone, metro, optical, enterprise and cybersecurity solutions including equipment from Juniper Networks (Elite Partner), Ruckus Networks, Fujitsu, F5 Networks, Keysight Technologies and a number of other network and IT vendors.

Keysight has worked with WZTECH Networks as a trusted technology advisor and solution partner for several years.
Challenges

WZTECH Networks has been using Keysight 100GE test solutions since 2018 to validate Ethernet deployments for their customers. This capability enabled them to roll out 100GE to their ISP customers. Brazil is the fifth-largest market for internet access globally with 150 million users, ranked behind China, India, U.S., and Indonesia.¹ The increasing number of Brazil’s internet users drives explosive growth in demand for internet access and bandwidth.

In response to this demand, WZTECH Networks’ ISP customers are increasingly eager to deploy 400GE. They are asking not just for 400GE but specifically for quad small form factor pluggable double-density (QSFP-DD) interfaces, support for a point-to-point protocol (PPPoX), multi-protocol label switching (MPLS), and dynamic routing protocols such as border gateway protocol (BGP).


IxNetwork (left), with AresONE (right).
Solutions

Keysight put together a solution that enabled WZTECH Networks to validate 400G Ethernet and the various protocols using IxNetwork test software and our high-performance AresONE 400G test platform.

WZTECH Networks was able to test the protocols they needed, including MPLS, BGP, and more. More importantly, technicians could generate realistic traffic flows that reflected an actual production network with the flexibility to handle SDN, broadband access, and comprehensive coverage for routing and switching traffic.

The AresONE 400G test platform brings industry-leading density with four- and eight-port options in a fixed two-rack unit form factor supporting both octal small form factor pluggable (OSFP) and QSFP-DD optics. The platform can test line rate performance at all speeds on all ports with coverage for 400G media access control (MAC), personal communications service (PCS), and forward error connection (FEC).

Results

Knowing the needs of tomorrow will differ from the requirements of today. Keysight collaborated with WZTECH Networks to help protect their test investment with a three-year investment plan. The AresONE 400G test platform controlled the up-front costs because the platform is:

- Available in both 4-port and 8-port reduced and full-performance models.
- Scalable and field-upgradeable from 4-ports to 8-ports reduced to full-performance models.

The AresONE 400G test platform enables you to start on a small-scale and expand later as your test requirements increase. In addition, up to six AresONE 400G test platform units can sync in a star topology cluster to enable significant growth from a cost-effective starting point.
Conclusion

WZTECH Networks, an established Keysight customer, came to us with a need to test and validate 400GE solutions for ISPs and other customers. They worked with a local distributor to secure creative financing options protecting their investment from any exchange rate volatility.

Keysight offered a solution package that enables WZTECH Networks to test using state-of-the-art 400GE testing platforms — IxNetwork and AresONE — using a cost-effective pricing strategy. This solution gave the company the ability to scale over time by implementing the three-year investment plan.

Learn more about Keysight IxNetwork test software and AresONE’s 400G test platform.