

## BUSINESS OBJECTIVE: NETWORK MODERNIZATION WITH RESPONSIVE SUPPORT, IMPROVED SECURITY

Two-thirds of this large U.S. financial services company’s small business customers are completely dependent on the Internet for their day-to-day operations. As a result, network reliability and availability are paramount. So the fact that the company’s existing legacy network was becoming unreliable was an issue. What’s more, the company could not get timely bug fixes from complacent legacy networking vendors. Or, in one case when it did get a bug fix, after installation the fix took the company’s network down.

The financial services company also wanted to upgrade its network to counter the primary security threat to its small business customers – business e-mail phishing attacks. About 30 percent of these bogus communications were opened by their intended recipient. Sadly, about 60 percent of small businesses whose financial records are breached in this manner go out of business within six months of the event.

To counter this predation of its customer base, the financial services company turned to Pica8 to layer on switch-based intrusion detection, prevention and monitoring for its small business customers e-mail, POS and back-office computer systems. This was accomplished by adopting Pica8’s unique CrossFlow™ technology – a standard component of Pica8’s industry-leading Linux-based PICOS® network operating system for disaggregated open white box networking switches.

On top of adding this Pica8-only network-based security upgrade, the company was able to take advantage of the Pica8 Automation Framework to automate the process of distributing configuration upgrades to hundreds of campus and branch office switches. The technology upgrade also improved both the reliability and bandwidth availability of the company’s overall enterprise network by using Pica8’s automated switch orchestration software application to remove any dependency on the decades-old Spanning Tree Protocol – a requirement that was built into their existing legacy-vendor network.

### CUSTOMER PROFILE

This U.S. financial services market leader offers SaaS-based financial and tax accounting, electronic payment/ collection services, and insurance to businesses of all sizes – from startups through the very largest of enterprises. The company has hundreds of campuses and branch offices throughout the United States and is actively replacing legacy switch stacks and large chassis switches with Pica8’s PICOS network operating system running on multivendor open white box switches. It is using the new Pica8 Automation Framework to streamline the switch software upgrade process and drastically simplify the deployment and on-going operations of its new open enterprise open network.

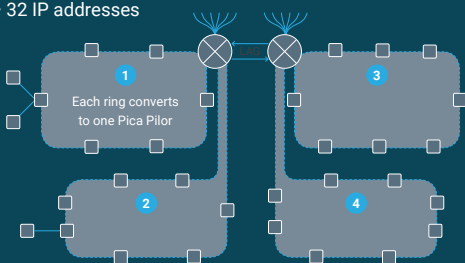
### Select customer PICOS features include:

- Protection of financial information via enhanced intent-based network control (CrossFlow)
- Automated distribution of switch software upgrades to hundreds of distributed open network switches (PAF)
- Collection of syslog, trap and counter entries for security threat event reporting
- Use PICOS’s monitoring capabilities to either discard threat traffic or deliver it to SecOps
- Reduction in number of managed network elements by a factor of 10x-50x (PicaPilot)
- 802.1x (Wi-Fi), IGMP, IGMP snooping, DHCP forwarding and snooping
- Eliminate bandwidth-constraining STP from company’s access network with PICOS MLAG
- Use POE/POE+ with PICOS and LLDP to recognize and place VoIP phones and cameras in their VLANs
- Automatic rollbacks (if needed)
- Backwards-compatible with all existing legacy network infrastructure

## SAMPLE BEFORE/AFTER FINANCIAL SERVICES COMPANY NETWORK TOPOLOGY

### BEFORE

- Ring w/STP
- 50% bandwidth
- 32 IP addresses



### AFTER

- 4 IP addresses
- Full bandwidth

