

BUSINESS OBJECTIVE: INCREASED PERFORMANCE, IMPROVED AVAILABILITY AND SECURITY

In the face of the ever-growing uptick in “trolling” -- hackers sniffing networks for remote access into point-of-sale systems that are open (or loosely protected) -- this large US-based credit card services company wanted to upgrade its legacy three-tier network architecture as well as add granular network-based intrusion protection for its customers’ POS systems.

By adopting Pica8’s unique CrossFlow™ technology – a standard component of Pica8’s industry-leading Linux-based PICOS® network operating system for disaggregated white box networking switches – this customer was able to eliminate a hacker’s network “dwell time” for known threats as well as slash any dwell time for new ones. On top of adding this Pica8-only network based security capability, this credit card services company was able to improve both the reliability and bandwidth availability of its overall enterprise network by using PICOS’ built-in automation framework and Pica8’s switch orchestration application to remove any dependency on the decades-old Spanning Tree Protocol – a requirement that was built into their existing legacy-vendor network.

Select customer PICOS features include:

- Protection of financial information and transaction processing systems from identity theft via enhanced intent-based network control (CrossFlow)
- Collection of syslog, trap and counter entries for security threat event reporting
- Use PICOS monitoring capabilities to either discard threat traffic or deliver it to SecOps, thereby eliminating the cost of monitoring TAPs in many areas
- Reduction in number of managed network elements by a factor of 25x-50x
- 802.1X (Wi-Fi), IGMP, IGMP snooping DHCP forwarding and snooping
- Eliminate bandwidth-constraining STP from the 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

**ENTERPRISE SUCCESS STORY
CUSTOMER PROFILE**

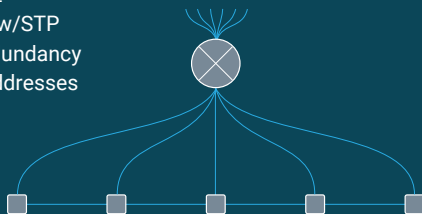
In addition to its headquarters campus, this large public enterprise has hundreds of locations across the U.S. The company is a market leader in electronic payment services, insurance and SaaS products that help businesses of all sizes – from startups to the largest public companies – with their financial and tax accounting obligations. Its software and IT operations organizations are among the most sophisticated worldwide and are skilled in operating system, application and cybersecurity software development.

In its production enterprise network, the company has now deployed Pica8’s PICOS NOS on multi-vendor open white box and brite box network switches to replace end-of-support OEM chassis switches and switch stacks.

SAMPLE BEFORE/AFTER CREDIT CARD SERVICES COMPANY NETWORK TOPOLOGY

BEFORE

- Mesh w/STP
- No redundancy
- 5 IP addresses



AFTER

- Redundant network
- 1 IP address

