TIER 1 SERVICE PROVIDER SUCCESSFULLY AUTOMATES ITS SOFTWARE UPGRADES

CUTS TIME AND EFFORT BY 95% WHILE SUBSTANTIALLY ELIMINATING THE RISK OF NETWORK OUTAGES

THE CUSTOMER:

As one of North America's top Inter-Exchange Carriers (IXC), the company operates one of the largest communications networks in the world with an optical networking infrastructure that spans close to 100,000 miles and more than 4,000 Points of Presence (POPs). Among the Customer's key differentiators is a network that offers high availability and the latest next-generation features.

THE SITUATION:

The Customer was preparing to upgrade segments of its optical network and was interested in exploring solutions to help expedite the process while reducing the risk of network outages. A 40-node segment of the network, featuring Ciena Corestream® network elements, was the first targeted upgrade segment. The network runs between two major metropolitan cities in the southwestern U.S. over a distance of approximately 650 miles (1,045 kilometers).

Given the competitive environment in which it operates, getting the latest features available on new software loads without compromising network availability was paramount. The success of the 40-node upgrade would drive new revenues for the service provider while making the network operationally efficient.

The Customer's knowledgeable network operations and field personnel, by virtue of their experience, had allocated a full week to perform the upgrade, with various operations personnel to be involved in the process.

THE SOLUTION:

The Customer called upon Nakina Systems to expedite the upgrade using its Nakina Network Audit and Software Delivery™ solution. On the morning of the scheduled upgrade, a single individual in Nakina Systems' headquarters invited the Customer's operations personnel to remotely "view" Nakina Network Audit and Software Delivery™ in action from various office locations across the U.S. using web conferencing software from their desktops.

The first step involved conducting a network audit to identify any potential problem areas that would result in the failure of the network upgrade. This included checking for software and hardware revision incompatibilities and potentially troubling alarm conditions on the network.

Next, the parallel delivery of software to multiple nodes was initiated remotely through the Nakina Network Audit and Software Delivery™ user interface. When the software delivery was complete, Nakina activated the software upgrade on each node. Owing to the pre-upgrade network audit, no failures occurred. Finally, the upgrade load was committed to the nodes, completing the upgrade.

To the surprise of the operations personnel, the entire audit and software upgrade process took less than 2 hours. It was conducted by a single individual on a desktop in Ottawa, a full 2,173 miles (3,500 kilometers) away from the network, while the Customer's personnel observed the upgrade via web-conference from the comfort of their respective offices throughout the U.S.

THE BENEFITS:

The two-hour upgrade was considered a dramatic improvement over the 40-hour, week-long effort the Customer's team had originally anticipated to successfully complete the upgrade.

No network outages occurred during the software upgrade process, owing to the network audit pre-upgrade procedure inherent in the Nakina Network Audit and Software Delivery™ application.

> " Our field guys really liked the NASD tools they saw for the first time that day."

The Customer was able to leverage the new features available in the new software load a full week ahead of schedule, reducing its time-to-new service revenue and operational efficiencies, with significant implications for eventual network upgrades over thousands of nodes.

A key member of the Customer's Engineering team, responsible for reviewing various network upgrade tools, described his team's overall impression: "Our field guys really liked the Nakina Network Audit and Software Delivery™ tools that they saw for the first time that day." He went on to describe Nakina's solution as simple to use and designed with network operator concerns in mind. "Suffice it to say, we've been working with Nakina ever since."