

REMOTE DEVICE ACCESS FOR WEB-SCALE SERVICE PROVIDER

CASE STUDY SUMMARY

- Through its vast expertise in data center infrastructure solutions, Rahi was able to recommend a console server solution to precisely meet the customer's requirements.
- The ZPE NodeGrid Serial Console delivers advanced capabilities in a solution that's secure and easy to learn and manage.
- Rahi's ongoing logistical support aids with problem resolution and ongoing implementation of the solution.

Web-scale data center environments have unique operational requirements that cannot be met by traditional solutions. These vast facilities, often with unstaffed "lights out" areas, must be managed to ensure maximum uptime and support rapid deployment of systems. Engineers need remote access to all devices within the data center in order to troubleshoot issues and provide out-of-band management of compute, networking, power, security and telecom services.

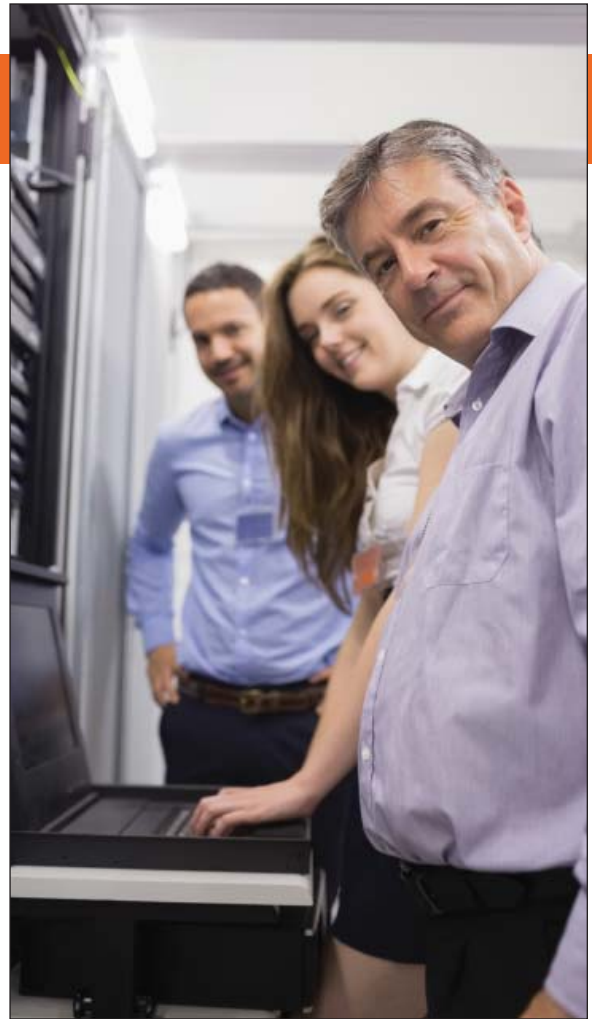
A well-known web-scale service provider was using an older remote access console that did not meet current technology requirements. The service provider needed a solution that could detect network devices via Link Layer Discovery Protocol (LLDP), perform system configuration checks, and provide an advanced command line interface, security features and automation support. The solution also had to deliver the performance needed to meet the demands of a web-scale environment.

The service provider found that many of the remote access consoles available in the marketplace were based upon 10-year-old technology. Rahi Systems, through its partnership with ZPE Systems, was able to deliver a solution that met the customer's requirements precisely.

SOLUTION

ZPE's NodeGrid Serial Console (NSC) allows the service provider to manage all devices within the data center, regardless of vendor, for unparalleled security, access and control. It features a dual- or quad-core x86 Intel CPU, 4GB or 8GB of RAM and 32GB to more than 64TB of SSD memory, with a modern, 64-bit Linux operating system and state-of-the-art software. It supports more than 1,000 concurrent sessions, 115,200bps port speeds and 20 users per port. All of this functionality is packed into a 1U device that's available in 16-, 32-, 48- and 96-port options.

The service provider conducted a two-month evaluation in which administrators tested the NSC's command line interface and scripting features as well as its performance and security features. Once the evaluation was complete, the service provider gave Rahi Systems the green light to deploy 48-port NSCs across five data centers in the U.S., one in Sweden and one in Singapore.



RESULTS

In addition to providing a faster and more up-to-date serial console server, the NSC delivers a number of unique benefits. For example, it enables zero-touch provisioning of routers and switches, with out-of-band access from the initial configuration through firmware updates and upgrades.

ZPE's NodeGrid software enforces security with System Configuration Checksum, a patented "fingerprint" methodology for detecting unauthorized configuration changes. Integration with Docker and Puppet or Chef provides an extra layer of management flexibility.

The 64-bit Linux operating system offers a familiar environment that reduces the learning curve for administrators. At the same time, ZPE provides patches and security updates for both the OS and NodeGrid applications, reducing maintenance requirements.

Rahi Systems provides ongoing global logistical support, as well as planning and project management for future implementations. The service provider can call upon Rahi Systems for device replacements and new deployments anywhere in the world.