Increased uptime and a higher compute density translates to a greater ROI.

CASE STUDY TURN | Oct 2014

TURN

INDUSTRY

Advertising analytics and technology software

LOCATION

Redwood City, CA

KEY CHALLENGES

- > Existing cabinet PDU did not offer the functionality and reliability needed to run the Turn business, and the vendor was unresponsive
- > Outlet density
- > Form factor
- > Power level

SOLUTION

> 48 outlet Switched PDU with PIPS[®] capability

BENEFITS

- > One PDU for two different rack configurations
- > Density of racks reduced floor space at colocation facilities
- > Able to ensure usage of power allotted by colo and paid for by Turn



If you ever use the Internet and find an advertisement that seems to be "just what you're looking for," then chances are Turn was behind the data, media execution and analytics that led to that ad being on your screen.

Turn is the largest independent company in the advertising technology sector, based in Redwood City, CA. They provide a lightning-fast technology platform that responds to half of the world's Internet page views in as little as 10 milliseconds. Turn operates a highly scalable multi-tier server infrastructure that runs a "big data" analytics engine and software suite, providing a managed-service and self-service platform for brand and agency customers across the globe.

Recently, Turn revised its hardware configurations to standardize on two rack level configurations, one having 23 devices per rack, and the second having 43 devices in each rack, to make the most use of the colocation space and power to support customers with data-driven advertising programs. The company also wanted to implement remote monitoring and management capability for its hardware.

The Challenge

As Turn grew, the systems deployed across multiple data centers grew larger and more complicated, as did the number of hardware configurations and variations. Going forward, Turn sought to standardize on just two rack configurations having at least two more compute nodes per rack than prior generations.

Prior rack deployments relied on PDUs that varied according to the loads deployed in them. This meant that each rack required a unique PDU solution for the combination of outlet types needed by the hardware in the cabinet. A varying mix of C19 and C13 outlets was usually required.

Communications with the variety of PDUs deployed across the multiple Turn data centers also proved to be difficult, as different vendors implement different MIBS. A standard was needed in order to ensure that power consumption data could be collected, and that remote management might be a possibility in the future.

Randall Wofford,

Data Center Manager, **Turn**

"Server Technology has an open ear, and quickly responds to suggestions and challenges. They are very responsive and their support is outstanding."

"We were able to validate power consumption versus colocation provider reports."

Gregory Parker, Engineer, Turn

"Server Technology products have provided years of stable power and reporting."

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The Solution

Turn was able to select a single PDU form factor and outlet that would satisfy all of their data center power needs and help them reduce the total footprint per node in the colocation facility. This was achieved through standardizing on a 48U tall rack, and implementing only two varieties of rack configurations having additional compute nodes per rack. The higher-compute density required more outlets per rack than Turn was able to acquire elsewhere. Moving to a 48-outlet solution from Server Technology enabled the Turn data center team to deploy enough additional nodes (two per rack) to achieve a 5-10% reduction in floor space per compute node. Colocation expenses were reduced and room was left in the power envelope for additional hardware to be deployed if necessary.

Turn also chose to deploy cabinet PDUs that feature both remote monitoring and management capability, thus enabling the company to remotely measure and monitor power at the various colocation facilities housing its infrastructure.

Business Benefits

By moving to cabinet PDUs from Server Technology, Turn has experienced increased uptime, fewer failures, and a higher compute density that is able to sustain higher operating temperatures. Additionally, they are able to correlate data from the STI PDUs with data coming from the various colocation providers to make sure that they are not oversubscribing or underutilizing the power circuits.



About Server Technology

Server Technology's power strategy experts have provided power solutions for labs, data centers, and telecommunications operations for 30 years. Over 60,000 customers around the world rely on our cabinet power distribution units and award winning power management solutions to reduce downtime, facilitate capacity planning, improve energy utilization, and drive efficiency. With the best quality, best technical support and most patents, Server Technology products provide uncompromising reliability, innovation, and value for the datacenter.

Only with Server Technology will customers Stay Powered, Be Supported & Get Ahead — www.servertech.com

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