



SoftLayer/IBM Cloud



SUMMARY

IBM Cloud Production

- Repeatable, sustainable, and simplified approach
- Standardized on dual-sided locking cords

Secure power connections

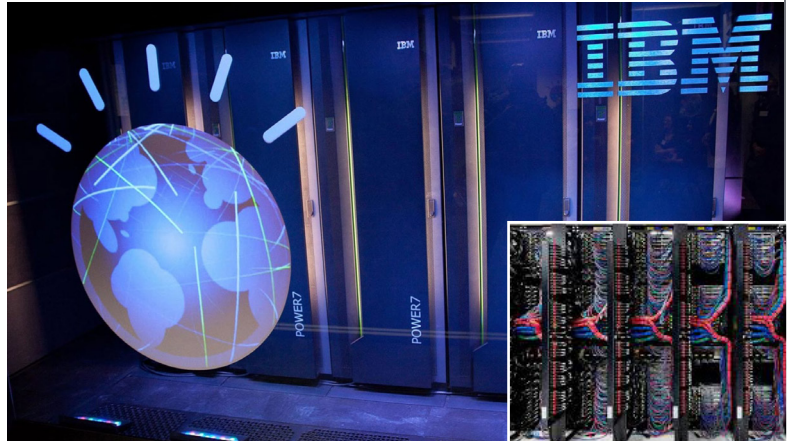
- Secure power connection on both IT device and PDU sides
- Only dual-sided cord on the market
- Power cord assemblies speed rack and stack deployment

Improved reliability and production

- Locking cords secure equipment during move/add/change
- Greatly reduced installation costs
- One million cords, zero quality issues

ABOUT SOFTLAYER/IBM CLOUD

SoftLayer Technologies, Inc. is a dedicated server, managed hosting, and cloud computing provider founded in 2005 by Lance Crosby in Dallas, TX. Acquired by IBM in 2013, it is now known as IBM Cloud and deploys compute workloads to over 60 data centers in 18 'availability zones' around the world.



ABOUT THE PROJECT

As a startup technology provider in the nascent cloud computing industry, SoftLayer was dedicated to the notion of unparalleled customer service through a quickly deployable rack architecture. Key to their delivery was a 'rack and stack' model of centralized configuration and loading of equipment racks that could be stood up in a number of hosted data centers and colocation providers across the country. As SoftLayer became IBM, the Dallas-based IBM Cloud Operations team would manage the process of racking 44 servers.

PROJECT CHALLENGE

At that time, the cloud computing business was exploding and SoftLayer was experiencing unprecedented growth. The increased deployments were not linear, but rather came in spurts that made materials management difficult. SoftLayer had to solve the challenge of both building and deploying racks at a faster pace, while managing quality control/quality assurance issues presented by the process of configuring, shipping, handling, and installing racks at their final destination.

Their standard 44 server configuration meant measuring, bundling and labeling 88 power cords per rack. This also meant that there were 176 plugs that could become disconnected. There were also a host of factors including human error and vibration during transportation that could otherwise render a perfectly seated plug unplugged. Moreover, the ongoing server move/add/change process was difficult given the density of their deployments. Replacing a server within the rack meant there was a possibility of unplugging the active server either above or below it.

CASE STUDY



ABOUT THE PRODUCT

Zonit's Z-LOCK is the world's first truly universal IEC locking power cord. Z-LOCK is 100% compatible with any existing infrastructure. It locks into place on both ends of the cord, securing the power path between IT device and rack PDU regardless of brand or manufacturer. Z-LOCK is specifically designed to eliminate accidental, vibration or nuisance disconnects, and secure the power path between all devices.



“After shipping and installing almost a million cords, there has not been a single product failure.”

PROJECT SOLUTION

After a review of several IBM data centers, it was clear that they were dealing with end user uptime and reliability issues as a direct result of power disconnects. Though IBM Cloud was using a locking cord already, it only locked on the PDU side, not the device side, of the cord.

Through Anixter, a national distributor, Zonit presented the Z-LOCK dual-sided locking power cord as a potential solution. IBM's 'Go Live' team tested a number of cords that were available on the market, but quickly settled on the Zonit product as the solution. While competing cords used technology that locked onto the ground prong, only the Zonit product used the negative space around the plug head to create a lock, making it a vendor-neutral approach. Moreover, the Zonit locking cord was the only product that locked on both sides, thus simultaneously securing the PDU and device ends of the cord.

CUSTOMER EXPERIENCE

With the cord selection complete, there was another important part of the equation that needed to be solved. Over time, it became apparent to IBM Cloud technicians that they needed to improve upon the three hours required to install the power cords. Anixter introduced a program that streamlined the installation process by supplying pre-labeled cord assemblies to IBM Cloud, reducing the installation time to 15 minutes. Bundling the cords not only provided quality assurance, but also made the installation process faster and more cost-effective for IBM Cloud.

In addition to improving the reliability and efficiency of their deployments, the most telling detail of the IBM Cloud locking cord program is that they have never experienced a quality problem. After shipping and installing almost 1,000,000 cords, there has not been a single product failure.

CONCLUSION

Thanks to Zonit's Z-LOCK locking cord and their distributor's materials management experience, IBM Cloud was able to solve a variety of manufacturing, shipping, and operational issues, resulting in improved uptime and decreased deployment costs. Zonit's dual-locking cord took the guesswork out of the rack and stack process, improved IBM's quality control standards, and has secured hundreds of thousands of servers since the start of the program.