Transforming payment processor’s transaction systems with hyperconverged infrastructure

The secure, high-performing Cisco HyperFlex solution running SQL Server database and mission-critical transactional apps for Red Enlace
As the global reliance on credit continues to grow, so too do the security risks for card issuers and card holders alike. In Bolivia, the share of population owning a credit card has nearly doubled in recent years. Having an infrastructure that can support the additional level of protection required by the Payment Card Industry Data Security Standard (PCI DSS) is critical to earning the trust of customers—and Red Enlace has set out to do just that.

The company manages the largest electronic payment system in Bolivia, with more than 5,000 merchants with 9,000 POS and 600 ATMs directly connected from the 1,700 ATMs of the entire Enlace ATM network in Bolivia and processing approximately 200,000 transactions each day. To keep payments flowing seamlessly and securely for financial institutions and merchants, Red Enlace invested in a cloud-based unified compute, storage, and networking solution that will serve as the foundation for the company’s digital transformation strategy.

The Red Enlace processing network

**Breaking Down Data Silos**

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**Results**

With Cisco HyperFlex, Red Enlace has:

- Simplified administration of various infrastructure touch points through a single management platform
- The batch processes were reduced to half the processing time.
- This scaled to support growth, with the ability to handle four times more transactions
provides services such as risk management and transaction fraud, conflict resolution, loyalty services and other advanced business applications in electronic payments. The company also maintains a separate network for non-PCI-compatible applications, such as email, web portal and ancillary systems, to support its own corporate services. But this was not always the case.

"Prior to PCI certification, we maintained a single network for all our systems," explains Renzo Martínez, CIO of Enlace Network. "In addition to duplicating our network, we had to prepare our processing capacity to anticipate the growth of all our transactions, which could be very costly since we do not have the correct technology, since it would represent significant investments in technological infrastructure and storage over current technology we had."

It also took a long time for the IT team to monitor the environment due to network disparity, storage and server functions, all of which required individual management. In the same way, system performance was delayed, which caused delays in the processing of batch process information.

**Expanding on a Trusted Solution**
The Red Enlace team evaluated several hyperconverged infrastructure solutions, and found that Cisco HyperFlex offered superior data optimization capabilities—such as inline deduplication and compression—as well as greater security features to enable PCI compliance. Because data

**SOLUTION**
Cisco HyperFlex hyperconverged infrastructure running the mission-critical Microsoft SQL Server database and proprietary transactional system application.

**We consider Cisco HyperFlex the basis of our ongoing digital transformation. We can scale our environment easily and profitably, which is significant since we anticipate a very significant increase in the number of transactions we process in the coming years.**

Renzo Martínez
- Chief Information Officer, Red Enlace
centers at Red Enlace were already equipped with Cisco Unified Computing System (UCS), it was a natural transition to move its PCI-enabled processing functions to Cisco HyperFlex.

The high-performance, multi-cloud platform eliminates silos by providing a single point of management for the company’s networking, storage, and servers. Features such as All-Flash nodes free up storage space and drive performance. In fact, with Cisco HyperFlex, Red Enlace experienced a 53% compression rate—saving double the terabyte space compared to its previous environment. And when more resources are required, Red Enlace simply has to add more nodes, versus having to manage and configure three separate components.

Red Enlace migrated its SQL Server database and its mission-critical transactional applications to Cisco HyperFlex, helping to ensure PCI compliance. The company also has long-term plans to move corporate applications and systems, including SAP that are not part of PCI, from its legacy infrastructure to Cisco HyperFlex.

"We consider Cisco HyperFlex the basis of our ongoing digital transformation," says Renzo Martínez. "We can scale our environment easily and profitably, which is significant since we anticipate a considerable increase in the coming years in the number of transactions we process in our virtualized systems."

**Driving Innovation Through Performance**

Thanks to Cisco HyperFlex, the batch processes of customer and merchant information from the Red Enlace credit and debit cards were reduced to half the processing time. This provides customers with the timely information they need to tailor services and make business decisions that will drive growth while maintaining the integrity and security of their data. It also significantly reduces capital expenditures: Martínez anticipates a saving of 20% of our server budget for the following 3 years.

"With Cisco HyperFlex, we can quickly and easily deploy more capacity at a fraction of the price while offering superior security and system and application performance," says Guillermo Cortez, IT Manager at Red Enlace. We had a saving of 35% compared to the planned investment. “Our IT team now spends less time managing the infrastructure, and more time exploring new and innovative ways to help our business—and ultimately our customers—reach their goals.”

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