



Large Chain Store Uses Protegrity Tokenization to Simplify PCI Compliance

By segmenting cardholder data with tokenization, a regional chain of 1,500 local convenience stores is reducing its PCI audit from seven to three months.

“We planned on 30 days to tokenize our 50 million card numbers. With Protegrity Tokenization, the whole process took about 90 minutes.”

Security Project Manager
Large Regional Store Chain



AT A GLANCE



Who - Regional chain of 1,500 local convenience stores

Why - Simplify compliance with PCI DSS by moving assets out of scope

How - Centralized deployment of Protegrity Tokenization segmented cardholder data from the network and Internet

Result - Quick deployment, stronger security, reduced time and cost of PCI audit, top performance, and minimal change to business processes

For the large retailer, the process of complying with the Payment Card Industry Data Security Standard (PCI DSS) consumes a major slice of staff time and budget. The ongoing changes in each revision of PCI DSS bring gray areas that, for validating compliance, are fully subject to the interpretation of Qualified Security Assessors. The simplest way to get control of this burden is to isolate cardholder data from as many IT assets as possible. Shifting assets outside the specified scope of PCI DSS is called segmentation, and the standard encourages organizations to fully exploit those benefits. Having fewer assets in scope simplifies the number and complexity of required security controls. Segmentation increases the odds for stronger security. And it enables shorter and less expensive audits. The retailer profiled here achieved segmentation with Protegrity Tokenization in only two months and encountered no technical issues during the process.

Objective: Simplifying PCI Compliance

Simplifying PCI compliance was the key goal of this large regional retailer. The Security Project Manager said scope reduction was the path for achievement. The retailer required a technology for segmenting, or removing IT assets from scope. Tokenization offered the best path to fill that need. There were three related challenges:

Management – Auditors frequently challenged the retailer on its use of encryption, due to that technology’s accompanying issues of key rotation and management. Tokenization offered less controversy as card processing systems did not use the actual card number. The solution needed to ease manageability of this security control.

Ease and speed of implementation – The retailer had 18 concurrent projects for PCI compliance. It was imperative that the tokenization solution ease that workload with rapid, painless deployment.

Performance – The retailer’s service level agreement for transaction completion was less than one second. The tokenization solution had to comply with this SLA.

Deploying the Protegrity Tokenization Solution for PCI Segmentation

The retailer deployed Protegrity Tokenization as a centralized solution, which uses a dedicated tokenization server on commodity hardware. The token server was deployed outside of the data warehouse to facilitate segmentation. With tokenization, data for

a card transaction now follows this path: (a) card data is encrypted at the point of sale; (b) data is transmitted to a centralized host for decryption; (c) data is tokenized on the token server; (d) data enters the data warehouse.

The initial tokenization process was expected to take about 30 days for 50 million card numbers. The Protegrity Tokenization process actually required about 90 minutes. Deployment of the solution was non-intrusive as it did not require obtaining third-party modifications to code. According to the Security Project Manager, deployment of Protegrity Tokenization “was one of the most painless implementations we did last year.”

Benefits of the Protegrity Tokenization Deployment

The Security Project Manager reports that results of the Protegrity Tokenization deployment exceeded the team’s expectations.

For starters, the retailer’s Qualified Security Assessors had no issues with the effective segmentation provided by Protegrity Tokenization. “With encryption, implementations can spawn dozens of questions,” says the Security Project Manager. “There were no such challenges with tokenization.”

Segmentation with Protegrity Tokenization is yielding other immediate benefits for the retailer:

- **Faster PCI audit** – The retailer’s PCI audit last year required about seven months. With segmentation, the retailer says the current audit will require half that time.
- **Lower maintenance cost** – “Maintenance is now less expensive because we don’t have to apply all 12 requirements of PCI DSS to every system,” says the Security Project Manager.
- **Better security** – “Everyone agrees the cardholder data is a lot more secure,” says the Security Project Manager. With tokenization, he says the retailer has been able to eliminate several business processes such as generating daily reports for data requests and access.
- **Strong performance** – In addition to the rapid processing rate for initial tokenization, the solution meets the retailer’s sub-second transaction SLA.

Another benefit is that Protegrity Tokenization did not require any significant changes to the ways the retailer analyzes transactions. As part of the implementation, the retailer elected to leave the first six and last four digits of card numbers in the clear. “This satisfies 98% of our daily requirements in applications, reporting, and answering customer questions,” says the Security Project Manager. Some staffers were concerned about lack of access to the entire card number, so for the two percent of other situations, Protegrity provided the retailer with a tokenizer utility. With this tool, authorized staffers can take a token for access to the full card number, and then re-tokenize after completion of the task. “It’s no longer an issue,” he says.

Assessing the Project and Future Plans with Tokenization

“We have had no problems since deploying the Protegrity Tokenization solution,” says the Security Project Manager. “The Protegrity team has made the entire process much easier for our team. This is as close to turnkey as you can get.”

With the success of this deployment, the retailer is now looking for other ways to leverage the benefits of Protegrity Tokenization. The next big target is extending tokenization to the company’s 1,500 retail locations. The company has about ten to twelve thousand devices enterprise-wide. “By using a dedicated tokenization device in each store, we could remove half of the company’s network and devices out of PCI scope,” says the Security Project Manager. “That’s an opportunity for saving big money and cutting the length of the PCI audit down to about one month,” he says.

“We’re happy with the results of Protegrity Tokenization and have a great working relationship with the company,” concludes the Security Project Manager. “This is one of those few cases where a solution ended up the way the sales guys said it would occur – and it’s saved us a lot of time and money.”

“The nice thing about tokenization is it turns the PCI conversation with auditors from gray into black and white. They don’t challenge us like they do with encryption. With Protegrity Tokenization, it’s very clear if you’re in scope of PCI – or not.”

Security Project Manager, Large Regional Store Chain



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