The PCI DSS Backdrop to Data Privacy and Security
The Payment Card Industry (PCI) Data Security Standard (DSS) guidelines indicate that organizations processing and storing credit card data must comply with a set of well-defined audit requirements in twelve areas of cardholder data management and privacy. However, what is becoming increasingly clear is:

- Achieving and maintaining compliance with PCI DSS guidelines is expensive, challenging, time-consuming and disruptive as cardholder data is often stored, transmitted and used in many different applications within an organization, and often even beyond the IT perimeter.
- Compliance does not equal security, and compliance by itself is not enough to prevent data breaches. Cyber threats are increasingly sophisticated and hackers are going after data they can monetize, wherever they find a vulnerability.
- Emerging new business initiatives—mobile, e-commerce, Cloud and Big Data projects bring more systems and applications into PCI scope as well as more risk.

Tokenization, which is used as a way of replacing sensitive data like credit card numbers with tokens, is one of the data protection and audit scope reduction methods recommended by the PCI DSS. But, organizations who have adopted tokenization—either home-grown or first generation commercial solutions—have found it increasingly difficult to maintain compliance and are faced with growing complexity and rising costs resulting from conventional database-centric architectures. Others may have a hosted tokenization solution but would like to have more in-house control and a choice of processors.

Two Breakthrough Technologies for End-To-End Secure Commerce
Micro Focus Voltage SecureData radically cuts compliance complexity and costs on an ongoing basis, and neutralizes data breaches by protecting sensitive data at the data field and sub-field level, in transit, in use and at rest. SecureData provides a comprehensive data-centric approach to PCI compliance that has been proven to reduce PCI DSS scope by up to 80 percent, cut compliance costs by up to 95 percent, and includes:

- Voltage Hyper Secure Stateless Tokenization (SST) is an advanced, patent-pending, proven data security technology—stateless because it eliminates the token database that is central to other tokenization solutions and removes the need to store cardholder data. Eliminating the token database significantly improves the speed, scalability, security, and manageability of the tokenization process. Every application handling the tokenized data, including back-end applications such as fraud analysis and loyalty programs, may be removed from PCI audit scope.

- SecureData Web with Voltage Page-Integrated Encryption (PIE) encrypts payment and personal data in browser-based transactions from the moment data is entered into a Web browser and all the way through the Web tier, the application tier, cloud infrastructure, and upstream IT systems and networks to the trusted host destination. This shields sensitive customer data from theft in front-end and intermediate systems, and further reduces audit scope.
Solution Considerations | SecureData Solution for PCI Compliance
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How do I reduce PCI scope through tokenization of credit card numbers? Do I have to implement a token database to support the solution? | Up to 80 percent PCI scope reduction and 95 percent reduction in PCI compliance costs—using format-preserved protected data removes applications from PCI scope and enables applications to work without live data. Hyper SST increases security by removing the need to store credit card data.

Does the solution encrypt data from my different payment channels (mobile, e-commerce, mobile onboard payments, call center) to eliminate gaps in data protection? | End-to-end data-centric protection—SecureData Web secures payment and personal identity information (PII) in browser-based transactions by encrypting at the moment of capture and protecting it all the way through upstream IT systems and networks to the trusted host destination.

Can I use the same solution for my payment channels to reduce scope in my back-office systems? Will I have to rewrite these applications? | Easily brings applications out of scope without rewrites—Hyper SST enables applications and databases to be fully protected and PCI-compliant without rewriting core business applications.

Is the solution standards-based, secure, and third-party validated? | Proven security leadership track record—the SecureData proven data protection technologies are standards-based (NIST, ANSI, IEEE, IETF), published, and third-party validated.

How does this work with core payment transaction processing systems like mainframe and HPE NonStop? | Native tokenization—Hyper SST delivers fully native tokenization on the IBM z/OS and the HPE NonStop OS for payment processor-grade performance and scalability.

**Table 1. Solution information**

**About Micro Focus Security**
Micro Focus is a leading provider of security and compliance solutions for the modern enterprise that wants to mitigate risk in their hybrid environment and defend against advanced threats. Based on market-leading products from Micro Focus Security ArcSight, Micro Focus Security Fortify and Micro Focus Data Security, the Micro Focus Security Intelligence Platform uniquely delivers the advanced correlation and analytics, application protection, and data security to protect today's hybrid IT infrastructure from sophisticated cyber threats.