

# Data-centric Protection for Sensitive Data in Test and Development Environments

Industry-standard, Format-preserving Encryption and Tokenization for Maximum Data Protection

## Test/Dev Environments Present Significant Security Risks

Generating data for test and development environments presents serious challenges for enterprise security and risk management. When data is copied from production databases and used directly for test/development, large volumes of private data accumulate on unprotected servers and workstations. The use of outsourced and offshore QA and development services further increases the risks. An alarming number of data breaches, along with complex regulatory compliance requirements, highlight the need to de-identify sensitive data when moving from production to test, development, and training environments.

Traditional data masking solutions, such as random data generation, proprietary data scrambling, and rules-based masking, provide many data management and transformation capabilities, but don't deliver the strong encryption and tokenization technologies that maximize data protection yet maintain the usefulness of the data for test and development.

## The Solution—Voltage SecureData™ Suite for Test/Dev

Voltage provides maximum data protection with the Voltage SecureData™ Suite for Test/Dev, with industry-standard, next-generation Voltage Format-preserving Encryption™ (FPE) and Secure Stateless Tokenization™ (SST) technologies.

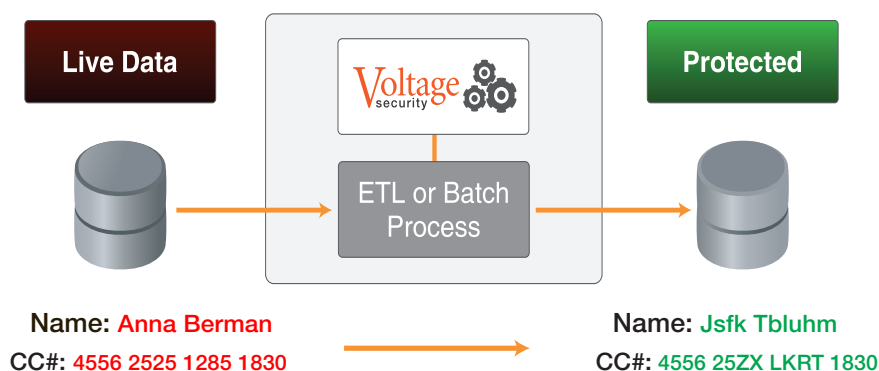
With Voltage SecureData FPE and SST, protection is applied at the data field and sub-field level, preserves characteristics of the original data, including numbers, symbols, letters and numeric relationships such as date and salary ranges, and maintains referential integrity so joined data tables continue to operate properly. The de-identified data meets most data transformation requirements for direct use in test and development, and can be combined with other data masking techniques if required. Voltage SecureData can immediately integrate with programs running on a wide range of platforms including Linux, Windows, IBM z/OS, Solaris, HP/UX, IBM/AIX, Mac OS, HP NonStop, Stratus, etc.

Best of all, the Voltage SecureData Suite for Test/Dev uses the same components and technology as the rest of the Voltage SecureData product line, so it can become part of an end-to-end, data-centric security architecture protecting sensitive data across the entire organization, including production, disaster recovery and analytics, in addition to test and development.

The Voltage solution is designed to work with existing Test Data Management (TDM) and ETL tools, as well as customer-created data flows, and is perfectly suited to environments where:

- Test/dev data is in the clear, or
- Only protected using “home-grown” techniques, or
- Currently masked using TDM/ETL products and would benefit from adding format-preserving encryption for their data transformations

## How it Works



## Benefits

- Maximum data protection—and data value preserved
- Safe Harbor in the event of a data breach
- Keep test/dev environment out of scope for PCI
- High-performance and high-scalability
- Optional data reversibility
- Broad platform support
- Fits seamlessly into an end-to-end, data-centric security architecture

## Packages

The Voltage SecureData Suite for Test/Dev is available in three application-specific configurations. Use the Open Systems Standard Edition for basic data de-identification needs, the Open Systems Enterprise Edition for more frequent and complex de-identification needs, and the Mainframe Systems Edition for data de-identification directly on z/OS platforms.

Open Systems Standard Edition	Open Systems Enterprise Edition	Mainframe Systems Edition
<ul style="list-style-type: none"> <li>• Bundle consisting of 1 Key Server &amp; 1 Web Services Server for Staging, plus Installation Kit for 1 open systems platform, and up to 500 GB of source data</li> </ul>	<ul style="list-style-type: none"> <li>• Bundle consisting of 1 Key Server &amp; 1 Web Services Server for Staging plus 1 of each for Voltage Dev environment, Installation Kit for 2 open systems platforms, and up to 1 TB of source data</li> </ul>	<ul style="list-style-type: none"> <li>• Bundle consisting of 1 Key Server for Staging plus 1 for Voltage Dev environment, Installation Kit for IBM z/OS platform, up to 30 MSUs of processing power</li> </ul>
<ul style="list-style-type: none"> <li>• One year standard support</li> </ul>	<ul style="list-style-type: none"> <li>• One year standard support</li> </ul>	<ul style="list-style-type: none"> <li>• One year standard support</li> </ul>
<ul style="list-style-type: none"> <li>• Professional services assistance for Voltage system installation, configuration &amp; integration</li> </ul>	<ul style="list-style-type: none"> <li>• Professional services assistance for Voltage system installation, configuration &amp; integration</li> </ul>	<ul style="list-style-type: none"> <li>• Professional services assistance for Voltage system installation, configuration &amp; integration</li> </ul>

Additional data capacity, MSU processing power, key servers, integration kits, and other Voltage functions can be added to these packages to meet the exact data protection needs for any test and development environments.

## ABOUT VOLTAGE SECURITY

Voltage Security®, Inc. is the leading data protection provider, delivering secure, scalable, and proven data-centric encryption and key management solutions, enabling our customers to effectively combat new and emerging security threats. Leveraging breakthrough encryption technologies, our powerful data protection solutions allow any company to seamlessly secure all types of sensitive corporate and customer information, wherever it resides, while efficiently meeting regulatory compliance and privacy requirements.

For more information, please visit [www.voltage.com](http://www.voltage.com).

Voltage Security, Inc., Voltage Identity-Based Encryption (IBE), Voltage Format-Preserving Encryption (FPE), Voltage Page-Integrated Encryption (PIE), Voltage Identity-Based Symmetric Encryption, Voltage SecureMail, Voltage SecureMail Mobile Edition, Voltage SecureMail Application Edition, Voltage SecureMail eDiscovery Compliance Tool, Voltage SecureMail Archive Connector, Voltage SecureMail Statement Generator Service, Voltage SecureMail Cloud, Voltage SecureData, Voltage SecureData Enterprise, Voltage SecureData Payments, Voltage Secure Stateless Tokenization (SST), Voltage SecureFile, Voltage SecureData Web, and Voltage Cloud Services are registered trademarks of Voltage Security or are trademarks and service marks of Voltage Security, Inc. All other trademarks are property of their respective owners.

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