

**TEST APPLICATIONS FASTER
WITH GREATER DATA SECURITY**



SECURE CUSTOMER DATA AND ACCELERATE TESTING VIA SAFE AND STREAMLINED TEST DATA

HIGHLIGHTS

Micro Focus Data Express reduces the time, cost, and risks associated with testing applications helping customers to:

➤ Ensure compliance with data privacy regulations by masking sensitive information

➤ Reduce storage costs up to

90%

by using subsets of live data for testing

➤ Slash turnaround time on development tasks by speeding up test data generation up to

80%




Organizations cannot risk the stability of their application portfolio or the security of customer data. The threat to the business is just too great. Therefore, IT teams must ensure that they are testing their core applications for real-world scenarios. This requires realistic test data and it is imperative to avoid exposing test data to the possibility of loss or theft – especially in this era of heightened privacy regulation.


Micro Focus Data Express helps manage the test data environment, improving test results, lowering the cost to test, and securing customer data from loss or misuse. The solution enables customers to:

- Automate the generation of test data environments, cutting the elapsed time by up to 80%. This frees testing personnel to work on addressing the testing queue.
- Eliminate up to 90% of test data storage. This significantly reduces storage hardware and power costs and eases processing requirements.
- Protect customer data by obscuring sensitive information. This keeps data safe from unauthorized users while retaining its value for testing.

THE HIGH COST OF TESTING



DEVELOPMENT TEAMS ARE UNDER CONSTANT PRESSURE TO DELIVER. URGENT CHANGES DEMANDED BY THE BUSINESS ARE RECEIVED EVERY DAY. THE TEAM MUST QUICKLY TRANSLATE THESE REQUIREMENTS INTO DEVELOPMENT RESULTS.



The high rate of change means that testing critical systems becomes ever more imperative. Organizations simply cannot afford to have an outage of an essential system. This requires access to high quality test data

to ensure that all production situations are validated. Tests need to be executed efficiently and repeatedly. But there are significant challenges that confront the testing team.

THE HIGH COST OF TESTING

Over

262m

personal information records have been compromised in breaches of data security reported to the authorities in the USA during the last four years.

A Chronology of Data Breaches

Privacy Rights Clearinghouse, 2009

The average cost per security breach for each reporting company was

\$6.65m

and the average cost per lost customer record was \$202, compared to \$182 two years ago.

2008 Annual Study, The Cost of Data Breach

Ponemon Institute

Unlike development, the scale of testing bears little connection to the size of the application change. QA must verify that even the smallest change will not disrupt the stability of a business process. As a result, testing frequently becomes a bottleneck that slows development efforts and is often the most expensive component of any development project.

Testing for real-world situations requires real-world data. But generating test data manually is infeasible. It is too slow and error-prone, and it can never prove the reliability of an application with the same level of confidence as real data.

One of the leading European banks addressed this challenge by using a copy of live data. The cost to transfer, store, and reset 34 terabytes of data was extremely high. Especially when this task was done repeatedly as the application was re-tested.

The answer is to automate the process of generating test data to provide testing environments quickly. It also requires sub-setting data to provide just enough information to enable testing without leading to onerous costs.

SECURING DATA PRIVACY

QA departments need real data to ensure quality tests. As a result, they frequently use unmodified production data for testing. This data includes personal information like account numbers, account balances, credit card numbers, government ID numbers, and other private details. As this data is passed




through large and distributed global teams the likelihood for loss and theft multiplies.

In recent years there have been numerous high-profile scandals in which data has fallen into the wrong hands. These data breaches can cost millions to rectify and can seriously undermine confidence in an organization. It is no surprise that this area has come under increased regulatory scrutiny. Legislation like HIPAA, Sarbanes-Oxley and Basel II has increased penalties and exposed managers to the threat of jail time.


To implement rigorous security in the QA organization is very expensive and may be ineffective. After all, analysts estimate that 70% of security breaches come from the actions of insiders. Plus, excessive security only further slows testing, hindering the ability to execute changes needed to applications.

The answer is to use test data that has been cleansed of sensitive information via data masking while retaining the integrity of the test environment.

THE MICRO FOCUS DATA EXPRESS SOLUTION



TO ENSURE HIGH QUALITY APPLICATIONS REQUIRES HIGH QUALITY TEST DATABASES. BUT CREATING THESE TEST ENVIRONMENTS IS COMPLEX, TIME-CONSUMING, AND RISKY.



Micro Focus Data Express automates the entire test data life cycle – from the extraction process through loading the test environment. The solution enables users to view and analyze the test data to ensure QA objectives are met. At the same time, it reduces test database size to lower costs while masking

sensitive information to preserve privacy.

Data Express can handle a wide-array of data formats, from proprietary sources like VSAM to major relational databases like Oracle, DB2, and SQL Server on the mainframe or open systems.

EFFICIENT DATA MASKING AND DATA EXTRACTION

100%

masked data, significantly reducing the risk of a data breach while maintaining the exact characteristics and referential integrity of production data

91%

reduced test database size

DATA MASKING

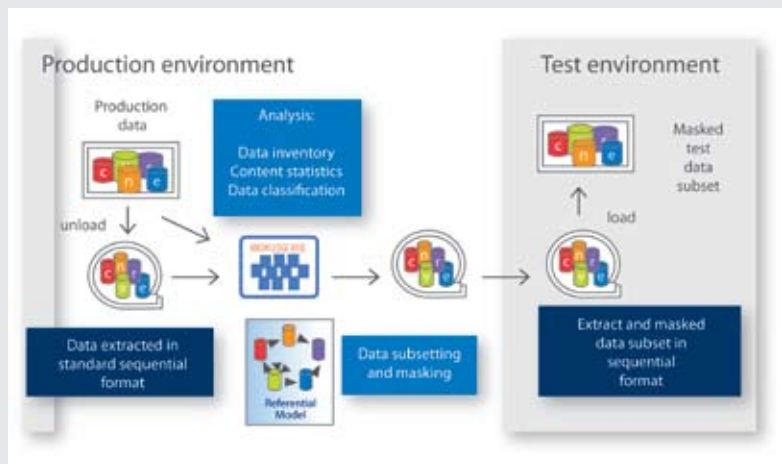
Data Express offers an innovative approach to combat the security and regulatory risks of using live data. The Micro Focus solution maintains the exact characteristics of sensitive data, including referential integrity, while automatically modifying personal information to ensure it is safe. It handles a comprehensive array of data types, ensuring complete coverage of every customer's unique environment. Further, its rule-based techniques ensure repeatability and traceability of the transformations.

Now customer data cannot be used by third parties or malicious insiders, minimizing the risk of a data breach. At the same time, it ensures effective testing and compliance with privacy standards like PCI, Sarbanes-Oxley, HIPAA, and Basel II.

DATA EXTRACTION

Data Express' data unload and extraction facilities create a consistent and realistic subset of production data from all major commercial data sources. QA staff can specify database unload queries and identify all relevant variables needed for data integrity. It also derives the right amount of data for effective validation, avoiding unnecessary and costly duplication of testing effort.

Huge reductions of data volumes are possible. The leading European bank that required a 34 terabyte test database reduced the size to just 3 terabytes without compromising test effectiveness. The savings in storage, transfer, and test execution costs were substantial.



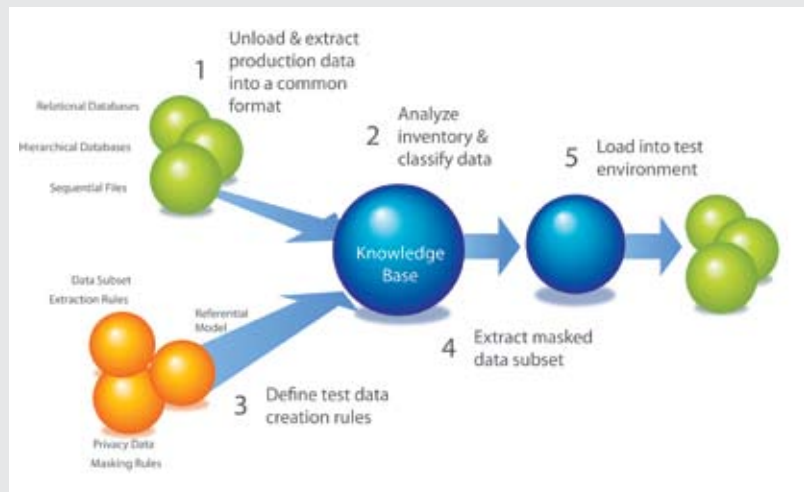
Micro Focus Data Express - supporting governance and security needs

EFFECTIVE DATA INVENTORY MANAGEMENT

Accelerate the testing process and deliver consistently high-quality results while ensuring that security is paramount.

Data Express offers test designers and QA managers tools to assess the generated test data. Centralized insight over the test data environment is provided through administrators' desktops. This allows managers to assess the test databases to ensure that all operational situations have been thoroughly addressed by the test plan.

Managers can also define rules within Data Express to govern the flow of data from production to test environments and to control how data is masked. This gives control back to QA management, helping to speed up the test process, retain consistently high-quality results, and ensure that security is paramount.



The Micro Focus Data Express test data process

DATA PRIVACY LEGISLATION

GOVERNMENT REGULATION HAS BECOME MORE AGGRESSIVE IN RECENT YEARS IN ORDER TO PROTECT CONSUMERS' IDENTITIES. THESE STANDARDS AND REGULATIONS MUST BE TAKEN INTO ACCOUNT WHEN ESTABLISHING THE TEST DATA ENVIRONMENT.

INDUSTRY STANDARDS

The PCI Security Standards Council founded by Visa, Mastercard, American Express, and others published a comprehensive set of requirements governing all aspects of the processing, storage, access, and transmission of sensitive cardholder information.

The Basel II Accord dictates banking standards and practices with significant implications for personal and financial data privacy.

UNITED STATES

The Right to Financial Privacy Act of 1978 specifies Fourth Amendment protection for financial records.

The Gramm-Leach-Bliley (GLB) Act of 1999 requires financial institutions to protect the confidentiality and accuracy of personal consumer information.

The Health Information Portability and Accountability Act (HIPAA) of 1996 provides extensive rules

governing the access and use of personal and medical information by the healthcare industry and insurers.


The Sarbanes-Oxley Act of 2002 takes data privacy rules further. Section 404 of the act in particular lays out a number of required internal controls that organizations must implement within their systems for processing financial information.

EUROPE


Directive 95/46/EC of the European Parliament on the protection of personal data provides comprehensive rules governing individual rights to data privacy and the responsibilities of organizations that hold personal data.

The UK Data Protection Act extends the EU directive, adding more rules for organizations to control the use of private information.

SUMMARY



DATA SECURITY IS AN ISSUE THAT CAN NO LONGER BE IGNORED AND IS NOW ONE OF THE TOP THREE CONCERNS FOR CIOS. DATA BREACH INCIDENTS IMPACTING MILLIONS OF CUSTOMERS AND HUGE FINANCIAL LOSSES ARE COMMON.



There are severe risks to a company's customers as well as its revenue stream and reputation from the proliferation of sensitive information in insecure test environments. In addition there is a real danger of contravening privacy legislation.

Micro Focus Data Express provides a powerful solution to the challenges of test data management. It uses innovative techniques to mask sensitive information while maintaining

the realistic nature of the data. Validation specialists can efficiently create, analyze and deploy safe and effectively masked subsets of data from all major production sources.

In addition to removing security risks, dramatic cost savings can be achieved in labor and storage needs, and the business advantages of improved application quality and time to market are compelling.

ABOUT MICRO FOCUS

Micro Focus, a member of the FTSE 250, provides innovative software that allows companies to dramatically improve the business value of their enterprise applications. Micro Focus Enterprise Application Modernization and Management software enables customers' business applications to respond rapidly to market changes and embrace modern architectures with reduced cost and risk.

For additional information please visit:
www.microfocus.com

Micro Focus Worldwide

Australia	+61 800 632 626
Austria	+43 800 293
Belgium	+32 3 218 21 26
Brazil	+55 (11) 3443 7431
Canada	+1 877-772-4450 x1123
Denmark	+ 45 3694 4754
France	+33 800 835 135
Germany	+49 800 182 5443
Hong Kong	+852 2168 0600
India	+91 11 4060 1560
Italy	+39 800 784 420
Japan	+81 3 5793 8550
Mexico	+52 55 9171 1000
Netherlands	+31 (0)23-5540 640
Norway	+47 21 601 606
Portugal	+351 21 723 0726
Singapore	+65 6622 5466
Spain	+34 915 726 699
Switzerland	0800 564 247
Sweden	+46 8 505 165 40
United Kingdom	+44 800 328 4967
United States	+1 877 772 4450
Other Countries	+44 1635 32646