

# Data Masking

Cost-Effectively Protect Data Privacy in Production and Nonproduction Systems

# How Can Your IT Organization Protect Data Privacy?

## The High Cost of Data Breaches

It's estimated that more than half of the data that businesses and government organizations create and collect can be classified as sensitive or even confidential. This data includes personal information—such as names, addresses, Social Security numbers—as well as financial information, such as revenue projections, customer purchasing histories, and pricing information.

You can't open a newspaper these days without reading yet another story about a data breach at a major corporation or government agency. Data breaches can cost millions in fines, lost revenues, and damaged reputations.

Data security officers, database administrators, and other security specialists do their best to anticipate internal and external threats and guard against them. But the opportunities for data breaches are as vast as their costs.

Sensitive information is shared throughout your organization—internally among your business users, IT | teams, and developers and externally with consultants, business partners, and outsourcing/offshore teams. Your IT organization needs to protect all this sensitive information, regardless of where or with whom it resides, to comply with a veritable alphabet soup of data privacy regulations (e.g., PCI DSS, GLB, EU Data Protection Directive).

**“Informatica Dynamic Data Masking ensures that both IT and business users using applications and tools access personal information on a need-to-know basis.”**

- Kobi Hirsh, Chief Information Security Officer  
Partner Communications Company Limited

## The Special Vulnerability of Near Production and Nonproduction Environments

With so much critical data being stored and copied, databases have become targets for data breaches. Near production and nonproduction environments, including data warehouses, clones, replications, testing, training, and QA environments, are particularly vulnerable because they are often copies of production environments or contain production data. When testers—either an in-house team or a third-party vendor—are given copies of databases to test or develop against, the data breach risk skyrockets.

In addition to the security risk, creating a complete copy of production data for nonproduction environments is inefficient and expensive. System copies devour maintenance, support, and storage resources. They clog databases and slow performance with unnecessary and obsolete data. And each new system copy increases the risk that one might escape IT's control and lead to a data breach.

## The Range of Data Privacy Challenges

Your IT organization may think it's doing it all it can to protect data privacy. But database security solutions are hard to configure and administer. Hand coding data masking solutions is error prone and labor intensive. How are you handling the full range of data privacy challenges?

- How can you grant privileged users, such as database administrators or application developers, with access to data while still protecting data privacy?
- Does your IT team have to maintain a huge number of applications and databases, each of which has its own customized privacy solution?
- Are you using production data for testing purposes? How are you securing this data?
- Has tokenization required additional development effort and maintenance due to source code changes and application complexities?
- Is your database encryption technology taking a toll on your database performance?
- Is your IT team struggling to meet its service-level agreements while trying to mitigate the risk of data breaches?

## The Informatica Data Masking Product Family

The Informatica® Data Masking products are a family of highly scalable, high-performance data masking software. These products mask or block sensitive and confidential information from unauthorized access in production and nonproduction systems, reducing the risk of data breaches. They empower your IT organization to comply with data privacy policies, regulations, and mandates at lower costs. With Informatica Data Masking products, application end users, database administrators, developers, testers, trainers, production support, and business analysts can perform their functions without sacrificing data security.

- Quickly customize data security solutions for maximum ROI
- Support outsourcing and cloud initiatives while protecting sensitive information
- Improve development, testing, and training quality
- Simplify test data management and increase quality of nonproduction systems
- Reduce data storage and maintenance costs
- Accelerate development/test cycles

## IKON OFFICE SOLUTIONS SAVES COSTS AND SOLVES DATA GROWTH PROBLEM



- Saved 18.8 terabytes of database capacity
- Cut backup window by 25 percent, from 8 to 6 hours
- Achieved ROI in 6 months

Spiraling data growth in its Oracle E-Business Suite database was threatening to overwhelm this innovative document management systems and services provider's storage infrastructure and impact user response times. Once copies of the production and test databases were taken into account, the total database size was forecast to reach 80 terabytes.

IKON relied on Informatica Data Subset to create data subsets to replicate user-selected application data quickly and easily from its production systems into lean, nonproduction systems, such as development, test, and training environments. As a result, IKON reduced costs by up to \$1.5 million over a two- to three-year lease term.

An entity is a logical grouping of database tables that contain related data for a business object.

Name	Description	Data Source	Main Table
AS_SALES_LEAD_RANKS_B_Seed		OSM	AS_SALES_LEAD_RANKS_B
AS_SALES_LEAD_RANKS_TL_Seed		OSM	AS_SALES_LEAD_RANKS_TL
AS_SALES_LEADS	OSM Sales Leads	OSM	AS_SALES_LEADS
AS_SALES_STAGES_ALL_B_Seed		OSM	AS_SALES_STAGES_ALL_B
AS_SALES_STAGES_ALL_TL_Seed		OSM	AS_SALES_STAGES_ALL_TL
AS_STATUSES_B_Seed		OSM	AS_STATUSES_B
AS_STATUSES_TL_Seed		OSM	AS_STATUSES_TL
AS_WORD_REPLACEMENTS_Seed		OSM	AS_WORD_REPLACEMENTS
ASG_APPLICATIONS_R_Seed		ASG	ASG_APPLICATIONS_R

Name	Description	Data Source
AS_SALES_LEADS_LOG	Holds opportunity change history	OSM
AS_SALES_LEAD_CONTACTS	Holds contact information for the Lead. F	OSM
AS_SALES_LEAD_LINES	Holds sales lead lines informatoin	OSM
AS_SALES_LEAD_OPP_LINES	Holds the linking information between sal	OSM

Informatica Data Subset provides prebuilt accelerators for many packaged ERP, SFA, CRM, and SCM business applications, including Oracle E-Business Suite. These accelerators allow you to deploy data subset strategies quickly and easily without fear that your subset policies will cease to function when the underlying application changes.

# Informatica Dynamic Data Masking

## Protect Data Privacy by Dynamically Masking Sensitive Information

Informatica Dynamic Data Masking de-identifies data and controls unauthorized access to production environments. The software dynamically masks sensitive information and blocks, audits, and alerts end users, IT personnel, and outsourced teams who access sensitive information while ensuring compliance with privacy regulations.

Informatica Dynamic Data Masking is built on a patented database network in-line proxy, transparently installed between applications and databases. Acting as a database listener, the proxy processes all inbound application requests coming from application screens, canned reports, and development tools. Once they are analyzed or acted on, they are then sent to the database for prompt execution.

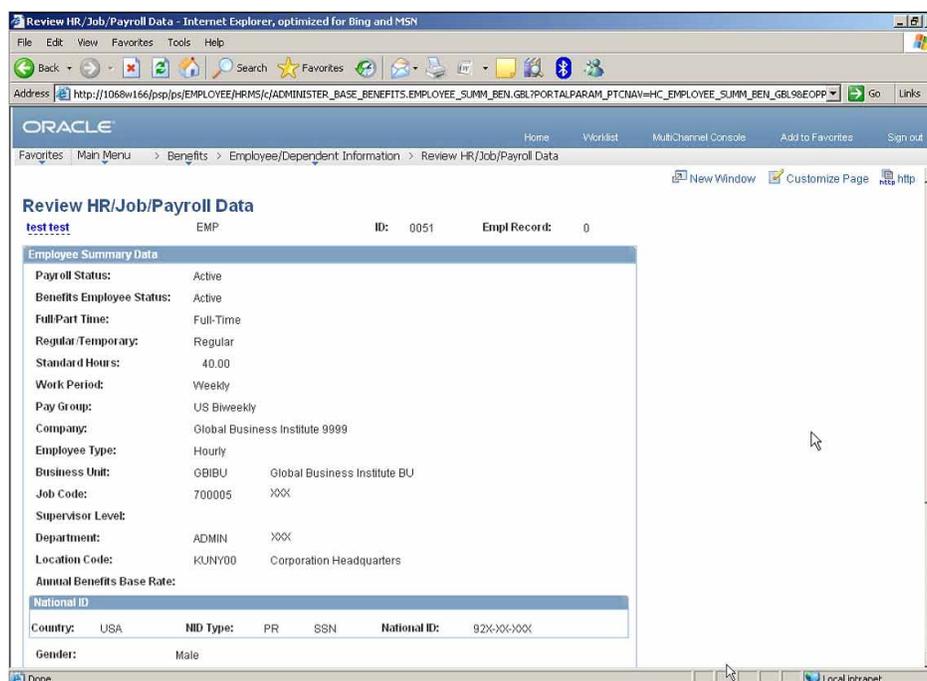
Your IT organization can apply sophisticated, flexible data masking rules based on a user's authentication level. Through a simple yet elegant rules engine, criteria can be specified to identify which SQL statements are to be acted upon (rewritten). When there is a match, Informatica Dynamic Data Masking applies one or more actions—including mask, scramble, hide, rewrite, block, or redirect—to prevent unauthorized users from accessing sensitive information in real time.

### Features

- Easy installation and configuration
- Comprehensive set of application accelerators and prebuilt privacy rules
- Policy-driven real-time business application and database security and monitoring

### Benefits

- Cost-effectively prevent data breaches without impact
- Quickly customize security solutions for maximum ROI
- Support outsourcing and cloud initiatives while protecting sensitive information



Informatica Dynamic Data Masking makes names, account numbers, Social Security numbers, and other sensitive information anonymous in real time when accessed by authorized users—either inside or outside your organization.

# Informatica Persistent Data Masking

## Protect Data Privacy by Persistently Masking Sensitive Information

Informatica Persistent Data Masking is scalable data masking software that helps your entire IT organization manage access to your most sensitive data. The software shields confidential data, such as credit card information, Social Security numbers, names, addresses, and phone numbers, from unintended exposure to reduce the risk of data breaches. It provides unparalleled enterprise-wide scalability, robustness, and connectivity to a vast array of databases.

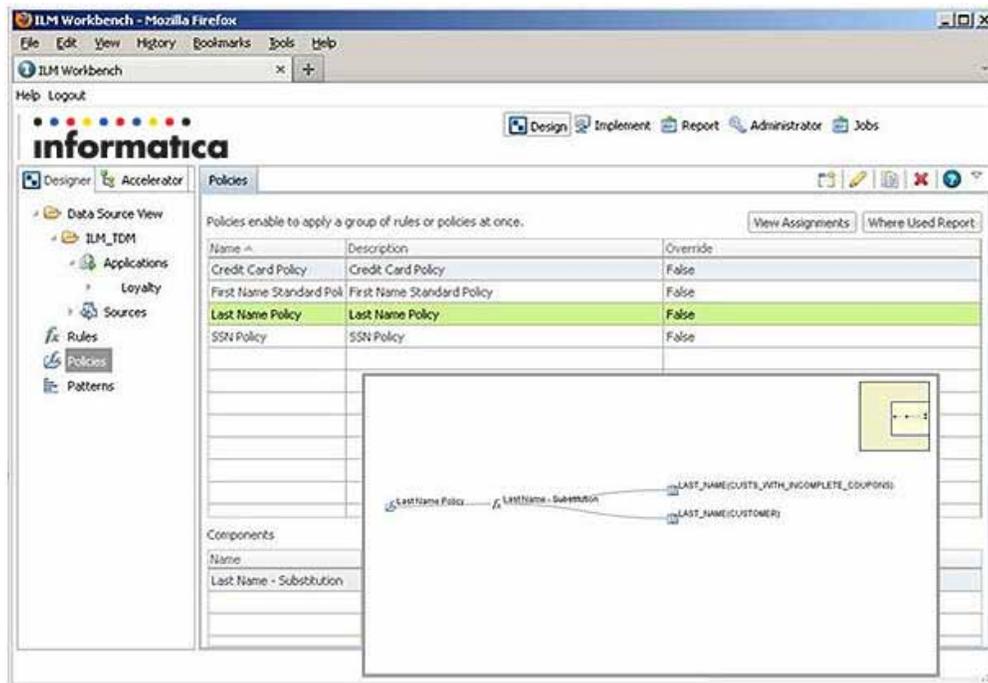
Informatica Persistent Data Masking minimizes the risk of data breaches by masking test and development environments created from production data regardless of database, platform, or location. The software provides sophisticated, but flexible masking rules that allow your IT team to apply different types of masking techniques to various data used in testing, training, and other nonproduction environments.

### Features

- Single, scalable data masking environment
- Comprehensive set of application accelerators
- Broad connectivity and custom application support

### Benefits

- Reduce the risk of data breaches
- Support data privacy compliance mandates
- Improve development, testing, and training quality and simplify test data management



Informatica Persistent Data Masking features robust masking algorithms—including substitution, blurring, key-masking, and other special techniques for credit card numbers, Social Security numbers, account numbers, and financial information—that enable IT organizations to maintain structural rules to de-identify values.

# Informatica Data Subset

## Create Data Subsets to Reduce Costs and Accelerate Development

Informatica Data Subset is flexible, scalable software for creating data subsets. It enables your IT team to create, update, and secure data subsets—smaller, targeted databases—from large, complex databases. With referentially intact subsets of production data, your IT organization dramatically reduces the amount of time, effort, and disk space needed to support nonproduction systems.

Informatica Data Subset quickly replicates and refreshes production data with only the most relevant, high-quality application data. This means your IT team doesn't need to create a full database copy—you separate out only functionally related data from interconnected systems.

By automating the test data management subset and masking operations, Informatica Data Subset minimizes cost, risk, and development times so your IT team can streamline development and testing in favor of focusing on more strategic activities. The software even reduces the size of your test and development environments so you can reallocate reclaimed storage space for other uses.

### Features

- Scalable data subset creation from heterogeneous applications
- Robust data subset support
- Comprehensive set of application accelerators

### Benefits

- Reduce data storage and maintenance costs
- Accelerate dev/test cycles and optimize development, testing, and training systems
- Facilitate test data management and increase quality of nonproduction systems

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## KAMIN LLC QUICKLY DIVESTS AND SAVES BIG



- Divested ERP data within 24 hours
- Cut new company's time to market by 6 months
- Saved \$1 million in IT costs

A leading supplier of kaolin clay to paper and industrial customers worldwide, KaMin needed to separate its own ERP data from its parent company's and create a freestanding technology infrastructure—all on a tight budget and an even tighter timeline.

KaMin relied on Informatica Data Subset to create a smaller, targeted version of its Oracle E-Business Suite database. As a result, the company quickly separated data along business lines, completing the divestiture in half the time it would have taken using scripting techniques and saving more than \$1 million in IT costs.

## About Informatica

Informatica Corporation (NASDAQ: INFA) is the world's number one independent provider of data integration software. Organizations around the world rely on Informatica for maximizing return on data to drive their top business imperatives. Worldwide, over 4,630 enterprises depend on Informatica to fully leverage their information assets residing on-premise, in the Cloud and across social networks.

*"Thanks to Informatica, ...KaMin has become its 'own master' faster—being in a position to target, acquire, and support kaolin customers up to six months more quickly than if we had used an alternative divestiture strategy."*

– Senad Hadzic, CIO  
KaMin Performance  
Materials LLC



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