

SECURITY INSIDEOUT

Complete Protection for Your Database, Middleware, and Applications

ORACLE

Database Security Enterprise Manager Data Masking Pack

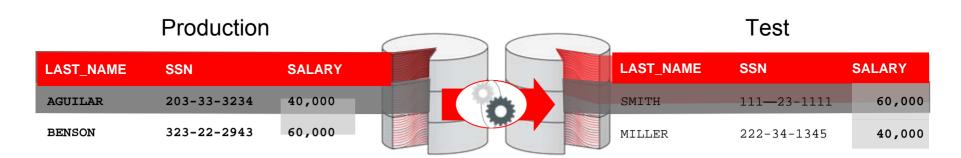
Antun Vukšić Principal Consultant, Oracle Hrvatska

Business Drivers for Data Masking Application Sarbanes Developers Social Security Oxley Numbers 3rd party IT **PCI-DSS** Service Customer acconuting Corporate credit cards **Providers HIPAA Business** partners **GLBA** Patient health California Market Employee salaries Data Research Security **Breach** Clinical numbers Bank a/c **EU** Data Research Protection Directive

Secure Test System Deployment



Oracle Data Masking



- Deploy secure test system by masking sensitive data
- Sensitive data never leaves the database
- Extensible template library and policies for automation
- Sophisticated masking: Condition-based, compound, deterministic
- Integrated masking and cloning
- Leverage masking templates for common data types

Oracle Data Masking



Comprehensive and Extensible Mask Library

Form	at Library									
The Format Library contains a collection of ready-to-use masking formats which can be used when creating a masking definition										
Search Format			Go							
(View) (Create Like) (Edit) (Delete)										
Select	Format	Data Type	Sample	Description						
•	American Express Credit Card Number	Character	3737652673504728	~10 billion unique American Express credit can numbers						
0	Discover Card Credit Card Number	Character	6011119415762055	~10 billion unique Discover Card credit card nu						
0	MasterCard Credit Card Number	Character	5450028508701930	~10 billion unique MasterCard credit card numl						
0	Visa Credit Card Number	Character	4485866837369032	~10 billion unique Visa credit card numbers						
0	Generic Credit Card Number	Character	6011924613720064	~10 billion unique generic credit card numbers						

Mask formats for common sensitive data

Accelerates solution deployment of masking

Extensible mask routines

Enables customization of business rules

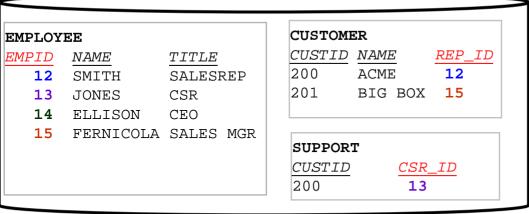
Define once, apply everywhere

Ensures consistent enforcement of policies

Oracle Data Masking



Application Integrity and Sophisticated Masking Techniques



Automatic Referential Integrity



Conditionbased Masking

Compound Masking

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Automatic Referential Integrity



Ensure application consistency while eliminating manual maintenance

Sophisticated masking techniques

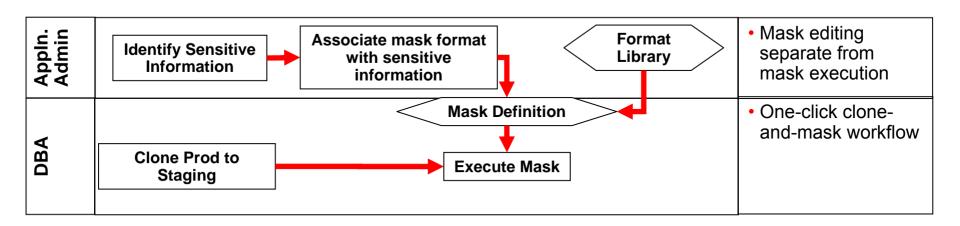


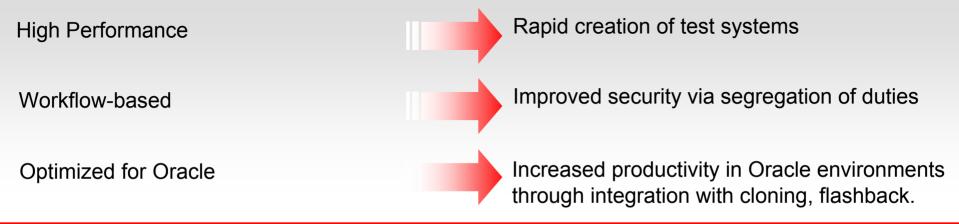
Apply context-sensitive business rules

Oracle Data Masking



High performance, Workflow-based and Optimized for Oracle





Secure Test System Deployment



Oracle Data Masking in EM 11g

Production			Test		
LAST_NAME	SSN	SALARY	LAST_NAME	SSN	SALARY
AGUILAR	203-33-3234	40,000	SMITH	111—23-1111	60,000
BENSON	323-22-2943	60,000	MILLER	222-34-1345	40,000

- NEW: Masking of heterogeneous databases via database gateways
- NEW: Command line (EMCLI) support for data masking actions
- Deploy secure test system by masking sensitive data
- Sensitive data never leaves the database
- Extensible template library and policies for automation
- Sophisticated masking: Condition-based, compound, deterministic
- Integrated masking and cloning
- Leverage masking templates for common data types

Integration with Non-Oracle data



- Connect to non-Oracle from an Oracle env.
 - Transparently access non-Oracle data using Oracle SQL
- Makes the non-oracle look like a remote Oracle
 - Location Transparency
- Target specific Gateways
 - DB2, SQL Server, Teradata, Sybase, Informix
- Generic Gateway
 - Gateway for ODBC

Support and availability



Support

- Oracle Database 9.2 through 11.2
- All Oracle Applications on the above DB platforms
- Available in
 - Oracle Enterprise Manager Grid Control 10.2.0.4 → 11.1
 - Oracle Enterprise Manager Database Control 11.2







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