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Informatica Cloud Test Data Management

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Informatica™

Housekeeping Tips



- Today's Webinar is scheduled for **1 hour**
- The session will include a webcast and then your questions will be answered live at the end of the presentation
- All dial-in participants will be muted to enable the speakers to present without interruption
- Questions can be submitted to "All Panelists" via the **Q&A option** and we will respond at the end of the presentation
- The webinar is **being recorded** and will be available to view on our **INFASupport YouTube channel** and **Success Portal**. The link will be emailed as well.
- Please take time to complete the **post-webinar survey** and provide your feedback and suggestions for upcoming topics.

Success Portal

<https://success.informatica.com>

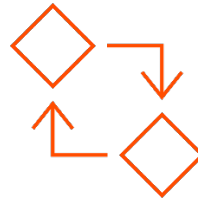
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experience



FREE Product
Learning Paths
and weekly Expert
sessions



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Tailored training and
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recommendations

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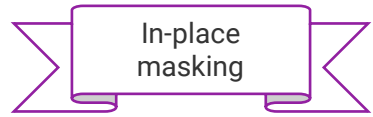
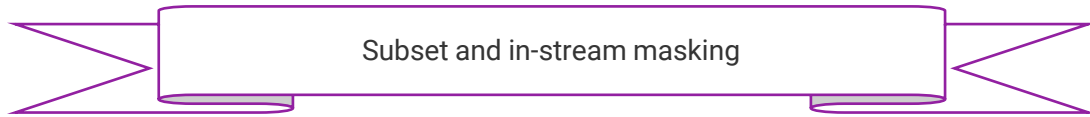
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Agenda

- Overview of the current approaches
- IICS Cloud Test Data Management
 - Data Masking
 - Data Sub-setting
- Consistency Data Masking
- Schedule Options
- Bonus: Data Masking Transformation for CDI
- Q&A

Salesforce use cases

Production Org	Full Sandbox	Partial Sandbox	Dev Pro Sandbox	Dev Sandbox
				
Unlimited Edition	1	0	5	15
Performance Edition	1	1	5	30
Refresh Interval	29 days	5 days	1 day	1 day
Max size / data	Same as production Org	5 GB	1 GB	200 MB
What is copied by Salesforce	Metadata and all data	Metadata and sample data	Metadata only	Metadata only
				

Cloud masking offerings at a glance

Cloud Test Data Management and Cloud Masking

Designed for **provisioning of secure non-production environments**

Purpose built wizard

New

1 Definition 2 Source 3 Target 4 Data Filters 5 Masking 6 Schedule

Task Details

Task Name: * Salesforce Mask PII ?

Location: * REG\Default Browse ?

Description:

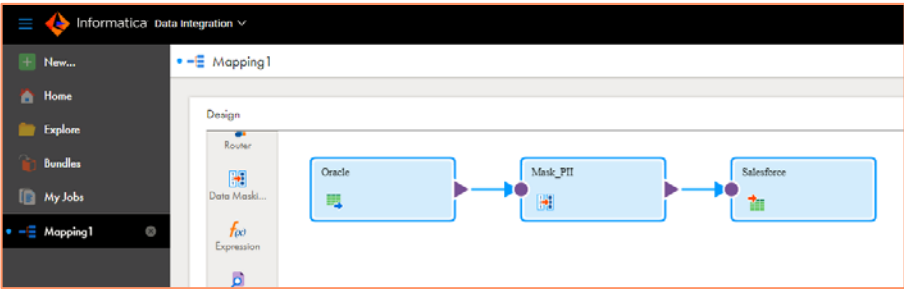
For Salesforce only

Salesforce: Subset and in-place masking

Data Masking for Data Integration

Designed for **masking sensitive data in Data Integration**

Transformation in Cloud Mapping Designer



For all sources supported by Cloud Mapping Designer

SaaS, Oracle, MSSQL, Flat files...

Consistent masking achieved using same set of masking techniques

Data Masking and Subset for salesforce.com

Secure and Populate Sandbox Copies

- Masks existing sandboxes
 - Ensures data privacy
 - Out of the box PII, PHI, PCI data masking rules
- Create test data sets for dev sandboxes
 - Populate empty sandboxes with referentially intact data sets
- Rationalize existing SFDC investment
 - Saves cost of additional full sandbox copies

The image shows two overlapping screenshots of the Salesforce Data Masking and Subset tool interface.

The top screenshot, titled "New", shows the "Definition" tab. It includes a progress bar with steps: 1 Definition, 2 Source, 3 Target, 4 Data Filters, 5 Masking, and 6 Schedule. The "Task Details" section contains the following fields:

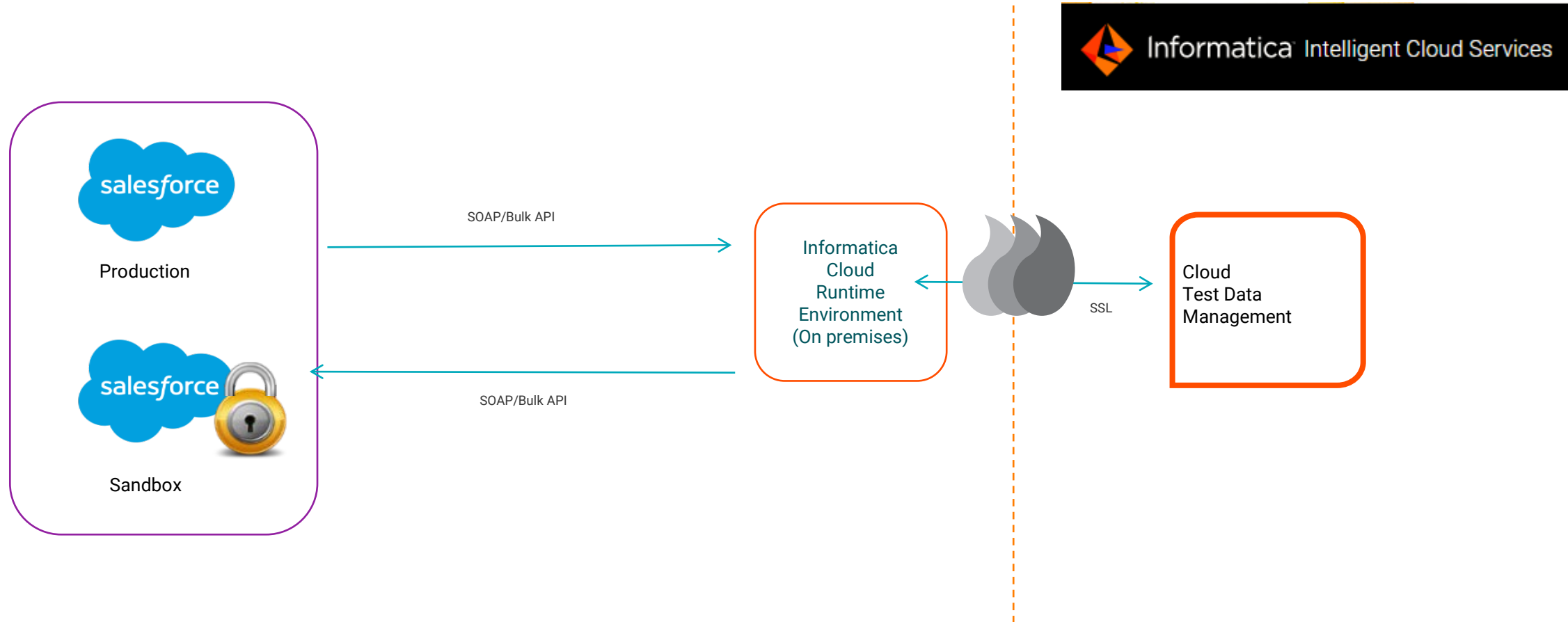
- Task Name: Salesforce Mask PII
- Location: REG\Default
- Description: (empty)

The bottom screenshot, titled "New Salesforce Mask PII", shows the "Masking" tab. It includes a progress bar with steps: 1 Definition, 2 Source, 3 Target, 4 Data Filters, 5 Masking, and 6 Schedule. The "Define Masking Rules" section shows a table of rules for the "Source Object: Account".

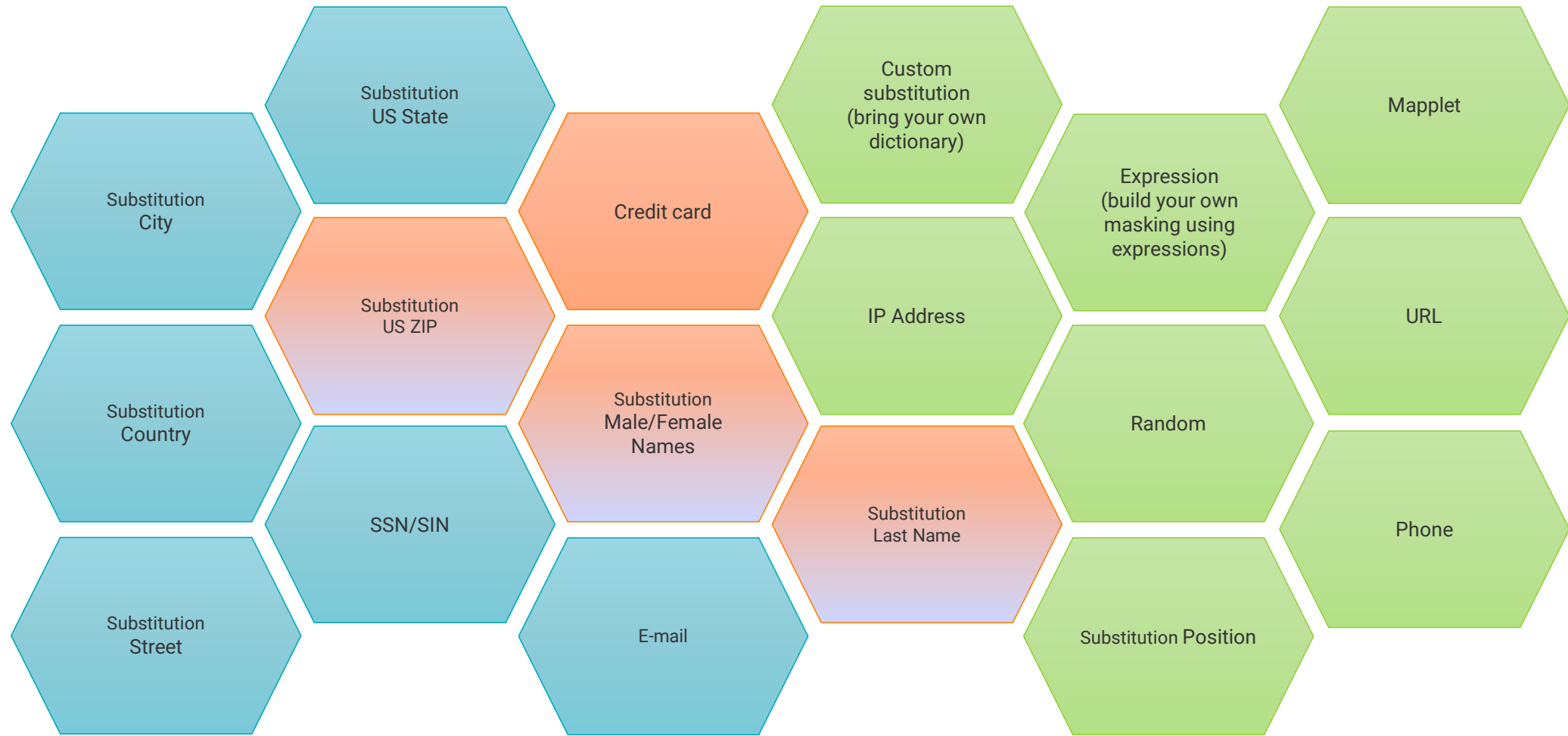
Status	Name	Masking Rule	Configuration
<input type="checkbox"/>	Account Number		
<input type="checkbox"/>	Account Source		
<input type="checkbox"/>	Active		
<input type="checkbox"/>	Annual Revenue		
<input checked="" type="checkbox"/>	Billing City	Substitution City	Configure...
<input checked="" type="checkbox"/>	Billing Country	Substitution Country	Configure...
<input type="checkbox"/>	Billing Geocode Accuracy		
<input type="checkbox"/>	Billing Latitude		
<input type="checkbox"/>	Billing Longitude		
<input checked="" type="checkbox"/>	Billing Zip/Postal Code	Substitution US ZIP Code	Configure...
<input checked="" type="checkbox"/>	Billing State/Province	Substitution State	Configure...
<input checked="" type="checkbox"/>	Billing Street	Substitution Street	Configure...
<input type="checkbox"/>	BusinessHours1		

Cloud-based Test Data Management

High Level Architecture



Masking techniques available

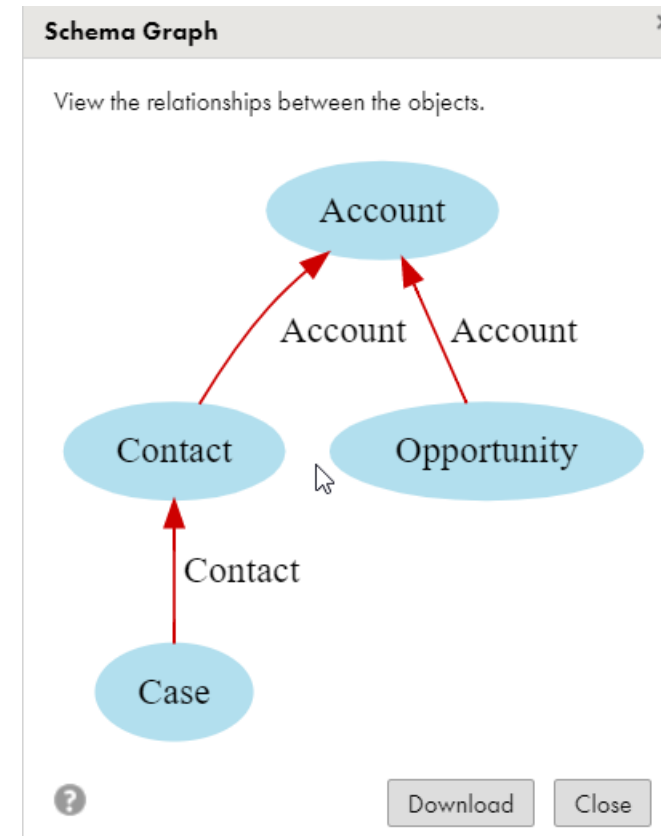


Regulations: PII, PHI, PCI

Source Objects

Single or Multiple related Objects

- Single object that doesn't contain any related objects
- Multiple objects that have an explicit relationship defined in Salesforce
- Schema Graph – Graphical representation of the relationships
 - Multiple Source Objects
 - Relationships
 - Assignments



Target Task Operations

Single or Multiple related Objects

- Partial Sandbox – Insert, Update, Upsert operations are possible
- Inplace Masking – target is same as source; only update
- Refresh Fields – when there's a change in metadata
- Validation Reports - lists mandatory relationships, fields, and field and relationship mismatch between source and target

Refresh Metadata

Obsolete metadata

- Refresh metadata without editing task – Explorer Page
 - Refresh runs a separate job
 - Cannot run an instance of masking task and a refresh job at the same time
- Refresh metadata from within a task
 - Refresh source and/or target fields from within a masking task when you create or update a masking task
- Best Practice: If you need to update many objects then you refresh metadata without editing the task

Staging Database

H2

- H2 Database
 - Stage record ID's
 - Data subset for simple entities
 - Entities with junction objects
 - Multipath & Lookup based relationships
 - Masking fields
- H2 Staging Database Installer
 - Packaged along with Secure Agent; run the installer to install the staging connection
 - Either start the database connection from Schedule page of the masking task wizard or manually run the H2 startup script

Data Subset & Masking Rules

- Masking Task maintains primary-foreign key relationships and reconciles the object relationships in the subset data
 - Data Filter – Simple or Advanced data filter
 - Relationship Behavior (Schema Graph)
 - Subset Statistics – Helps in estimating/evaluating target size for the data subset
- Masking Rules – You can apply masking rules to fields which are not read-only
 - Masking Rule Assignments – Masking Rules by field data type
 - Add Mapplets – Use Passive mapplets to mask target fields
 - Target Fields – Common & Missing Mandatory fields

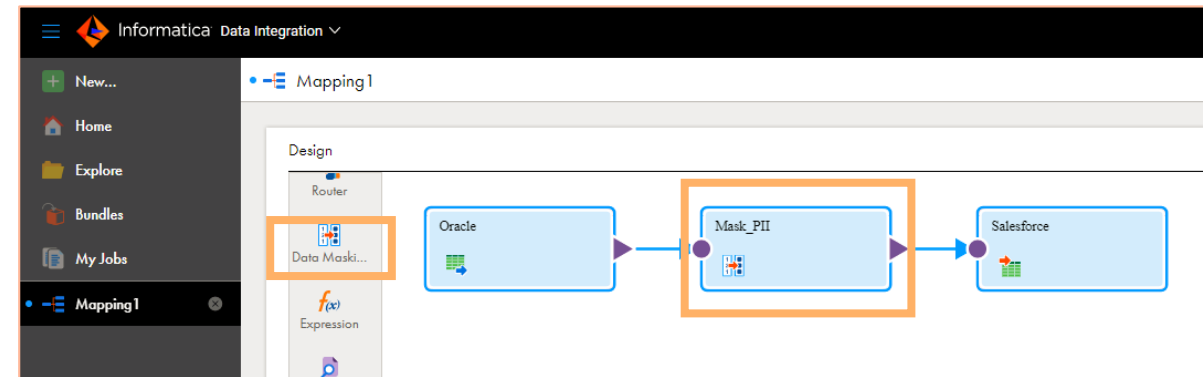


Data Masking for Data Integration

Data Masking Transformation

Available on Cloud Mapping Designer

- Designed to mask sensitive data in data integration use cases
- **Supports all sources and targets supported by Cloud Mapping Designer**
- Embeds several masking techniques: SSN, credit card, substitution, random and others
- Not designed for creation of new test environment systems



Consistent masking between TDM and CTDM

- Cloud TDM, on premise TDM, Data Masking Transformation in Cloud Mapping Designer and PowerCenter **can mask consistently**
- Repeatable**: same masked result for the same input

Original	TDM	CTDM	DDM
John Adams	Tim Jones	Tim Jones	Jo***
Nicholas Cage	Jack Nicholson	Jack Nicholson	Ni***
John Adams	Tim Jones	Tim Jones	Jo***

Repeatable ON

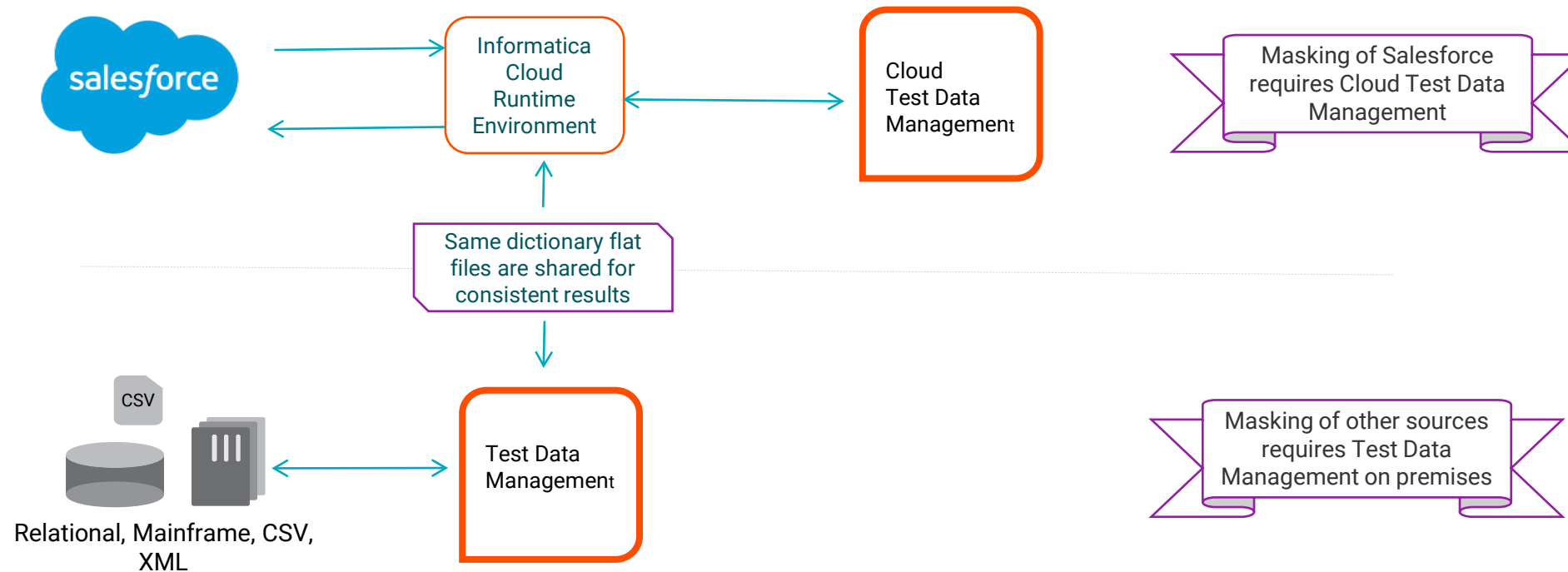
Original	TDM	CTDM	DDM
John Adams	Tim Jones	Calvin Kline	Jo***
Nicholas Cage	Jack Nicholson	Joanna Wu	Ni***
John Adams	Fred Mercury	Perry Mason	Jo***

Repeatable OFF

- Seed value**: point for generating masked values. If the same seed value and same dictionary (for substitutions) is used, same result will be obtained

Consistent masking use cases

- High Level Architecture



Test Data Management and Cloud Test Data Management

Main characteristics and features

Informatica Test Data Management and Cloud Test Data Management are **complementary solutions**














	Test Data Management (on premises solution)	Cloud Test Data Management (Hosted SaaS solution)	Dynamic Data Masking (Masking data on the move)
High Performance and Scalable Subset and Masking	•	•	•
Centralized Administration and Management	•	•	•
Profiling: discover sensitive data and infer relationships	•		
API for DevOps integration	•	•	
Data Validation	•		
Connectivity to Relational, No-SQL, Mainframe	•		•
Masking and Subset for Salesforce Sandboxes		•	
Masking and Subset for Mainframe	•		
Masking No-SQL and Hadoop	•		•
Test Data Warehouse and Self Service Portal	•		
Test Data Generation	•		
Test Data Coverage	•		



Demo

Masking Salesforce Data

Original data in Salesforce

Account United Oil & Gas Corp. 		
Contacts (4) New		
 Lauren Boyle Title: SVP, Technology Email: lboyle@uog.com Phone: (212) 842-5500		 Avi Green Title: CFO Email: agreen@uog.com Phone: (212) 842-5500
 Arthur Song Title: CEO Email: asong@uog.com Phone: (212) 842-5500		 Stella Pavlova Title: SVP, Production Email: spavlova@uog.com Phone: (212) 842-5500
View All		
Opportunities (6+) New		
United Oil Standby Generators Stage: Closed Won Amount: \$0.00 Close Date: 10/14/2019		United Oil SLA Stage: Closed Won Amount: \$120,000.00 Close Date: 10/13/2019
United Oil Refinery Generators Stage: Closed Won Amount: \$915,000.00 Close Date: 9/29/2019		United Oil Refinery Generators Stage: Proposal/Price Quote Amount: \$270,000.00 Close Date: 10/6/2019
United Oil Plant Standby Generators Stage: Needs Analysis Amount: \$675,000.00 Close Date: 9/15/2019		United Oil Installations Stage: Closed Won Amount: \$235,000.00 Close Date: 8/29/2019
View All		
Cases (6+) New		
00001001 Contact Name: Avi Green Subject: Performance inadequate for second consecutive... Priority: High		00001002 Contact Name: Stella Pavlova Subject: Seeking guidance on electrical wiring installatio... Priority: Low
00001022 Contact Name: Stella Pavlova Subject: Signal panel on GC5060 blinks intermittently Priority: Medium		00001021 Contact Name: Stella Pavlova Subject: Generator GC3060 platform structure is weaken... Priority: High
00001023 Contact Name: Stella Pavlova Subject: Electric surge damaging adjacent equipment Priority: High		00001024 Contact Name: Lauren Boyle Subject: Design issue with mechanical rotor Priority: Low
View All		

Definition of a Masking Task – Source object

Edit dm_MaskingSubsetting_Demo



1 Definition 2 Source 3 Target 4 Data Filters 5 Masking 6 Schedule

Source Details

Connection: * Salesforce_Demo View... New...

Source Type: * ☐ Single ☒ Multiple

Add... View Schema...

Actions Source Object Related Objects Relationship Name

<input checked="" type="checkbox"/>	Case		
<input checked="" type="checkbox"/>		Contact	Contact
<input checked="" type="checkbox"/>	Contact		
<input checked="" type="checkbox"/>		Account	Account
<input checked="" type="checkbox"/>	Opportunity		
<input checked="" type="checkbox"/>		Account	Account
<input checked="" type="checkbox"/>	Account		

- ☒ Display technical names instead of labels
☐ Display source fields in alphabetical order

Data Preview

Select an object to preview its data.

Sandboxes where data will be masked

Salesforce Objects to be masked. Standard objects and custom objects are supported.



Save

< Back

Next >

Finish

Cancel

Definition of a Masking Task – Data Filters

Edit dm_MaskingSubsetting_Demo

1 Definition 2 Source 3 Target 4 Data Filters 5 Masking 6 Schedule

Data Filters

New...

Object Filter by

Account **Account.Name='United Oil & Gas Corp.'**

Relationship Behavior

Configure...

View Schema...

Join Operations: ?

3

Selection Sequence: ?

View...

Configure Relationship Behavior

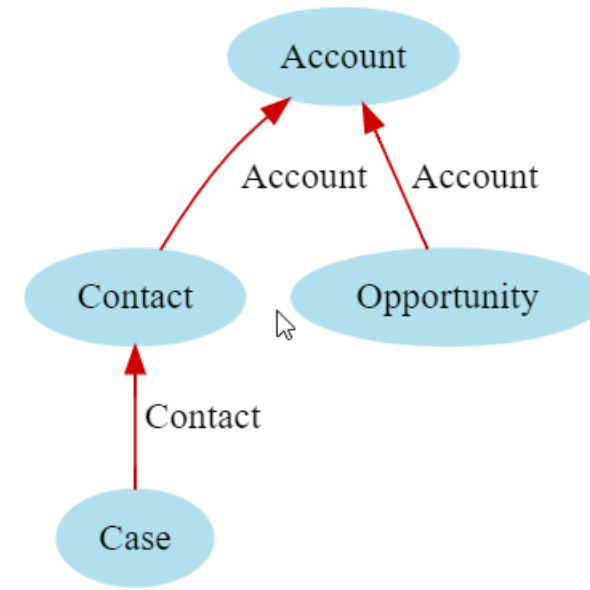
Configure the relationship to select the child objects that you want to include in the data subset.

Source Object	Child Record Selection	Related Objects	Relationship Name
Account	<input checked="" type="checkbox"/>	Contact	Account
	<input checked="" type="checkbox"/>	Opportunity	Account
Contact	<input checked="" type="checkbox"/>	Case	Contact
Case			
Opportunity			

Data Filter:
Simple &
Advanced

Schema Graph

View the relationships between the objects.



Save

Cancel

< Back

Next >

Finish

Cancel

Definition of a Masking Task – Masking configuration

Edit dm_MaskingSubsetting_Demo



1 Definition 2 Source 3 Target 4 Data Filters

Schedule

Define Masking Rules

Source Object: Account

Account

Show: ☒ Comm

Contact

Status

Name

Case



Id



IsDele...



MasterRecordId



Name



Type



ParentId



BillingStreet



BillingCity



BillingState



BillingPostalCode



BillingCountry



BillingLatitude



BillingLongitude

Fields

Masking Rule

Pick a Source Object to apply Masking Rules

Assign a masking rule to updateable fields

Configure...

Configure...

Configure...

Configure...

Configure...



Save

< Back

Next >

Finish

Cancel

Definition of a Masking Task – Schedule

Edit dm_MaskingSubsetting_Demo



1 Definition 2 Source 3 Target 4 Data Filters 5 Masking 6 Schedule

Success Email Notification:

Advanced Options

Preprocessing Commands:



Post-processing Commands:



Parameter File Name:



Advanced Salesforce Options

Disable Triggers and Rules:

☒

Use the Bulk API:

☒

Enable Primary Key Chunking:

☒

Yes

☐

No














Primary Key Chunking Size:



Enable Primary Key Chunking and use Bulk API for large volumes of source data
Improve data load performance by disabling active triggers and rules on targets and re-enable the same after load completes

Masked data in Salesforce

Account United Oil & Gas Corp. 		
Contacts (4) New		
 Arthur Jb0_ Title: CEO Email: sla4f@fpw.ttd Phone: (767) 937-4488		 Lauren ybt/u Title: SVP, Technology Email: evanls@bos.fnd Phone: (767) 937-4488
 Avi .-Ef Title: CFO Email: swlkc4@bfb.tkz Phone: (767) 937-4488		 Stella Yc\./.# Title: SVP, Production Email: kqxtlppm@lkj.hcc Phone: (767) 937-4488
View All		
Opportunities (6+) New		
United Oil Office Portable Generators Stage: Closed Won Amount: \$121,161.65 Close Date: 10/14/2037		United Oil SLA Stage: Closed Won Amount: \$121,212.16 Close Date: 8/11/2021
United Oil Plant Standby Generators Stage: Needs Analysis Amount: \$619,126.28 Close Date: 9/28/2000		United Oil Refinery Generators Stage: Closed Won Amount: \$850,680.82 Close Date: 7/13/1991
View All		
Cases (6+) New		
00001054 Contact Name: Avi .-Ef Subject: Performance Inadequate for second consecutive... Priority: High		00001055 Contact Name: Stella Yc\./.# Subject: Seeking guidance on electrical wiring Installatio... Priority: Low
00001057 Contact Name: Stella Yc\./.# Subject: Signal panel on GC5060 blinks Intermittently Priority: Medium		00001056 Contact Name: Stella Yc\./.# Subject: Generator GC3060 platform structure Is weaken... Priority: High
View All		





Thank you!