DELPHIX

# **Delphix 6.0.9 and More**

### July 2021

Product Marketing



## Delphix Data Platform 6.0.9: What's New

#### • High Level Update

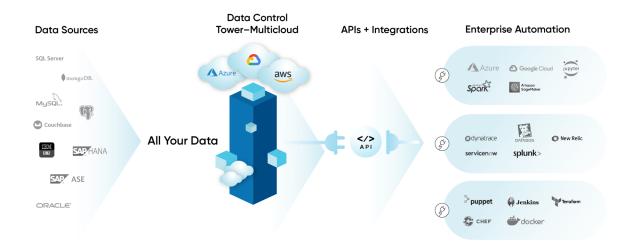
- Data Control Tower Multicloud
- Data Control Tower SaaS API Expansion

### • Technical Updates

- Oracle EBS Multi-Tenant Support
- Batch Masking
- New Shuffle Algorithm
- Email Masking Algorithm
- Masking Extensibility SDK and Masking Custom Tasks
- TLS 1.3 Support
- Data Vault Additions
- Change in Phonehome Data Collection
- Password Vaults for Remote Hooks
- dxi docker image
- End of Life
- Certifications

### **Data Control Tower - Multicloud**

- We launched a new offering, Data Control Tower Multicloud.
- This is a new product that will bring an API control point to customers who want to run their integrations either on-premises or in a cloud of their choice.

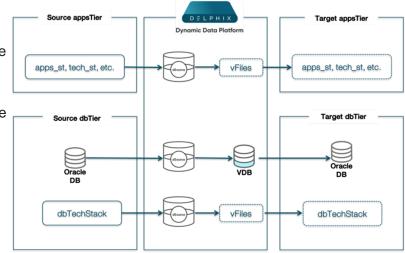


### **Data Control Tower - SaaS API Expansion**

- We added a new set of endpoints to list the virtualization data objects, sources, dSource and VDBs.
- These new API endpoints will enable a Data Control Tower customer to query dataset information without regard to individual engines, power reporting workflows and monitor dataset usage.

### **Oracle EBS Multi-Tenant Support**

- We added support for Oracle 19c Multi-Tenant configurations for the 12.2 Oracle EBS plugin.
- Please note the 12.1 plugin will not support 19c MT.
- EBS 12.2 3.0.0 Plugin GA is certified with Oracle 19c MT database on RHEL 7.9 OS.
- Supports the following plugin features/enhancements:
  - 1. APPS Password change
  - 2. Weblogic Password change
  - 3. Change JAVA forms interface
  - 4. Enhanced security of critical information (passwords)
  - 5. Sudo Privileges
- Existing customers can upgrade their plugin version to 3.0.0 for these benefits:
  - 1. Dynamic timeout feature for cloning appstier according to customers' environmental configuration.
  - 2. Enhanced user experience to avoid manual workarounds.



### **Batch Masking**

- We added batch masking processing to the masking extensibility API.
- This allows an algorithm to receive multiple inputs, mask them, then provide the set of results back to the masking job.
- Allows a masking algorithm to process multiple inputs and produce multiple outputs all in one method call.
- Improves performance when an external database or API gateway is being accessed to mask.
- Batching can only be supported in jobs where every row processed passes through the extended algorithm job step.

Јоb Туре	Condition	Batch Support	Batch Size at Default RowLimit
Database		Yes	4000
Delimited File	Exactly 1 body record type	Yes	2000
Delimited File	2 or more body record types	No	1
Fixed Width File	Exactly 1 body record type	Yes	2000
Fixed Width File	2 or more body record types	No	1
Mainframe Dataset (VSAM)		No	1
XML		No	1

### **New Shuffle Algorithm**

- We implemented a new version of the Secure Shuffle algorithm with the new batch masking feature.
- The Secure Shuffle algorithm takes existing values in customers' datasets and sorts them into a new order.
- This new algorithm provides greater, more robust performance and supports a much larger shuffle set.
- All values in each batch are randomly shuffled, each value is moved to a new position.
- Shuffle radius is equal to the batch size for the job.
- Secure Shuffle can only be applied when batching is supported.
- Delimited and fixed width jobs can now use Secure Shuffle as long as multiple record types are not defined.

### **Email Masking Algorithm**

- We introduced a new algorithm framework that allows customers to mask email addresses to unique values as well as independently choose how the name and domain parts of an email address are masked.
- The Email framework masks string values by splitting the input on the '@' symbol and independently masking the name and domain portions of the email address. The framework has the ability to produce unique masking results where two different inputs will not mask to the same output.
- Masked values are calculated algorithmically using the algorithm's key, so rekeying the algorithm will cause different outputs to be generated for each input. All inputs to this framework are valid and the framework will not generate non-conformant data events.

## **Email Masking Example**

#### Configuration via GUI:

Algorithm Name         Character Mapping       Algorithm Example         Description       Description         Date       Mask Name With         Dependent Date Shift       Mask Name With         Lookup File for Name - Upload a File or Specify a URI         Segment Mapping (legacy)       Mask Domain With         Binary Lookup       Mask Domain With         Select Algorithm for Domain       Select Algorithm for Domain         In Max       Corre: CM Alpha-Numeric       Select Algorithm for Domain         In Max       Core: CM Alpha-Numeric       Select Algorithm for Domain         In Max       Core: CM Alpha-Numeric       Select Algorithm for Domain         In Max       Core: CM Alpha-Numeric       Select Algorithm for Domain         In Max       Core: CM Alpha-Numeric       Select Algorithm for Domain         In Max       Core: CM Alpha-Numeric       Select Algorithm for Domain         In Max       Core: CM Alpha-Numeric       Select Algorithm for Domain         In Max       Core: CM Alpha-Numeric       Select Algorithm for Domain         In Max       Core: CM Alpha-Numeric       Select Algorithm for Domain         In Max       Core: CM Alpha-Numeric       Select Algorithm for Domain         In Max       Core: CM Alpha-Numeric       Select Al	Select Framework		Create Email Algorithm <sup>@ Learn More</sup>	
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ata Cleansing O Cancel S	okenization	0	dlpx-core:CM Alpha-Numeric	
Cancel	1in Max	0		
	ata Cleansing	0	Cancel	
	ree Text Redaction	0	Cancer	

# Configuration via API using POST /algorithms API endpoint:

```
"algorithmName": "EmailAlgorithmExample",
"algorithmType": "COMPONENT",
"frameworkId": 6,
"algorithmExtension": {
    "nameAction": "LOOKUP",
    "domainAction": "APPLY_ALGORITHM",
    "nameLookupFile": {
        "uri": "delphix-file://upload/f_0123/email_lookup_20K.txt"
    },
    "domainAlgorithm": {
        "name": "dlpx-core:CM Alpha-Numeric"
    }
}
```

#### Possible inputs and outputs:

Input	Output	
bob@gmail.com	Joe.Smith@dqpnx.fsy	
bob@hotmail.com	Joe.Smith@poatzdw.bya	
alex@gmail.com	Abe.Lincoln@dqpnx.fsy	
joe_1230yahoo.com	Katherine.A@wbpaq.kts	

### Masking Extensibility SDK and Masking Custom Tasks

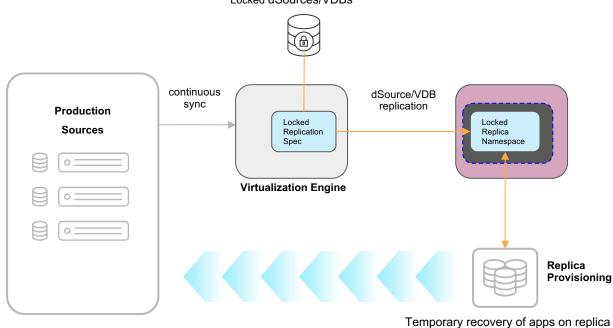
- We changed the name of the "Masking Algorithm SDK" to the "Masking Extensibility SDK" to reflect that we are introducing additional functions that can be extended via the SDK.
- In this release, we made extended connectors more powerful by providing the ability to add custom tasks.
- These custom tasks include commonly-requested steps like disabling triggers or constraints which will be executed in a masking job before and after the transformation step.
- Added the new driver support plugin type to customize pre/post job tasks using the masking SDK. You can:
  - Implement custom tasks, with access to the masking ruleset, inventory, and target connection
  - Define order that the custom tasks are run
  - Add custom logging
  - Include built-in stats like total duration of operation
  - Include built-in error reporting through the execution events API
  - Allow as many tasks per job with separate UI screen for tasks on the job form
  - Enable sharing tasks between jobs using the same extended driver
  - Enable any operations that can be done in Java, even outside database operations
- In future releases, we will expand this functionality to additional connector types.

### TLS 1.3 Support

• We added HTTPS support for Engine Admin Console Access for secure connections.

### **Data Vault Additions**

- In the 6.0.8 release, we introduced our first Ransomware-specific functionality: locked replication specs.
- Now, we added the ability to manage this from the UI and additional process monitoring.



provisioned VDBs in case of ransomware attack

Locked dSources/VDBs

### **Change in Phonehome Data Collection**

• For those customers with phonehome enabled, we shifted the default collection period to daily.

### **Password Vaults for Remote Hooks**

- Hooks running on environments can now obtain credentials from the engine and its configured password vaults to perform custom authentication tasks in a secure manner.
- This will initially be supported via the command line.
- In the past, hook operations that perform custom authentication tasks when running on hosts must resort to hard-coding credentials in the hook code.
- To improve security and flexibility, the new feature allows hooks to access environment variables that contain credentials securely retrieved by the engine.
- The credentials can be entered directly by the Delphix user in the hook definition (e.g. a password encrypted in disk and masked in the UI) or retrieved by the engine from a password vault that is already configured in the engine.

### dxi docker image

- We have released a <u>dockerized version of dxi</u>.
- Through a customizable dockerfile or a pre-built Docker image, users can now trigger dxi CLI operations with minimal set-up requirements.

## End of Life

- Delphix Reporting reached EOL on July 1st, 2021.
- We recommend to account teams to discuss Data Control Tower with customers interested in continuing their reporting workflows.

### Certifications

• ESXi 7.0 U2