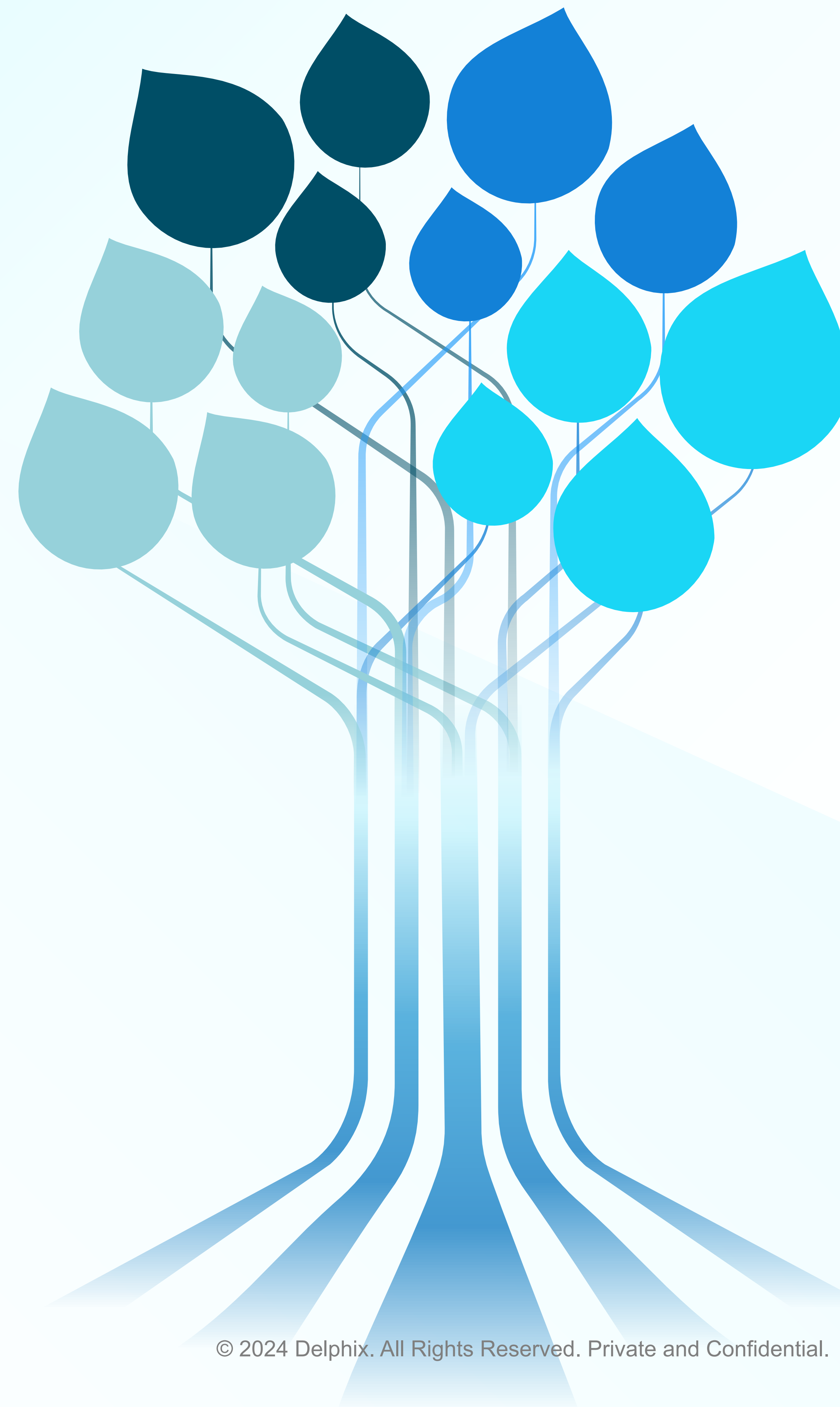




# What's New

Delphix March 2024 Product Updates



# March Feature Highlights

- **Automated Sensitive Data Discovery** now works with XML files.
- **The Data Control Tower developer experience has been enhanced** to include advanced self-service scenarios.
- **Data Control Tower now shows if algorithms are configured differently** across your applications and how they differ.



## Data Control Tower (DCT)

- Expanded Source Linking: Over the past few years, we have introduced Staging Push to allow users to bring their data to Continuous Data. The DCT UI now supports linking for Oracle and SQL Server using Staging Push. Further, we've expanded standard linking to SAP ASE, PostgreSQL, Db2, MySQL, HANA, and MongoDB.
- Hyperscale Compliance UI Enhancements: Several improvements have been added, including enabling the management of Continuous Compliance Engine assignments for Hyperscale Jobs.
- DCT Toolkit Enhancements: Based on customer feedback, several improvements have been made to our fully supported CLI for DCT. Notably, `dct-toolkit` allows users to provide engine names as values for 'id' options.
- Improved Replication Visibility: Replication is used for data movement, disaster recovery protection, Sensitive Data Distribution, and more, which requires setting up relationships between Continuous Data Engines. To provide better visibility on these relationships, we have added them to Data Control Tower. To further simplify this user experience, the target Continuous Data Engine and dataset are now linked together.
- Algorithm Centralization: We plan to centralize orchestration and control in Data Control Tower. To enable better visibility into compliance, masking algorithms across all connected Continuous Compliance Engines can now be centrally viewed in DCT.
- Engine Performance Trendlines: Historical trendlines have been added to the recently introduced engine performance reports.

## Continuous Compliance

- Character Replacement Algorithm Framework: This framework allows for creating rules to replace specific characters in a string with other characters. For example, you can use this framework to remove inconsistent punctuation in data to maintain referential integrity across data sources.

## Continuous Data

- Documentation Updates: We have made broad improvements across multiple areas of our documentation, including the Delphix Glossary, Datasets' Getting Started, and PostgreSQL.
- UI for Object Storage Connectivity Modification: We have implemented several enhancements to simplify the modification of object storage configuration. Specifically, the following can be modified: key rotation for security (key-based authentication), endpoint URL, region, and the ability to change between key-based and profile-based authentication.
- Improved Elastic Data Migration: Leveraging Elastic Data with Continuous Data provides significant cost savings by leveraging object storage and block storage. We have decreased the time to execute migrating an engine from a standard Continuous Data Engine to an Elastic Data Engine without the need for replication.
- TDE support for Hardware Security Module (HSM) solutions: Managing Oracle TDE (Transparent Data Encryption) across multiple Oracle environments can be challenging. TDE management solutions have been introduced to solve this challenge and are growing in popularity. Delphix can now connect to and leverage tools like OKV and CypherTrust to perform all operations within TDE environments managed by any of these tools.
- SAP HANA: HANA SPS 06 and SPS 07 are now supported on the SUSE Operating Systems.
- MongoDB: MongoDB is now supported on the RHEL 9.0 Operating System.

## Compliance Services for Salesforce

- Sorted Masking: Presorting tables helps to prevent row locking when dealing with large data volumes.
- Independent Metadata Management: Provides the option to disable and re-enable metadata outside of a masking job. This can improve performance as metadata can now be disabled once before masking starts and re-enabled only once after all masking jobs are complete.



## Continuous Compliance

- Automated Sensitive Data Discovery for JSON and Delimited Files: Automated Sensitive Data Discovery was introduced last year, bringing a much more complete set of sensitive data identification to structured data. This has now been expanded to operate against JSON and delimited files.
- File Masking in S3 Buckets: Increasingly, organizations store sensitive application data in object storage buckets. To ensure these buckets can be masked alongside other application data, connecting directly to S3 buckets and masking supported file types is now available.
- User Experience: The Environments Add and Edit Ruleset pages have been updated.

## Continuous Data

- Customizable Local Listeners for Oracle MT RAC VDBs: Database administrators must configure database listener parameters for multiple reasons, notably security, performance optimization, and resource management. We now support customizing local listeners when provisioning a VDB in an Oracle RAC environment. In addition, this allows you to provision a VPDB into a new VCDB in a non-RAC or RAC environment, update local listeners for a VDB in a RAC environment, and update local listeners for a VCDB in a non-RAC or RAC environment.
- Support Delphix Operations for Oracle RAC VDBs/VPDBs During Downtime: Oracle RAC is used for production databases to ensure their availability 24/7. To comply with business continuity guidelines, we now support the following VDB/VPDB operations when one or more hosts of the Oracle RAC clusters are down: Provisioning, enable/disable, refresh, start/stop, and rollback. This enhancement includes VDBs/VPDBs in VCDBs and Linked CDBs.
- Staging Push Online DB Mode for SQL Server: We now support database online mode for Staging Push dSources for SQL Server, keeping the source database open for transactions, as needed. Before this enhancement, Staging Push source databases were required to be only in restoring mode. This enhancement is supported for SQL Server deployed on-premises and in the cloud (for self-managed databases and SQL PaaS environments).
- IBM Db2: RHEL v9.2 is now supported for IBM Db2 v11.5, including IBM Db2 v11.5.9.
- MySQL: Added Staging Push support for AWS RDS and AWS RDS Aurora MySQL. Certified Amazon Linux 2 as staging and target host environments.
- Oracle E-Business Suite (EBS): Oracle EBS's DB Tech Stack on IBM AIX v7.2 is now supported. The EBS App Tier is not supported on IBM AIX v7.2.
- SAP HANA: HANA SPS 06 and SPS 07 are now supported on the SUSE Operating Systems.
- Expanded RedHat Support: RHEL 9.0 and 9.3 are now supported for Oracle 19c. RHEL 9.3 is supported with vFiles.
- Documentation Updates: We have continued to make broad improvements across multiple areas of our documentation, including Couchbase, IBM Db2, MongoDB, and MySQL.

## Compliance Services for Salesforce

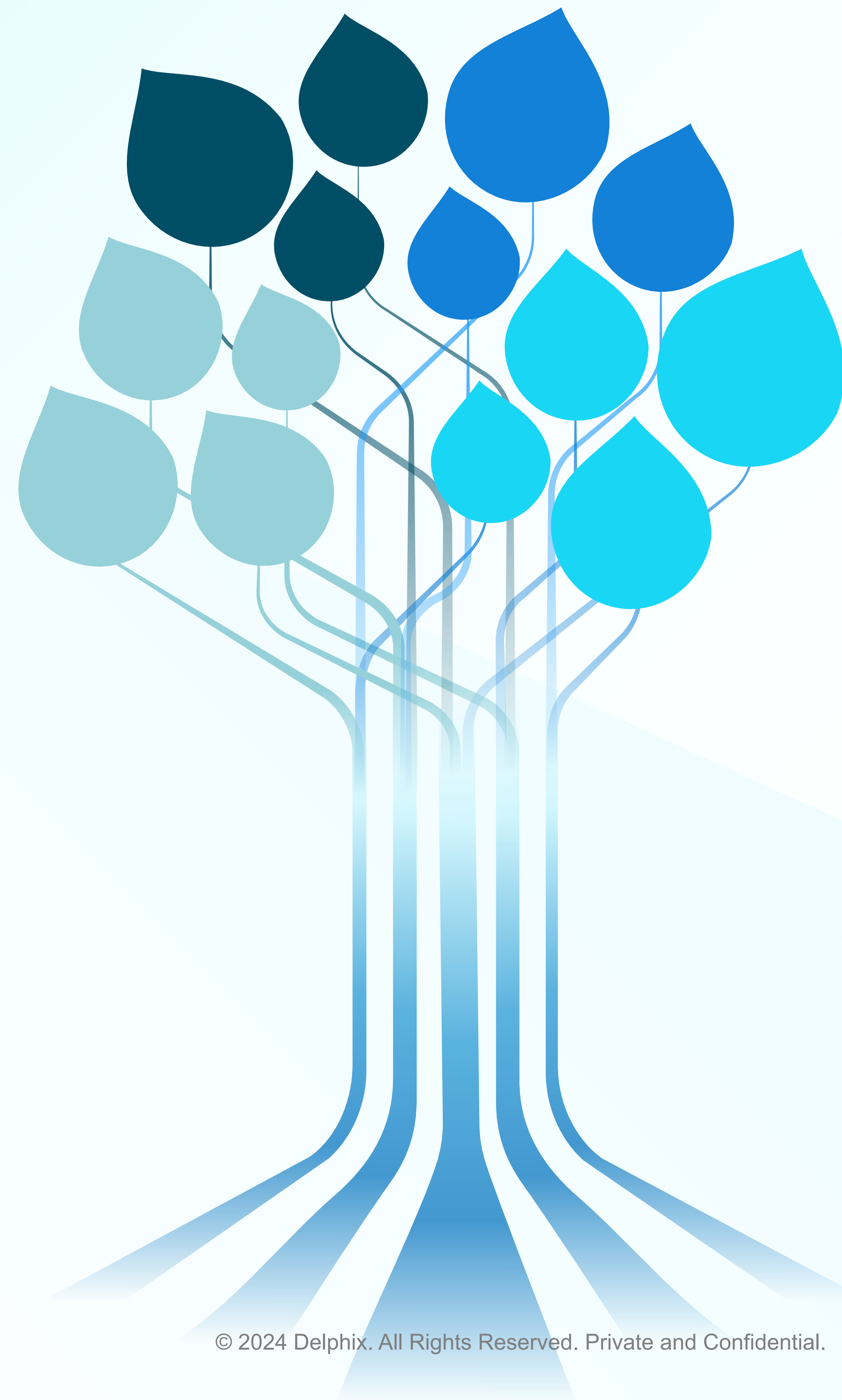
- Dynamic Batch Sizing: We now optimize the masking batch size depending on the contents of each to-be-masked payload. This is designed to optimize performance and reduce Salesforce API consumption.

## Compliance Services for Azure

- Quick-Start Templates: In the fall, we launched the capability to manage metadata as parameters and rapidly deploy masking across thousands of tables in a single Azure Data Factory (ADF) pipeline. To facilitate the fastest deployment for common data sources, we're releasing parameterized templates for Snowflake and Databricks.



# March 2024 Updates





# Data Control Tower (DCT)

- **MongoDB and Delimited File Support via the DCT UI:** DCT now supports executing and modifying existing MongoDB and Delimited File Hyperscale Compliance jobs.
- **Kubernetes Driver:** We have added support for taking a VDB volume snapshot and provisioning a VDB from a snapshot. In addition, we resolved various bug fixes impacting general dataset creation and deletion.
- **Terraform Provider:** The Terraform Provider now has a new “Database” resource that allows users to create and delete PostgreSQL environment source configurations.



# Data Control Tower (DCT)

## Bookmarks

Bookmarks are used to flag important data states on VDBs.

Q	Team: Alpha ×	×	Clear All	AND <input type="radio"/> OR <input type="radio"/>	Search Q	▼
Bookmark Name	VDB Group	VDB	Size	Creation Date	Expiration Date	Tags
QA Test AP-392		<a href="#">Alpha Dev</a>	358Mb	Dec 20th, 2021 2:02 PM	Dec 20th, 2021 2:02 PM	<button>View Tags (4) &gt;</button>
▼ QA Test AP-444	<a href="#">RiskShield - Alpha</a>		2.5Gb	Dec 20th, 2021 2:02 PM	Dec 20th, 2021 2:02 PM	<button>View Tags (4) &gt;</button>
QA Test AP-444		<a href="#">Alpha Dev</a>				
QA Test AP-444		<a href="#">Beta Dev</a>				
QA Test AP-444		<a href="#">Gamma Dev</a>				
QA Test AP-332		<a href="#">Alpha Dev</a>	358Mb	Dec 20th, 2021 2:02 PM	Dec 20th, 2021 2:02 PM	<button>View Tags (4) &gt;</button>
QA Test AP-332		<a href="#">Beta Dev</a>	358Mb	Dec 20th, 2021 2:02 PM	Dec 20th, 2021 2:02 PM	<button>View Tags (4) &gt;</button>
QA Test AP-332		<a href="#">Gamma Dev</a>	358Mb	Dec 20th, 2021 2:02 PM	Dec 20th, 2021 2:02 PM	<button>View Tags (4) &gt;</button>

**Enhanced Bookmarks Organization/Search:** The bookmark user experience has been updated, including search on VDB and dSource details pages. VDB visibility on the central bookmark, the VDB’s bookmark, and VDB wizard pages has been improved. Bookmarks are also supported via DCT-orchestrated replication.



# Data Control Tower (DCT)

Back

VDBs

> Customer\_Info\_GOLD

Customer\_Info\_GOLD

83a26f7f-e83c-4896-8633-863b61650bbc

Actions

Overview

Timeline History

Bookmarks

Hooks

Access

Q

Search

Timeline Creation

Relative VDB Refresh #002

Nov 20, 2022 | 2:33PM - Refreshed from [Bookmark AG-4345](#)

MaskedActiveActions

Today

Nov 20, 2022

4

Snapshot

4:34 PM EST

Actions

Snapshot

4:34 PM EST

Actions

Snapshot

4:34 PM EST

Actions

Snapshot

4:34 PM EST

Actions

Yesterday

Nov 19, 2022

4

1 Day Ago

Nov 18, 2022

4

Reset to Point on VDB Alpha Main


Nov 18, 2022 - 2:05 AM

**Timeline History UX Updates:** DCT has consolidated the active timeflow and timeflow history tabs into a single timeline tab. The new page is similar to the former timeflow history but now with a search bar and sorting capabilities. You can now sort upon timeline activation [default], timeline creation, parent timeline location, and origin timeline location. This enables better identification and filtering of your data sets' varying timelines.

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# Data Control Tower (DCT)



DATA  
CONTROL  
TOWER


Platform


Data


Compliance


Insight

Administration

<sup>4</sup>

<sup>3</sup>





Data Governance

» Data at Risk

» Trends

Data

» VDB Inventory

» dSource Inventory

» Oracle Container Database Inventory

» Engine Performance

Compliance

» Job Executions

» Engine State

» Engine Performance

Storage

» Block Storage

» Object Storage

» Storage Savings

System

» Source Ingestion

» Account Activity

» API Usage

Engine State

This report provides an analysis of engine configurations, offering a clear view of whether these configurations are in synchronization or if they are beginning to diverge through the engine configuration revision ID.

Search

Export

Engine Name	Jobs	Data Connections	Rule Sets	Engine Configuration Revision	Tags
<a href="#">DX-CC-LA-001</a>	2	2	2	ac236477-8c3b-415c-b1fc-3b4ab0390ba2	<a href="#">View Tags (4)</a>
<a href="#">DX-CC-NY-002</a>	7	3	4	ac236477-8c3b-415c-b1fc-3b4ab0390ba2	<a href="#">View Tags (4)</a>
<a href="#">DX-CC-TK-003</a>	1	1	2	ac236477-8c3b-415c-b1fc-3b4ab0390ba2	<a href="#">View Tags (4)</a>
<a href="#">DX-CC-TO-004</a>	12	12	10	1fbb34b2-d505-4b91-ba51-b88779a24997	<a href="#">View Tags (4)</a>
<a href="#">DX-CC-BR-005</a>	2	2	2	3e81ffe4-31c6-47dc-85b9-4c224b73e139	<a href="#">View Tags (4)</a>
<a href="#">DX-CC-MN-006</a>	8	6	9	3e81ffe4-31c6-47dc-85b9-4c224b73e139	<a href="#">View Tags (4)</a>
<a href="#">DX-CC-LN-007</a>	2	2	2	3e81ffe4-31c6-47dc-85b9-4c224b73e139	<a href="#">View Tags (4)</a>
<a href="#">DX-CC-SY-008</a>	3	3	5	3e81ffe4-31c6-47dc-85b9-4c224b73e139	<a href="#">View Tags (4)</a>
<a href="#">DX-CC-BJ-009</a>	6	4	12	3e81ffe4-31c6-47dc-85b9-4c224b73e139	<a href="#">View Tags (4)</a>

**Global Compliance Object Sync Report:** The compliance Global Object is the aggregate representation of all multi-use objects (algorithms, domains, rule sets, etc.) on a compliance engine. The compliance engine versioned these objects, among other things, to clarify whether there have been settings or behavioral changes. DCT now surfaces those versioning details to better illustrate if and where there are object differences. This could, for example, reveal whether or not two engines will mask with identical outputs.

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# Data Control Tower (DCT)

## Oracle Container Database Inventory

View and Manage your Oracle multitenant architecture CDB and vCDBs.

Virtual (vCDB)

Physical (CDB)

Search

	Status	Name	Type	TDE Active	Infrastructure	Engine	Tags	
^	⚡ Active	<a href="#">Customer_In_vCDB</a>	Virtual (vCDB)	2.3 TB	<a href="#">Alpha_PROD</a>	<a href="#">DX-CLD-NY-002</a>	<a href="#">View Tags (4)</a>	<a href="#">Actions</a>
v	⚡ Active	<a href="#">Customer_In_vCDB2</a>	Virtual (vCDB)	2.3 TB	<a href="#">Alpha_PROD</a>	<a href="#">DX-CLD-NY-002</a>	<a href="#">View Tags (4)</a>	<a href="#">Actions</a>
		Name	Type	Size	Tags			
		<a href="#">Customer_Info_vPDB_1</a>	vPDB	1 GB	<a href="#">View Tags (4)</a>	<a href="#">Actions</a>		
		<a href="#">Customer_Info_vPDB_2</a>	vPDB	24 GB	<a href="#">View Tags (4)</a>	<a href="#">Actions</a>		

**Oracle CDB Inventory Report:** DCT now features an Oracle Container Database (CDB) report that lists virtual and physical resources across all connected engines and associated pluggable database (PDB) relationships.



# Continuous Compliance

- **Automated Sensitive Data Discovery for XML Files:** Automated Sensitive Data Discovery was introduced last year, bringing a complete set of sensitive data identification techniques to structured data and semi-structured files. Previously, ASDD worked with databases, JSON, and delimited files. It now supports XML files as well.
- **New ASDD Default:** New Profiling jobs for connectors that support ASDD will now default to the standard ASDD classifier set.
- **AWS S3 Connector UI:** The new AWS S3 connector is now available in the user interface and API. This connector lets you connect to S3 buckets and mask supported file types.
- **User Experience:** The Environments Jobs and Connectors pages have been updated, dramatically improving UI performance. Further, there are now ease-of-use wizards for both connectors and jobs and new grid views.

# Continuous Data

- **Oracle:** RedHat Enterprise Linux (RHEL) 9.0 and 9.3 are now supported with Oracle 19c.
- **IBM Db2:** The IBM DB2 connector now supports IBM AIX 7.2 and RHEL 9.2
- **MySQL:** The user interface has been improved during the linking of a MySQL dSource in the wizard. Users will notice that only properties applicable to the chosen linking method are shown.
- **Documentation Updates:** We have continued to make broad improvements across multiple areas of our documentation, including CockroachDB and MySQL.



# Compliance Services for Salesforce

- **API Token Management:** DCS for Salesforce now supports API token management. Users can now create personal API tokens used to authenticate with DCS for Salesforce API endpoints.
- **Support for Character Replacement Algorithm Framework:** This framework allows for the creation of rules to replace specific characters in a string with other characters. For example, you can use this framework to remove inconsistent punctuation in data to maintain referential integrity across data sources. Compliance services now support this framework in the import algorithm workflow.

# Compliance Services for Azure

- **Additional Templates:** We've added Azure Data Lake, CSV, and JSON templates and continue to release fast-start templates for the most requested data sources.
- **Microsoft Fabric Beta:** In conjunction with our feature at the Microsoft Fabric Community Conference, we have a beta offering (demoed at the conference) that allows you to find and mask data in the newest version of Microsoft Fabric dataflows.



# March Product Version Releases

Product/Connector	Version	Release Date
Hyperscale Compliance	v18	March 5, 2024
Kubernetes (K8s) Driver	v1.2.0	March 15, 2024
MySQL/Linux Connector	v4.5.0	March 20, 2024
IBM Db2 Connector	v4.7.2	March 20, 2024
Continuous Data	v21	March 20, 2024
Continuous Compliance	v21	March 20, 2024
Data Control Tower	v15	March 20, 2024
Terraform Provider	v3.2.0	March 22, 2024

# End of Life and Deprecations

- **Delphix Self-Service:** Delphix Self-Service (Jet Stream) is now a deprecated interface and feature of Continuous Data. The March 2024 release of Continuous Data starts an 18-month deprecation period for all supported versions. All prior and current product versions will continue to be supported until September 30, 2025



# Delphix Product Updates Blog - released monthly

Product Updates

Delphix Platform

June 2023

PLATFORM JUN 29, 2023

**Delphix Platform June 2023 Product Updates**

The June 2023 updates to the Delphix platform include a new Software-as-a-Service offering for Microsoft Azure, an enhanced search interface and operations dashboard in Data Control Tower, and more.

Read more →

Product Updates

Delphix Platform

May 2023


PLATFORM MAY 30, 2023

**Delphix Platform May 2023 Product Updates**

The Delphix Platform's top new functionalities include Expanded data discovery, Oracle table space subsetting, and improved Data Control Tower developer experience.

Read more →

Data Privacy and Protection




PLATFORM MAY 11, 2023

**5 Takeaways from Data Company Summit Miami 2023**

Featuring luminary speakers from companies across many industries, Delphix's Data Company Summit 2023 was a great opportunity for IT leaders to learn how to unleash continuous innovation and compliance.

Read more →




PLATFORM APR 27, 2023

**Introducing the Delphix Spoke for ServiceNow**

The Delphix Spoke for ServiceNow provides out-of-the-box, automated workflows and actions, as well as a self-service catalog to enable application teams to manage their test data environments.

Read more →




PLATFORM FEB 13, 2023

**Delphix and DataStax Automate Cassandra Data for CI/CD Pipelines and Application Migration**

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Read more →



PLATFORM OCT 11, 2022

**Delphix Launches New Compliance Service Integrated with Microsoft Intelligent Data Platform**

Using Delphix in conjunction with Microsoft Intelligent Data Platform makes the delivery of on-demand, compliant data easy for all stakeholders

Read more →

[Delphix Platform Product Updates](#)