

Qlik Compose for Data Warehouses Release Notes - September 2020 (6.6.1)

IMPORTANT

- » This is a technical preview version. As such, it should not be installed in a production environment.
- » To ensure proper functionality with Qlik Replicate, Customers who upgraded to Qlik Replicate 6.6 SP04 or above must also install this version.

These release notes describe the new features and enhancements in the new version of Qlik Compose for Data Warehouses, as well as providing a list of resolved issues and known issues.

In these release notes:

- » [Product Compatibility](#)
- » [Upgrade Procedure and Considerations](#)
- » [Features and Enhancements](#)
- » [Windows 2008 R2 Pending Deprecation](#)
- » [Resolved Issues and Customer Requested Enhancements](#)
- » [Known Issues](#)

Product Compatibility

Qlik Compose for Data Warehouses 6.6 is compatible with the following Qlik products only:

- » Qlik Replicate 6.5 and 6.6

Upgrade Procedure and Considerations

Direct upgrade is supported from Qlik Compose for Data Warehouses 6.5 and 6.6 only.

The following table details the upgrade path from your existing Qlik Compose for Data Warehouses version.

Existing Version	Upgrade Path
6.6	Upgrade directly to 6.6.1.
6.5	Upgrade directly to 6.6.1.
6.4	First upgrade to 6.6, and then to 6.6.1.
6.3	First upgrade to 6.5, and then to 6.6.1.
3.1	Contact Support.

The Upgrade Procedure

We strongly recommend backing up your existing installation, projects and data warehouse before upgrading to any new version.

To upgrade to the new version:

1. Suspend all scheduled jobs.
2. Stop the Compose for Data Warehouses service.
3. Install the new Compose for Data Warehouses version.

The Compose for Data Warehouses service will be started automatically once the installation completes.

4. If you are upgrading from 6.5 to 6.6.1 (either directly or as part of a two-phase upgrade), you also need to run a special upgrade script in the Data Warehouse database defined for each of your projects. If you are not upgrading from 6.5 to 6.6.1, skip to step 5 below.

To generate the upgrade script:

- a. From the Windows **Start** menu, open **Qlik Compose for Data Warehouses > Compose for Data Warehouses Command Line** and run the following command:

```
composecli generate_upgrade_scripts
```

This will generate a SQL script for each project in the following folder:

```
data\projects\<<project name>\ddl-scripts\
```

- b. Run the generated script in the Data Warehouse database defined for each of your projects.

Note Failure to run the upgrade script will result in the following error when running tasks:

```
Invalid object name 'MyDataWarehouse.dwh. TDWM_ROWSTATUS'
```

5. Resume any suspended scheduled jobs.

Upgrade Considerations

- » An issue in a previous version may have significantly increased the size of the **ProjectRepoRuntime.sqlite** file (the runtime repository) in the `java\data\projects` folder. If it appears unusually large, perform the steps described in [CMPS-9212 below](#).
- » After upgrading from Compose for Data Warehouses 6.5 to version 6.6.1, historical logs of tasks cannot be viewed via the UI.

Workaround:

Browse to:

<COMPOSE_INSTALLATION_DIR>\java\data\logs

Open the relevant log files with a text editor.

Features and Enhancements

Migrating Data Mart Objects as CSV files

Migrating data mart objects as CSV files, provides a level of granularity that is not available when using the standard project export and deployment options. Instead of importing the entire project, you can import specific objects and then use the Compare and Apply CLI commands to apply periodic updates as needed.

This version adds support for export, import, compare, and apply of the following data mart objects: fact tables, fact attributes, fact dimensions, schemas, dimensions, and dimension attributes

Note The Apply command currently only supports ADD update operations.

Audit Trails

Added support for Audit Trail generation. Information provided in an Audit Trail can be leveraged for user accountability, reconstruction of events, intrusion detection, and other operational issues. As such, Audit Trails are an indispensable tool for regulatory compliance (e.g. SOX).

For operations which require Operator privileges or above, the Compose for Data Warehouses Audit Trail shows which user performed the operation, when it was performed, and on which objects.

Generating Projects using the CLI

Added support for automatic project generation using the `generate_project` CLI command. This can be especially useful when deploying projects between different environments.

Snowflake on Google Cloud Platform

Snowflake on Google Cloud Platform is now supported as a data warehouse.

Performance Enhancements

- » **Microsoft Azure Synapse Analytics** – Significantly improved performance by using a different distribution for temporary tables, thereby resulting in faster execution of

ETL tasks.

- » **Microsoft Azure Synapse Analytics, Snowflake, and Microsoft SQL Server** - Significantly improved performance when the input contains multiple versions of the same record in the same Change Processing batch.
- » **All Data Warehouses** - With the introduction of table metadata caching, the UI is now able to respond faster to operations involving metadata processing.

Other Enhancements

- » **Permissions/Security** - Permission to edit Command Tasks is now restricted to users with Admin or Designer role only. Previously, users with Operator role or above could edit Command Tasks.
- » **Data Mart Creation in Snowflake** - Added support for creating each data mart in a specific database and/or schema in Snowflake.

Windows 2008 R2 Pending Deprecation

Support for installing Compose for Data Warehouses on Windows 2008 R2 will be deprecated in the next version of Compose for Data Warehouses.

Resolved Issues and Customer Requested Enhancements

The table below lists the resolved issues and customer requested enhancements in this release.

Component/Process	Description	Internal Issue #	Customer Case #
ProjectRepoRuntime.sqlite	<p>The ProjectRepoRuntime.sqlite file in the java\data\projects\ folder would grow very large as the old runtime information would never be deleted.</p> <p>Although this patch resolves the issue, the size of the existing ProjectRepoRuntime.sqlite file will remain the same. Should you need to reduce its size:</p> <ol style="list-style-type: none"> 1. Stop the Compose for Data Warehouses service. 2. Run the SQLite "vacuum" command using the SQLite command-line tool. 3. Start the Compose for Data Warehouses service. 	CMPS-9212	1963349
Workflows	When a workflow was not valid (for example, if it contained a deleted ETL set), the monitor screen would be blank.	CMPS-9674	2022186
Model Validation	If a model already contains an attribute domain named Date or Time , adding the Date and Time entities to the model would fail without a clear message.	CMPS-9465	2019671
Full Load Tasks	When loading large tables to Oracle, Compose would sometimes	CMPS-9413	196099

Component/Process	Description	Internal Issue #	Customer Case #
	consume all of the available memory, causing the OS to crash.		
Mapping	<p>When foreign key attributes of Type1 were not mapped, the following error would occur during ETL generation:</p> <pre>sqlstate 'S0001', errorcode '102', message 'Incorrect syntax near ','.'</pre>	CMPS-9410	2010951
Data Mart - ETL Execution	Aggregated Fact creation would fail if the fact table contained a date dimension.	CMPS-9406	2011093
Data Mart - ETL Execution	<p>When using a specific database for a data mart, the data mart task would sometimes fail with the following error:</p> <pre>The operation failed because an index or statistics with name <name> already exists on table.</pre>	CMPS-9513	2022150
Export CSV	<p>When exporting a CSV file for a project without a mapping database or with linked entities (from relationships) that do not exist, the following error would occur:</p> <pre>Object reference not set to an instance of an object.</pre>	CMPS-9382	2006683
UI	Clearing the Handle Duplicates check box would not be saved when switching between ETL sets.	CMPS-8759	1756111
Microsoft Azure Synapse Analytics Data Warehouse	See Microsoft Azure Synapse Analytics Data Warehouse above.	CMPS-8653	1880586

Component/Process	Description	Internal Issue #	Customer Case #
ETL Statements	Modifying the Date or Time table after it was created would insert the records again instead of updating them.	CMPS-8686	1899978
Import from Erwin	Importing from Erwin would fail due to existing entities (which is expected), but would then fail again when trying to import new entities.	CMPS-9368	2005082
Renaming Tables	In some cases, changing the names of the From Date and To Date tables in the project settings would have no effect on the actual table names.	CMPS-9161	1951942
Engine	When the Write ETL command duration to the TLOG_PROCLOG table in the data warehouse option was selected, Compose would not populate the START_TIME and END_TIME columns with the actual data.	CMPS-9029	1953299
UI	The Entity column in the Manage ETL Sets window's Single Table ETL tab could not be resized.	CMPS-9289	1839961
ETL Statements - Snowflake	After executing an ETL Set (with a validation rule defined), clicking the Reported Rows to see which records violated the validation would not work in some cases.	CMPS-8687	1900320
ETL Generation	When multiple keys for an entity pointed to the same attribute definition, the ETL code would be generated incorrectly.	CMPS-8593	1886546

Component/Process	Description	Internal Issue #	Customer Case #
New Metadata Table (TDWM_ROWSTATUS)	<p>After upgrading from 6.5 to 6.6.1, customers would encounter an "Invalid object name 'MyDataWarehouse.dwh. TDWM_ROWSTATUS'" error when running Data Warehouse tasks.</p> <p>To create the missing table, you need to generate an upgrade script and run it in the data warehouse database defined for each of your projects.</p> <p>For instructions on how to do this, see Step 4 of Performing an Upgrade above.</p>	CMPS-9403	1883558
UI	In some cases, the Scheduler settings would be saved incorrectly.	CMPS-9070	195873
Server	Workflows would sometimes report failure even when the tasks completed successfully.	CMPS-8898	1925848
UI	In the mapping edit screen, the search function would return a maximum of fifteen matches, with no scrolling possible to find the remaining fields.	CMPS-8741	1911538
Data Marts	When multiple relationships for the same entity existed in a data mart dimension, updates for the related entities would not be shown.	CMPS-9191	1940216
Command Task	<p>The following security vulnerabilities were resolved:</p> <ul style="list-style-type: none"> » The use of a relative path in the script name is now prevented. 	CMPS-9715	N/A

Component/Process	Description	Internal Issue #	Customer Case #
	» An unclear error would be displayed when the command specified for a Command Task used a Windows reserved file name.		

Known Issues

The following are the known issues in this release.

Component/Process	Description	Ref #
Upgrade	<p>After upgrading Compose for Data Warehouses to version 6.6.1, historical logs of tasks cannot be viewed from the UI.</p> <p>Workaround:</p> <p>Browse to:</p> <p><COMPOSE_INSTALLATION_DIR> \java\data\logs</p> <p>Open the relevant log files with a text editor.</p>	CMPS-8844
Pivot Table	<p>When the same column is included in two different dimensions, the pivot table shows the wrong data.</p>	CMPS-3995
Scheduler	<p>The Scheduler is not adjusted to take into account daylight saving time (DST).</p> <p>For example, a daily job which was scheduled to run at 11 PM should be run at 11 PM after DST is applied.</p>	CMPS-3932