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New Features Summary

Replication Server® Data Assurance Option 15.7.1 SP100

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New Features in Replication Server Data Assurance Option 15.7.1 SP100

Replication Server® Data Assurance Option15.7.1 SP100 includes support for Sybase® IQ, Oracle, and SAP® HANA® as either source or target databases, data partitions for large tables, and heterogeneous comparison enhancements.

Replication Server Data Assurance Option 15.7.1 SP100 is compatible with Sybase Control Center 3.2.8. See *Sybase Control Center 3.2.8 for Data Assurance Documentation*.

Support for Sybase IQ

Replication Server Data Assurance Option 15.7.1 SP100 supports comparisons where the source or target database is Sybase IQ.

Supported versions:

- Sybase IQ 15.4
- Sybase IQ 15.3

The jConnect™ for JDBC™ driver included with DA server and DA agent connects to a Sybase IQ database. No further configuration is required.

See *create connection* in the *Replication Server Data Assurance Option Users Guide*.

Support for Oracle

Replication Server Data Assurance Option 15.7.1 SP100 supports comparisons where the source or target database is Oracle.

Supported versions:

- Oracle 11g
- Oracle 10g

Note: Data Assurance (DA) does not ship the Java Database Connectivity (JDBC) driver JAR file for an Oracle database. You must configure DA to use the Oracle JDBC driver, which is deployed with your Oracle installation.

See *create connection* and *Configuring DA to Use the Oracle JDBC Driver* in the *Replication Server Data Assurance Option Users Guide*.

Support for HANA DB

Replication Server Data Assurance Option 15.7.1 SP100 supports comparisons where the source or target database is HANA DB.

Supported version:

- SAP HANA 1.0

Note: DA does not ship the JDBC driver JAR file for the HANA DB. Download the JDBC type4 driver JAR file from the SAP® Web site for your HANA DB version, and configure DA to use the JDBC driver.

See *create connection* and *Configuring DA to Use the HANA DB JDBC Driver* in the *Replication Server Data Assurance Option Users Guide*.

Heterogeneous Comparison

Replication Server Data Assurance Option 15.7.1 SP100 compares row data between two or more databases in a heterogeneous comparison environment.

A heterogeneous environment means two or more of the databases in use are from different vendors.

You can compare data between any source and target database combinations. For example:

- An Adaptive Server source database and a Sybase IQ target database
- An Oracle source database with multiple target databases, for example, both Adaptive Server and Sybase IQ.
- An Adaptive Server source database and an HANA target database

DA accurately compares equivalent values stored in distinct datatypes. For example, the value 1 stored in a Sybase IQ `NUMERIC` column is equivalent to the value 1 stored in an Oracle `NUMBER` column, and to 1.0 stored in an `ASE FLOAT` column.

To use heterogeneous comparison:

- Configure DA to use the JDBC drivers for Oracle and HANA DB instances, if your heterogeneous comparison includes these databases.
- Create connections for each new database.
- Set the **hash_type** comparison option to `agent_hash`.

See *create connection* and *Heterogeneous Comparison Deployment* in the *Replication Server Data Assurance Option Users Guide*.

Data Partitions

Replication Server Data Assurance Option 15.7.1 SP100 allows large tables to be split into logical partitions.

For maximum performance, you can run each logical partition in parallel on a database with multiple engines. The data partitions can be run in smaller groups, if DA is configured to run fewer comparisons at the same time.

Note: When you run a comparison with a new compareset for the first time, DA runs the comparison with a single partition to gather partition information for subsequent runs.

The SQL **where** clause on the compareset key columns defines the upper and lower partition boundaries. The boundary key values are sampled for a compareset when a comparison that uses it is run for the first time. These boundary samples are stored in the Data Assurance System Database (DASD).

On subsequent runs, any comparison that uses the same compareset uses those boundary samples to split a table into as many logical partitions as required. Each time a comparison is run, DA collects the new boundary samples for the compareset in use, and updates them in the DASD.

To view and manage the data partitions and boundary samples, use:

- **show boundary** and **drop boundary** commands to view or delete the data partition boundary samples for each compareset.
- **NUM_PARTITIONS** comparison option to set the number of data partitions for a comparison.
- `PART` column in the **monitor job** and **show job** command's result set to view the data partition number for a comparison.

See *Row Comparison Job Commands* and *Data Partition Commands* in the *Replication Server Data Assurance Users Guide*.