Capabilities for PostgreSQL

Contents

This section lists the Capabilities of HVR when using 'PostgreSQL'. For more information about the pre-requisites, access privileges, and other configuration requirements, see Requirements for PostgreSQL.

Capture

HVR supports the following capabilities on PostgreSQL:

- Capture changes from location (PostgreSQL from version 8.0 to version 12.0).
- Log-based capture (capture from DBMS logging system) (PostgreSQL from version 9.4 to version 12.0).
- Log-based capture of tables without a primary key (PostgreSQL from version 9.4 to version 12.0).
- Direct access to logs on a file system (PostgreSQL from version 9.4 to version 12.0, except on Amazon RDS for PostgreSQL, Google Cloud SQL for PostgreSQL, and Microsoft Azure Database for PostgreSQL).
- Access to logs using SQL interface (PostgreSQL from version 9.4 to version 12.0).
- Log-based capture with **/LogReadMethod** parameter (PostgreSQL from version 9.4 to version 12.0).
- Log-based capture of tables with LOB column (PostgreSQL from version 9.4 to version 12.0).
- Rewind log-based capture to specific time (Hvrinit option **-i**) (PostgreSQL from version 9.4 to version 12.0).
- Rewind log-based capture to the beginning of currently active oldest transaction (PostgreSQL from version 9.4 to version 12.0).
- Multiple log-based capture jobs can capture from same database (PostgreSQL from version 9.4 to version 12.0).
- Log-based capture checkpointing (action Capture **/CheckpointingFrequency**) (PostgreSQL from version 9.4 to version 12.0).

HVR does not support the following capabilities on PostgreSQL:

- Capture from Archive log files only.
- Log-based capture of DDL statements using action AdaptDDL.
- Log-based capture from hidden rowid column (ColumnProperties **/CaptureFromRowId**).
- Rewind log-based capture to the beginning of currently active oldest transaction for a specific list of tables.
- Online refresh using accurate LSN/SCN.
- Populates column **hvr_cap_user** for use in ColumnProperties **{hvr_cap_user}** substitutions.
- Log-based capture of truncate table statements.
- Capture from tables with basic compression.
- Hvrlogrelease to preserve journal/archives.
- Read archives from an alternative directory (Capture **/ArchiveLogPath**).
- Trigger-based capture (action Capture **/TriggerBased**).

Hub Database

HVR supports Hub database on PostgreSQL.

Integrate

HVR supports the following capabilities on PostgreSQL:

- Integrate changes into location (PostgreSQL from version 8.0 to version 12.0).
- Integrate with **/Burst** (PostgreSQL from version 8.0 to version 12.0).
- Integrate with **/BurstCommitFrequency** (PostgreSQL from version 8.0 to version 12.0).
- Continuous integration (Integrate without **/Burst**) (PostgreSQL from version 8.0 to version 12.0).
- Action TableProperties with **/DuplicateRows** for continuous integration (PostgreSQL from version 8.0 to version 12.0).
- Continuous Integrate with **/OnErrorSaveFailed** (without **/Burst**) (PostgreSQL from version 8.0 to version 12.0).
- Action Transform **/SoftDelete** (PostgreSQL from version 8.0 to version 12.0).
- Creation and update of HVR state tables (PostgreSQL from version 7.0 to version 12.0).

HVR does not support the following capabilities on PostgreSQL:

- Disable/enable database triggers during Integrate (**/NoTriggerFiring**).
- Integrate with **/DbProc**.

Bi-directional Replication

HVR supports the following capabilities on PostgreSQL:

- Detection of changes made by HVR in a bidirectional channel to prevent loop-back (PostgreSQL from version 8.0 to version 12.0, state table needs to be created before replication starts).
- CollisionDetect with **/TimestampColumn** (PostgreSQL from version 8.0 to version 12.0).

HVR does not support the following capabilities on PostgreSQL:

- CollisionDetect with Log-based Capture (without **/TimestampColumn**).

Refresh and Compare

HVR supports the following capabilities on PostgreSQL:

- Hvrrefresh or Hvrcompare from source location (PostgreSQL from version 7.0 to version 12.0).
- Hvrrefresh into target location (PostgreSQL from version 7.0 to version 12.0).
- Row-wise Hvrrefresh into target location (option **-g**) (PostgreSQL from version 7.0 to version 12.0).
- Select data from each table from same consistent moment in time using a single transaction (and session) with 'serializable' SQL isolation level (Hvrrefresh option **-Mserializable**) (PostgreSQL from version 7.0 to version 12.0).

Other Capabilities

HVR supports the following capabilities on PostgreSQL:

- Call database procedure *dbproc* during replication jobs (action AgentPlugin **/DbProc**) (PostgreSQL from version 11.0 to version 12.0).
- International table and column names where DBMS is not configured with UTF-8 encoding (PostgreSQL from version 7.0 to version 12.0).
- Treat DBMS table names and columns case sensitive (action LocationProperties **/CaseSensitiveNames**) (PostgreSQL from version 7.0 to version 12.0).
- Always treat DBMS table names and column names case sensitive (PostgreSQL from version 7.0 to version 12.0).
- Always treat DBMS schema names case sensitive (PostgreSQL from version 7.0 to version 12.0).

HVR does not support the following capabilities on PostgreSQL:

- Use distribution key for parallelizing changes within a table (ColumnProperties **/DistributionKey**).
- Lossless binary float datatypes. No dataloss when transporting float values (because base 2 fractions are never converted to base 10).
- Distinguish and support capture from 'materialized views'.