

# Capabilities for Azure SQL Managed Instance

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This section lists the [Capabilities](#) of HVR when using 'Azure Managed Instance'. For more information about the pre-requisites, access privileges, and other configuration requirements, see [Requirements for Azure SQL Managed Instance](#).

## Capture

HVR supports the following capabilities on Azure Managed Instance:

- [Capture](#) changes from location.
- Log-based capture (capture from DBMS logging system).
- Log-based capture of tables without a primary key.
- Access to logs using SQL interface.
- Log-based capture of tables with LOB column.
- Online refresh using accurate LSN/SCN.
- Populates column `hvr_cap_user` for use in [ColumnProperties {hvr\\_cap\\_user}](#) substitutions.
- Multiple log-based capture jobs can capture from same database.
- Capture from tables with basic compression.
- Capture from tables with advanced compression.
- Trigger-based capture (action [Capture /TriggerBased](#)).
- Boundaries between transactions preserved by trigger-based capture.
- Trigger-based capture jobs can be woken by db-event when change happens.

HVR does not support the following capabilities on Azure Managed Instance:

- Capture from Archive log files only.
- Direct access to logs on a file system.
- Log-based capture from hidden rowid column ([ColumnProperties /CaptureFromRowId](#)).
- Rewind log-based capture to specific time ([Hvrinit](#) option `-i`).
- Log-based capture of truncate table statements.
- Log-based capture checkpointing (action [Capture /CheckpointingFrequency](#)).
- [Hvrlogrelease](#) to preserve journal/archives.
- Read archives from an alternative directory ([Capture /ArchiveLogPath](#)).

## Hub Database

HVR supports Hub database on Azure Managed Instance.

## Integrate

HVR supports the following capabilities on Azure Managed Instance:

- [Integrate](#) changes into location.
- [Integrate](#) with [/Burst](#).
- [Integrate](#) with [/BurstCommitFrequency](#).
- Continuous integration ([Integrate](#) without [/Burst](#)).
- Action [TableProperties](#) with [/DuplicateRows](#) for continuous integration.

- Continuous [Integrate](#) with [/OnErrorSaveFailed](#) (without [/Burst](#)).
- Disable/enable database triggers during [Integrate](#) ([/NoTriggerFiring](#)).
- Action [Transform](#) [/SoftDelete](#).
- Creation and update of HVR state tables.
- [Integrate](#) with [/DbProc](#).

## Bi-directional Replication

HVR supports the following capabilities on Azure Managed Instance:

- Detection of changes made by HVR in a bidirectional channel to prevent loop-back.
- [CollisionDetect](#) with Trigger-based Capture (with [Capture](#) [/TriggerBased](#) and without [CollisionDetect](#) [/TimestampColumn](#)).
- [CollisionDetect](#) with [/TimestampColumn](#).

HVR does not support the following capabilities on Azure Managed Instance:

- [CollisionDetect](#) with Log-based Capture (without [/TimestampColumn](#)).

## Refresh and Compare

HVR supports the following capabilities on Azure Managed Instance:

- [Hvrrefresh](#) or [Hvrcompare](#) from source location.
- [Hvrrefresh](#) into target location.
- Row-wise [Hvrrefresh](#) into target location (option [-g](#)).
- Disable/enable foreign keys from table to others during [Hvrrefresh](#) (option [-F](#)).
- Disable/enable triggers during [Hvrrefresh](#) (option [-f](#)).
- Identity columns.
- 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](#)).
- Select data from each table from same consistent moment in time using a single transaction (and session) with 'snapshot' SQL isolation level ([Hvrrefresh](#) option [-Msnapshot](#)).

## Other Capabilities

HVR supports the following capabilities on Azure Managed Instance:

- Use distribution key for parallelizing changes within a table ([ColumnProperties](#) [/DistributionKey](#)).
- Call database procedure [dbproc](#) during replication jobs (action [AgentPlugin](#) [/DbProc](#)).
- [DbObjectGeneration](#) with [/IncludeSQLFile](#).
- International table and column names where DBMS is not configured with UTF-8 encoding.
- Treat DBMS table names and columns case sensitive (action [LocationProperties](#) [/CaseSensitiveNames](#)).
- Always treat DBMS table names and column names case sensitive.
- Always treat DBMS schema names case sensitive.

HVR does not support the following capabilities on Azure Managed Instance:

- Distinguish and support capture from 'materialized views'.