



Release Notes | Version 5.7.0/0 | 22 July 2020

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About HVR Release Notes

This document provides information about the requirements, new features, resolved issues, and other pertinent release information for HVR release version 5.7.0/0.

Installing an HVR Upgrade

Previously HVR had a concept of 'upgrade type', which is no longer used.

Often all machines are upgraded at the same time.

Current HVR version are fully compatible with 5.5 and 5.6 major versions; it is not necessary to upgrade all machines in a channel at once. Instead it is possible to only upgrade certain machines (e.g. only the hub machine, GUI machine, remote capture or target). If this is done, it should be understood that each HVR release fixes some bugs and/or contains new features. Each bug fix or feature is only effective if the specific machine(s) indicated for it are upgraded. New features should not be used until all machines that are specified for that feature are upgraded, otherwise errors can occur.

For example, if a new HVR release fixes an integrate bug, then that release must be installed on the machine(s) which do integrate. So, if only the GUI and/or hub machine is upgraded, then there will be no benefit.

To decide whether each machine needs to be upgraded, see the descriptions in the release notes below. Each description ends with a line says which machine must be upgraded for that specific bug fix or feature to be effective.

Platform Compatibility and Minimum Requirements

This section provides information on HVR's compatibility and minimum requirements for each supported platform.

- [Linux glibc2.12-x64-64bit](#)
- [macOS-x64-64bit](#)
- [Windows-x64-64bit](#)

Linux glibc2.12-x64-64bit

- **Operating System:** Linux (x86 64 bit) based on GLIBC 2.12 and higher
- **Operating System:** Red Hat Enterprise Server version 6 and higher
- **Operating System:** SuSE Enterprise Server version 12.0 and higher

Note: The 64-bit executable will not run on a 32-bit Linux machine.

- **Ingres:** 64-bit (a64.lnx) version 10.0, 10.1, 10.2, 11.0 and 11.1
 - Capture of X100 tables is not supported
- **Vector:** version 2.x, 3.x, 4.x, 5.0 and 5.1 as hub and target, not capture
- **Vector Hadoop Edition:** version 4.x as hub and target, not capture
- **Oracle:** version 11.1, 11.2, 12.1, 12.2, 18, 19c, and Exadata
- **DB2 on Linux, Unix, Windows:** version 10.5
- **DB2 for i:** version 7.1, 7.2, 7.3 and 7.4
 - Requires ODBC driver manager UnixODBC 2.3.1
 - Requires IBM i Access Client Solutions ODBC Driver 64-bit
- **DB2 for z/OS:** version 11.1 and 12.1
 - Version 11.1 requires DB2 client, DB2 server or DB2 Connect version 10.5 or higher
 - Version 12.1 requires DB2 client, DB2 server or DB2 Connect version 11.1 fix pack 1 or higher
- **PostgreSQL:** version 9.4, 9.5, 9.6, 10, and 11
PostgreSQL: version 8.x, 9.0 - 9.3 as target and hub, not capture
XtremeData dbX: 1.x as target and hub, not capture
 - Requires PostgreSQL 9, 10 or 11 client (**libpq.so.5** and its dependencies)
- **MySQL:** version 5.6, 5.7, and 8
- **MariaDB:** version 10.0, 10.1, 10.2, and 10.3
- **Aurora MySQL:** version 5.6 and 5.7
- **SQL Server:** version 2017 and Azure SQL Database
 - Requires ODBC driver manager UnixODBC 2.3.2
 - Requires ODBC Driver for SQL Server 11 or higher
- **Snowflake:** version 2.x as target, not hub or capture
 - Requires ODBC driver manager UnixODBC 2.3.1 or 2.3.2

- Requires Snowflake ODBC driver 2.13.20 or higher
- **HANA:** version 1.0 - SPS 11 and SPS 12, and version 2.0 - SPS 0, SPS 1, SPS 2, SPS 3 and SPS 4
 - Requires ODBC driver manager UnixODBC 2.3.2
 - Requires HANA ODBC driver 1.00.110 or 1.00.120
- **Teradata:** version 14.x, 15.x and 16.x as target and hub, not capture
 - Requires Teradata ODBC driver 15.00 or 16.10
 - Requires TTU 15.00 or 16.10 libraries
- **Greenplum:** version 4.0, 4.2, 4.3, 5.5 and 5.10 up to 5.21 as target, not as capture or hub.
 - Requires DataDirect Connect64 XE ODBC 7.1.3.99 - 7.1.5 driver for Greenplum provided by Pivotal
- **Redshift:** version 1.0.x, as target, not capture or hub.
 - Requires ODBC driver manager UnixODBC 2.3.0
 - Requires Amazon Redshift driver 1.2.6.1006-1
- **File replication:** local, FTP/FTPS and SFTP

- **Apache Hadoop HDFS:** version 2.2.0 and above
 - HVR requires Hadoop 2.4+ libraries and Java 7 on its local machine to access HDFS (Java 8 if Hadoop 3.0.0alpha1 or later). Command **hadoop** must be in **\$PATH** or Hadoop home must have been configured via one of the following environment variables: **\$HADOOP_COMMON_HOME**, **\$HADOOP_HOME**, **\$HADOOP_PREFIX**
- **Apache Hive:** version 1.1, 2.1, 2.3, 3.0, 3.1 with UnixODBC driver manager 2.3.2
 - HVR can create Hive external tables above S3/HDFS files. HVR only uses these during compare
 - Refresh or integration of this data is done into the S3/HDFS file location
 - Capture from Hive and hub database in Hive are not supported
 - Requires ODBC driver manager UnixODBC 2.3.2
 - Requires HortonWorks ODBC 2.1.2 or above for Hadoop Hive
 - Requires Cloudera ODBC 2.5.12 or above for Hadoop Hive
- **Apache Kafka:** version 0.8 and above (including 0.11)
- **Apache HBase:** version 1.1, 1.2, and 1.3
- **WebDAV/Sharepoint:** version 2010 and Online
- **S3:** supported
- **Google Cloud Storage:** supported
- **Azure Blob FS:** supported
- **Azure Data Lake Store:** Gen1 and Gen2 supported
- **Salesforce:** data loader version 44.0.0, 46.0.0 and 47.0.0
- **HVR user interface:** native GUI (X client), remote GUI or command-line
 - Native GUI requires X11 client libraries (libX11, libXext, libXrender), font rendering libraries libfontconfig and libfreetype

macOS-x64-64bit

- **Operating System:** MacOS Sierra (10.12.1) and higher
- **File replication:** local, FTP/FTPS and SFTP
- **WebDAV/Sharepoint:** version 2010 and Online
- **S3:** supported
- **Google Cloud Storage:** supported
- **HVR user interface:** native GUI, remote GUI or command-line

Windows-x64-64bit

- **Operating System:** Windows XP, 2003, Vista, 2008, 7, 8 and 10. Windows Server 2012 R2, 2016, and 2019
 - NTFS and FAT file systems
- Require Perl 5.6 or higher (only needed for hub machine and [hvrlogrelease](#))
- **Ingres:** version 10.0, 10.1, 10.2, 11.0, and 11.1
 - Capture of X100 tables is not supported
 - Trigger based capture is not supported
- **Vector:** version 2.x, 3.x, 4.x, 5.0 and 5.1 as hub and target, not capture
- **Vector Hadoop Edition:** version 4.x as hub and target, not capture
- **Oracle:** version 10.1, 10.2, 11.1, 11.2, 12.1, 12.2, 18, and 19c
- **SQL Server:** 2005, 2008, 2012, 2014, 2016, 2017, 2019, and Azure SQL Database
 - Azure SQL Data Warehouse as target, not capture and hub
- **DB2 on Linux, Unix, Windows:** version 10.5 and 11.1
- **DB2 for i:** version 7.1, 7.2, 7.3, and 7.4
 - Requires IBM i Access Client Solutions ODBC Driver 13.64.11.00
- **DB2 for z/OS:** version 11.1 and 12.1
 - Version 11.1 requires DB2 client, DB2 server or DB2 Connect version 10.5 or higher
 - Version 12.1 requires DB2 client, DB2 server or DB2 Connect version 11.1 fix pack 1 or higher
- **PostgreSQL:** version 9.4, 9.5, 9.6 and 10
- **PostgreSQL:** version 9.0 - 9.3 as target and hub, not capture
 - Requires PostgreSQL 9 or 10 client (**libpq.dll** and its dependencies)
- **MySQL:** version 5.6, 5.7, and 8
- **MariaDB:** version 10.0, 10.1, 10.2, 10.3, and 10.4
- **Aurora MySQL:** version 5.6 and 5.7
- **Snowflake:** version 2.x as target, not hub or capture
 - Requires Snowflake ODBC driver 2.13.20 or higher
- **HANA:** version 1.0 - SPS 11 and SPS 12, and version 2.0 - SPS 0 SPS 1, SPS 2, SPS 3, and SPS 4 as target, not capture
 - Requires HANA ODBC driver 1.00.110 or 1.00.120
- **Teradata:** version 14.x, 15.x and 16.x, as target and hub, not capture

- Requires Teradata ODBC driver 16.10 or 15.00
 - Requires TTU 16.10 or 15.00 libraries
- **Greenplum:** version 4.0, 4.2, 4.3, 5.5, and 5.10 up to 5.21 as target, not capture or hub
 - Requires DataDirect Connect64 XE ODBC 7.1.3.99 - 7.1.5 driver for Greenplum provided by Pivotal
- **Redshift:** version 1.0.x, as target, not as capture or hub
 - Requires Amazon Redshift driver 1.2.6.1006-1
- **File replication:** local, FTP/FTPS, and SFTP
- **Apache Hadoop HDFS:** version 2.2.0 and above
 - Requires Hadoop 2.4+ libraries and Java 7 on its local machine to access HDFS (Java 8 if Hadoop 3.0.0alpha1 or later). Command **hadoop.cmd** must be in **\$PATH** or Hadoop home must have been configured via one of the following environment variables: **\$HADOOP_COMMON_HOME**, **\$HADOOP_HOME**, **\$HADOOP_PREFIX**.
- **Apache Hive:** version 1.1, 2.1, 2.3, 3.0, 3.1 with UnixODBC driver manager 2.3.2
 - HVR can create Hive external tables above S3/HDFS files. HVR only uses these during compare.
 - Refresh or integration of this data is done into the S3/HDFS file location.
 - Capture from Hive and hub database in Hive are not supported.
 - Requires ODBC driver manager UnixODBC 2.3.2.
 - Requires HortonWorks ODBC 2.1.2 or above for Hadoop Hive
 - Requires Cloudera ODBC 2.5.15 or above for Hadoop Hive
- **Apache Kafka:** version 0.8 and above (including 0.11)
- **Apache HBase:** version 1.1, 1.2, and 1.3
- **WebDAV/Sharepoint:** version 2010 and Online
- **S3:** supported
- **Google Cloud Storage:** supported
- **Azure Blob FS:** supported
- **Azure Data Lake Store:** Gen1 supported
- **Salesforce:** data loader version 44.0.0, 46.0.0, and 47.0.0
- **HVR user interface:** native GUI, remote GUI or command-line

Log Based Capture Support

- **Ingres**
 - Log based capture is supported for all Ingres versions supported by HVR.
 - No support for dual or partitioned DBMS log-files.
 - No support for page-spanning rows.
 - DDL replication (using action AdaptDDL) is not supported.

- **Oracle**
 - Log based capture is supported for all Oracle versions supported by HVR.
 - Oracle RAC (cluster) and Oracle ASM are supported.
 - For Oracle version 9, log-based capture is not supported for LOBs or tables without a primary key.
 - Compressed tables are only supported for Oracle 11.2 and higher.
 - Log based capture is supported from Data Guard standby database for Oracle 11 and higher. HVR can also capture from a database that was previously a Data Guard target. If HVR was capturing changes from one primary Oracle database and a role transition occur (so that a different Data Guard target becomes the new primary) then HVR can continue capturing from the new primary, including capturing any changes which occurred before the transition. This process is automatic, providing that the HVR location is connecting to Oracle in a way which 'follows the primary'.
 - Log based capture from tables that are encrypted using Oracle TDE is supported for Oracle version 11 and higher. Both tables in an encrypted tablespace and tables with encrypted columns are supported.
 - HVR supports software and hardware (HSM) wallets. If the wallet is not configured as auto-login (Oracle internal file **cwallet.sso**), the password for the software wallet or HSM needs to be set on the HVR Live Wallet port using the **hvrwallet** command.
 - The software wallet can be in ASM or in a local file system.
 - Capturing from Oracle TDE is not supported on HP-UX.

- **SQL Server**
 - Log based capture is supported for SQL Server 2005, 2008, 2012, 2014, 2016 and 2017.
 - Data Compression is supported.
 - Capture from compressed backup transaction log files is supported.
 - Encryption is not supported.
 - Capture from memory optimized tables is not supported.

- **DB2 on Linux, Unix, Windows (LUW)**
 - Log based capture is supported for DB2 on Linux, Unix, Windows (LUW).
 - DDL replication (using action AdaptDDL) is not supported.

- The following table types are supported - regular tables, multidimensional clustering (MDC) tables, insert time clustering (ITC) tables, uncompressed tables, row compressed tables (both static and adaptive) and value compressed tables (both static and adaptive).
- **DB2 for i**
 - Log based capture is supported for DB2 for i.
- **DB2 for z/OS**
 - Log based capture for DB2 for z/OS is supported and has currently beta status.
 - DDL replication (using action AdaptDDL) is not supported.
 - The following table types are supported - regular tables, partitioned tables and compressed tables.
 - Capture rewind is not supported.
 - Capture from LOAD is not supported.
- **PostgreSQL**
 - Log based capture is supported for PostgreSQL 9.4, 9.5, 9.6, 10 and 11.
 - Capture of TRUNCATE is not supported.
 - When capturing via the SQL interface (**/LogMethod=SQL**) bi-directional replication is not supported because replicated changes will be re-captured and replicated back.
 - When capturing via the SQL interface (**/LogMethod=SQL**) PostgreSQL versions before 9.4.12 should be avoided due to a PostgreSQL bug (detected in 9.4.6) which affected this HVR feature.
 - When capturing via the SQL interface (**/LogReadMethod=SQL**) PostgreSQL version 9.5.0 and 9.5.1 contain a bug leading to the **test_decoding** plugin to return incorrect timestamp values and is therefore not supported.
 - DDL replication (using action AdaptDDL) is not supported.
- **HANA**
 - Log based capture is supported on Linux (not Windows) for HANA: version 1.0 - SPS 11 and SPS 12, and version 2.0 - SPS 0, SPS 1, SPS 2, SPS 3 and SPS 4.
 - Only column-store tables are supported (no row-store tables).
 - Capture of TRUNCATE is not supported.
 - DDL replication (using action AdaptDDL) is not supported.
- **MySQL and MariaDB**
 - Log based capture is supported for all MySQL and MariaDB versions supported by HVR.

HVR Network Encryption

An HVR connection to a remote location can be configured so that all communication over the network is encrypted. For network encryption, HVR uses [OpenSSL](#), which is developed by the OpenSSL Project.

- On linux 64bit version, HVR uses OpenSSL version 1.1.0i
- On macOS 64bit version, HVR uses OpenSSL version 1.1.1c
- On Windows, HVR uses OpenSSL version 1.1.1g

Note: On UNIX, HVR's encryption will attempt to exploit the entropy (randomness) generation capability supplied by the `/dev/urandom` device. For optimal security, it is recommended that this Operating System option is installed, especially on the machine used to generate public/private key pairs.

Windows Cluster Compatibility

The windows services in this product can operate as part of a Windows Cluster. The services ([hvrremotelistener](#) and [hvrscheduler](#)) can be created, started, stopped and deleted in the Windows Cluster. The services will act as 'Generic Service' resource within the cluster. To achieve this, an extra cluster option (-c) must be specified in addition to the windows service administration option (-a) with the administration command. The syntax for this is `-c cluster-name \ clustergroup-name`.

For example, to create and start the hvrscheduler service in cluster group **mygroup** in cluster **mycluster**, use:

```
hvr_scheduler -acs -c mycluster \ mygroup [- options ] hubdb
```

Note: The cluster and the cluster group should already exist before executing this command.

New Features

This section lists the New Features in each release of HVR since 5.6.0/1. All features introduced in releases 5.6.0/1 to 5.6.0/2 and 5.6.5/0 to 5.6.5/13 are available in HVR 5.7.0/0.

New Features in HVR 5.7.0/0

- **HVR-4717:** ENCRYPT TX FILES IN ROUTER DIRECTORY IF CONFIGURED.
To use this feature, upgrade HVR on the hub, capture and integrate machine(s).
- **HVR-8582:** ENCRYPT TEMPORARY FILES CONTAINING CONFIDENTIAL DATA IF CONFIGURED.
To use this feature, upgrade HVR on the capture, hub and integrate machine(s).
- **HVR-8906:** ADDED SUPPORT FOR SQLSERVER 2019.
To use this feature, upgrade HVR on all machine(s).
- **HVR-9588:** SUPPORT AGENT PLUGIN WITH /DBPROC FOR SNOWFLAKE, POSTGRESQL, MYSQL AND HANA.
To use this feature, upgrade HVR on the capture and integrate machine(s).
- **HVR-9844:** ENCRYPT CAPTURE CHECKPOINT DATA FILES (*.CKPTX<N>) CONTAINING CONFIDENTIAL DATA IF CONFIGURED.
To use this feature, upgrade HVR on the capture machine(s).
- **HVR-10619:** ADDED SUPPORT FOR DB2 FOR I 7.4.
To use this feature, upgrade HVR on all machine(s).
- **HVR-10963:** CREATE BURST TABLES IN SNOWFLAKE AS TRANSIENT INSTEAD OF PERMANENT.
To use this feature, upgrade HVR on the integrate machine(s).
- **HVR-10864:** SUPPORT FOR CAPTURE OF PERSISTED COMPUTED COLUMNS FROM SQL SERVER.
To use this feature, upgrade HVR on the capture machine(s).
- **HVR-11111:** EXTEND INTEGRATE /RESILIENT TO DROP KEY-UPDATES WITH MISSINGS IF BEFORE IMAGE IS ABSENT FROM TARGET.
To use this feature, upgrade HVR on the integrate machine(s).
- **HVR-11286:** FIX RELATED TO HVRMAINT'S OPTION -START_IF_NOT_RUNNING.
To use this feature, upgrade HVR on the hub machine(s).
- **HVR-11379:** UPGRADED OPENSSL LIBRARY TO 1.1.1G VERSION.
To use this feature, upgrade HVR on all machine(s).

New Features in HVR 5.6.5/13

- **HVR-7320:** COMMAND EXECUTION IS LIMITED TO ONLY TRUSTED AGENTS AND TRANSFORMS.
To use this feature, upgrade HVR on all machine(s).
- **HVR-9594:** FIXED BIGQUERY AGENT FOR DIFFERENT PYTHON AND PYTHON BIGQUERY MODULE VERSIONS.
To use this feature, upgrade HVR on the integrate machine(s).
- **HVR-10153:** ADDED SUPPORT FOR INGRES 11.0 ON AIX.
To use this feature, upgrade HVR on all machine(s).
- **HVR-10267:** ADDED ADAPTDDL /ONENROLLBREAK AND /ONPRESERVEALERTABLEFAIL.
To use this feature, upgrade HVR on the hub and integrate machine(s).
- **HVR-10435:** FIXED GOOGLE BIGQUERY PLUGIN TO SUPPORT SAP ECC SOURCES.
To use this feature, upgrade HVR on the integrate machine(s).
- **HVR-10491:** FASTER INTEGRATE, AFFECTS ALL DB TARGETS, BUT MAINLY SNOWFLAKE AND /BURST TARGETS.
To use this feature, upgrade HVR on the hub and integrate machine(s).
- **HVR-10506:** ADDED SUPPORT FOR MARIADB 10.4.
To use this feature, upgrade HVR on all machine(s).
- **HVR-10909:** INCREASED DEFAULT OF INTEGRATE /CYCLEBYTELIMIT FROM 10M TO 100M FOR /BURST TARGETS.
To use this feature, upgrade HVR on the hub machine(s).
- **HVR-11037:** MACOS WISDOMBUD BRAND.
To use this feature, upgrade HVR on all machine(s).
- **HVR-11102:** ALWAYS USE OVERWRITE=TRUE DURING SNOWFLAKE INTERNAL STAGING.
To use this feature, upgrade HVR on the integrate machine(s).

New Features in HVR 5.6.5/12

- **HVR-3637:** ADDED SUPPORT FOR DB2 FOR I 7.3.
To use this feature, upgrade HVR on all machine(s).
- **HVR-10349:** STAGING INTO SNOWFLAKE USING ITS OWN (INTERNAL) STAGING FOR AWS AND AZURE.
To use this feature, upgrade HVR on the hub and integrate machine(s).

New Features in HVR 5.6.5/11

- **HVR-6746:** HVRSTATS TO PROCESS BIG LOG FILES IN CHUNKS.
To use this feature, upgrade HVR on the hub machine(s).
- **HVR-8168:** LISTEN TO '\$*_PROXY' ENVIRONMENT VARIABLES.
To use this feature, upgrade HVR on the hub and remote machine(s).
- **HVR-8744:** HVRSTATS: IMPROVED SEARCH THROUGH ARCHIVED LOG FILES.
To use this feature, upgrade HVR on the hub machine(s).
- **HVR-8752:** HVRSTATS: AVOID USING HVR_STATS_STAGING IN REGULAR JOB CYCLE.
To use this feature, upgrade HVR on the hub machine(s).
- **HVR-8753:** HVRSTATS: ADD CACHING TO LOG METRICS GATHERER.
To use this feature, upgrade HVR on the hub machine(s).
- **HVR-8797:** IMPLEMENTED REPETITIVE MESSAGE THROTTLE FOR HVRMAINT.
To use this feature, upgrade HVR on the hub machine(s).
- **HVR-9235:** ADDED PIPELINE TO AUGMENT SAP CLUSTERS ONLY IF NECESSARY.
To use this feature, upgrade HVR on the hub and capture machine(s).
- **HVR-9810:** IMPLEMENTED HVRSTATS: BATCH INSERT.
To use this feature, upgrade HVR on the hub machine(s).
- **HVR-9815:** HVRSTATS: HIST_TIME MUST BE SAVED IN UTC.
To use this feature, upgrade HVR on the hub machine(s).
- **HVR-9841:** HVRSTATS: ADD 'SCOPE' COLUMN TO HVR_STATS TABLE.
To use this feature, upgrade HVR on the hub machine(s).
- **HVR-9845:** HVRSTATS: ADDED 'METRIC_GATHERER' COLUMN TO HVR_STATS TABLE.
To use this feature, upgrade HVR on the hub machine(s).
- **HVR-10155:** ADDED SUPPORT FOR WINDOWS 2019.
To use this feature, upgrade HVR on the capture, integrate and hub machine(s).
- **HVR-10293:** SUPPORT MORE ENCODINGS (ARABIC_CI_AS ETC) IN SQL SERVER.
To use this feature, upgrade HVR on all machine(s).
- **HVR-10382:** CHANGED DEFAULT OF TRANSFORM /PARALLEL TO 4 FOR REFRESH IN SAPXFORM CHANNELS.
To use this feature, upgrade HVR on the hub machine(s).

New Features in HVR 5.6.5/10

- **HVR-7950:** ADDED SUPPORT OF ORACLE19C.
To use this feature, upgrade HVR on the capture, integrate and hub machine(s).
- **HVR-9589:** DB2 FOR Z/OS : REPORT LOAD, REORG DISCARD, CHECK DATA DELETE AND RECOVER PIT CHANGES TO CAPTURED TABLES LEADING TO INCONSISTENCIES.
To use this feature, upgrade HVR on the capture machine(s).
- **HVR-9590:** DB2 FOR Z/OS : REPORT UNCOMPRESS ERRORS INSIDE LOG RECORDS.
To use this feature, upgrade HVR on the capture machine(s).
- **HVR-10115:** ADDED SUPPORT FOR SSL CERTIFICATES (HTTPS) KAFKA SCHEMA REGISTRY.
To use this feature, upgrade HVR on the integrate and gui machine(s).
- **HVR-10120:** DB2 FOR Z/OS : RELEASE DBD LOCKS TAKEN BY IFI 306 AT REGULAR TIME INTERVALS.
To use this feature, upgrade HVR on the capture machine(s) and upgrade HVR's stored procedures on the DB2 for z/OS capture machine(s).
- **HVR-10172:** ALLOW USING STRING ENCODER FOR KAFKA KEY WHILE USING SCHEMA REGISTRY.
To use this feature, upgrade HVR on the integrate and hub machine(s).

New Features in HVR 5.6.5/9

- **HVR-8019:** DB2 FOR Z/OS : ADD SUPPORT FOR ALL UPDATE LOG RECORD VARIANTS.
To use this feature, upgrade HVR on the capture machine(s).
- **HVR-9542:** DB2 FOR Z/OS: IMPROVE CLEAN-UP WHEN HVRCAP PROCEDURES ARE KILLED WHILE RUNNING.
To use this feature, upgrade HVR's stored procedures on the DB2 for z/OS capture machine(s).

New Features in HVR 5.6.5/7

- **HVR-7256:** DB2 FOR Z/OS : CAPTURE TRUNCATE TABLE IMMEDIATE AS TRUNCATE INSTEAD OF AS DELETES.
To use this feature, upgrade HVR on the capture machine(s).
- **HVR-8282:** ADDED SUPPORT OF SNOWFLAKE ON GOOGLE CLOUD STORAGE.
To use this feature, upgrade HVR on the integrate and hub machine(s).
- **HVR-8862:** DB2 FOR Z/OS : ADD SUPPORT FOR DB2 Z/OS V12.
To use this feature, upgrade HVR on the capture machine(s).

- **HVR-9715:** ADDED COMPRESSION WHILE TRANSMITTING DATA INTO KAFKA BROKER.
To use this feature, upgrade HVR on the gui, hub and integrate machine(s).
- **HVR-9770:** SUPPORT FOR CONTROL CHARACTERS (<0X20) AND PERFORMANCE IMPROVEMENTS IN CAPTURE FROM CSV FILES AND SALESFORCE.
To use this feature, upgrade HVR on the hub and capture machine(s).
- **HVR-9881:** SUPPORT CONTINUOUS INTEGRATION OF TRUNCATE WHEN A RESTRICT /INTEGRATECONDITION IS DEFINED.
To use this feature, upgrade HVR on the integrate machine(s).

New Features in HVR 5.6.5/5

- **HVR-2970:** SHOW PERFORMANCE 'BREAKDOWNS' IN LOG MESSAGES.
To use this feature, upgrade HVR on the hub and integrate machine(s).
- **HVR-5549:** STORE PASSWORDS ENCRYPTED WITH A SOFTWARE WALLET.
To use this feature, upgrade HVR on all machine(s).
- **HVR-6199:** ENHANCE INTEGRATE LOGGING TO INCLUDE TABLE LEVEL DETAILS.
To use this feature, upgrade HVR on the hub and integrate machine(s).
- **HVR-9393:** DB2 FOR Z/OS : INTRODUCE COMMITS INSIDE HVRCAPLG TO PREVENT POTENTIAL LOCKING ISSUES WHEN HANDLING COMPRESSED TABLES.
To use this feature, upgrade HVR on the capture and hub machine(s) and upgrade HVR's stored procedures on the DB2 for z/OS capture machine(s).
- **HVR-9413:** STORE PASSWORDS ENCRYPTED WITH AMAZON KMS WALLET.
To use this feature, upgrade HVR on the hub machine(s).
- **HVR-9480:** DB2 FOR Z/OS : AUTOMATICALLY DETECT ANY LRSN DELTA.
To use this feature, upgrade HVR on the capture and hub machine(s) and upgrade HVR's stored procedures on the DB2 for z/OS capture machine(s).

New Features in HVR 5.6.5/4

- **HVR-8514:** AUTO-DETECT & UNCOMPRESS OF READ ZIPPED/COMPRESSED ARCHIVE LOG FILES.
To use this feature, upgrade HVR on the capture machine(s).
- **HVR-8813:** IMPLEMENTED STATEFUL ENCODING SUPPORT. ADDED IBM-935.
To use this feature, upgrade HVR on all machine(s).
- **HVR-8972:** ADDED SUPPORT OF CLouDERA KAFKA SCHEMA REGISTRY.
To use this feature, upgrade HVR on the integrate machine(s).
- **HVR-9056:** IMPLEMENTED AUTOMATIC RECOVERY FROM F_JD0C13 AT SQL SERVER CAPTURE START TIME.

To use this feature, upgrade HVR on the capture machine(s).

New Features in HVR 5.6.5/3

- **HVR-8090:** ORACLE LBC: NEW CHAINER ABLE TO COMPOSE WIDE COMPRESSED TABLES ROWS.
To use this feature, upgrade HVR on the capture and hub machine(s).
- **HVR-8641:** ALLOW /MESSAGEKEY WITH KAFKA LOCATION AND SCHEMA REGISTRY.
To use this feature, upgrade HVR on the integrate machine(s).
- **HVR-8951:** ADDED OAUTH AUTHENTICATION SUPPORT FOR GOOGLE CLOUD STORAGE.
To use this feature, upgrade HVR on the gui, hub, integrate and capture machine(s).

New Features in HVR 5.6.5/2

- **HVR-6129:** ADDED SUPPORT FOR AZURE DATA LAKE STORAGE GEN2 FILESYSTEM.
To use this feature, upgrade HVR on the gui, hub and integrate machine(s).
- **HVR-6348:** ADDED NEW FILEFORMAT OPTIONS /BEFOREUPDATECOLUMNS=<PREFIX>/BEFOREUPDATECOLUMNSWHENCHANGED.
To use this feature, upgrade HVR on the hub and integrate machine(s).
- **HVR-6955:** ADD HVR MAINT EMAIL SUPPORT FOR OFFICE 365 AND GMAIL MAILSERVER.
To use this feature, upgrade HVR on the hub machine(s).
- **HVR-7390:** ADDED SUPPORT OF GOOGLE CLOUD STORAGE (GCS).
To use this feature, upgrade HVR on the capture, hub, gui and integrate machine(s).
- **HVR-7464:** ADDED SUPPORT {HVR_TBL_BASE_NAME} AND {HVR_SCHEMA} IN COLUMNPROPERTIES /INTEGRATEEXPRESSION AND RESTRICT /COMPARECONDITION AND /REFRESHCONDITION.
To use this feature, upgrade HVR on the hub and integrate machine(s).
- **HVR-7764:** SUPPORT AWS SNS 'SIMPLE NOTIFICATION SERVICE' FOR ALERTING IN MAINTENANCE TASK.
To use this feature, upgrade HVR on the gui and hub machine(s).
- **HVR-7778:** MORE FLEXIBLE CALCULATION OF MAX STAGING FILE SIZE TO FIT SNOWFLAKE, REDSHIFT AND HIVE REQUIREMENTS.
To use this feature, upgrade HVR on the integrate machine(s).
- **HVR-7946:** ADD NATIVE SUPPORT FOR DB2 (LUW) AND DB2 FOR Z/OS DATA TYPE XML.
To use this feature, upgrade HVR on all machine(s).

- **HVR-8746:** HVRSTATS: IMPROVED BEGIN AND END TIME MATCHING IN HVRSTATISTICS.PL.
To use this feature, upgrade HVR on the hub machine(s).
- **HVR-8904:** ORACLE LBC: MINIMIZE DELAY WHILE DETECTING END-OF-THREAD DURING REDO SWITCHING.
To use this feature, upgrade HVR on the capture machine(s).
- **HVR-8928:** TOLERATE MORE RETRIES WHEN DELIVERING MESSAGES TO KAFKA.
To use this feature, upgrade HVR on the integrate machine(s).

New Features in HVR 5.6.5/1

- **HVR-5684:** ADD SUPPORT FOR CASESENSITIVENAMES FOR DB2 (LUW), DB2 FOR I, DB2 FOR Z/OS, HANA, REDSHIFT, SNOWFLAKE, SQL SERVER AND TERADATA.
To use this feature, upgrade HVR on all machine(s).
- **HVR-6523:** INTRODUCED 'SELF_NTLM' MODE TO HVRVALIDPWLDAP FOR EASIER ACTIVE DIRECTORY INTEGRATION.
To use this feature, upgrade HVR on the hub machine(s).
- **HVR-7834:** PORTED HVR TO LINUX ON POWERPC.
To use this feature, upgrade HVR on all machine(s).
- **HVR-8306:** ADDED SUPPORT FOR INGRES 10.2 ON SOLARIS INTEL.
To use this feature, upgrade HVR on all machine(s).

New Features in HVR 5.6.5/0

- **HVR-7294:** FASTER ROWWISE COMPARE BETWEEN TABLES WITH DIFFERENT STRING ENCODINGS, USING ORDERBY-RESORT.
To use this feature, upgrade HVR on the hub and integrate machine(s).
- **HVR-7870:** HVRCOMPARE -I[KR] OPTIONS TO ALLOW INTERMEDIATE FILE REUSE DURING DIRECT FILE COMPARE.
To use this feature, upgrade HVR on the hub and gui machine(s).

New Features in HVR 5.6.0/1

- **HVR-6041:** ENABLED XLSX FORMAT FOR HVRSTATS HISTORY EXPORT.
To use this feature, upgrade HVR on the gui and hub machine(s).
- **HVR-6336:** ADD SUPPORT FOR POSTGRESQL 11.
To use this feature, upgrade HVR on the capture machine(s).

Problems Fixed

This section lists the problems fixed in each release of HVR since 5.5.0/1. All problems fixed in releases since 5.5.0/1 are fixed in HVR 5.6.0/0.

Problems Fixed in HVR 5.7.0/0

Jira ID	Description	Resolution
HVR-5331	FIXED JOB GETS STUCK AT F_JT0E26: RESTORING OF CAPTURE CHECKPOINT WAS EXPECTING A COMMIT STATEMENT AT EXACT RECORD SEQUENCE {}, BUT SCANNER JUMPED OVER IT AND PROVIDED A COMMIT STATEMENT AT {}.	Upgrade HVR on the capture and hub machine(s).
HVR-7335	FILE SYSTEM PERMISSIONS FOR HVR_CONFIG ON UNIX ARE RESTRICTED.	Upgrade HVR on all machine(s).
HVR-9084	FIXED LOOP DETECTION DURING CAPTURE FROM HANA.	Upgrade HVR on the capture machine(s).
HVR-9204	FIXED HVR DOES NOT WRAP A GUID IN VERBOSE SCRIPT FROM COMPARE.	Upgrade HVR on all machine(s).
HVR-9207	FIXED F_JD22DC: LOG RECORD HAS UNEXPECTED LENGTH 0, WHEREAS AT LEAST 162 WAS EXPECTED.	Upgrade HVR on the hub and capture machine(s).
HVR-9271	FIXED F_JG200A: SIGSEGV AFTER ORACLE WALLET ERROR.	Upgrade HVR on the capture machine(s).
HVR-9355	LIVE WALLET PORTS OF HVRREMOTELISTENER (REMOTE ORACLE TDE), HVRSCHEDULER (LOCAL ORACLE TDE, HVR HUB WALLET) ARE NOW ACCESSIBLE ONLY TO SAME OS USER AS THE SERVICE OR TO OWNER OS USER OF WALLET CONFIGURATION FILE.	Upgrade HVR on the capture and hub machine(s).
HVR-9572	FIXED DBMSATTR MIGHT RETURN INCORRECT CHARSET FOR ORACLE TNS LOCATIONS.	Upgrade HVR on the capture, integrate and hub machine(s).
HVR-9661	FIXED /ADAPTDDL REMOVES ACTIONS WITH WILDCARDS ON TABLE DROP.	Upgrade HVR on the hub machine(s).

Jira ID	Description	Resolution
HVR-9727	STATE TABLES SHOULD BE CREATED AS COLUMN STORE TABLE ON HANA SO WE CAN CAPTURE FROM THEM.	Upgrade HVR on the integrate machine(s).
HVR-9926	ORACLE LBC: SHRINKING TABLES WITH CHAINING NOT HANDLED PROPERLY.	Upgrade HVR on the capture machine(s).
HVR-10105	DB2I ADAPTDDL REGRESSION: ADAPTDDL UNEXPECTEDLY ADDED HVR_QSHELLIO_CHN_ADAPTDDL TABLE.	Upgrade HVR on the hub and capture machine(s).
HVR-10448	F_JZ114E AND F_JZ192 COMMIT WHILE CHAINED ROW IS INCOMPLETE. CON_UID AND PLUGGABLE DATABASES.	Upgrade HVR on the capture machine(s).
HVR-11077	FIXED REGRESSION WITH INCORRECT DATATYPE COERCION INTRODUCED BY HVR-7483,HVR-7409.	Upgrade HVR on the hub machine(s).
HVR-11174	HVRINIT FAILS WITH F_JR0337: INTEGRATE /ONERRORSAVEFAILED IS NOT SUPPORTED FOR CLASS SALESFORCE.	Upgrade HVR on the hub machine(s).
HVR-11177	FIXED F_JG0521 WITH ERROR WAITING ON SOCKET [-9] DURING SFTP WRITING.	Upgrade HVR on the remote machine(s).
HVR-11192	RENAMING INGRES LOCATION NAME IS CHANGING DATABASE USER.	Upgrade HVR on the gui machine(s).
HVR-11206	FIXED F_JZ0A4D WHEN CAPTURE FROM HANA STARTS.	Upgrade HVR on the capture machine(s).
HVR-11230	NEW HUB WALLET CONFIG AND PKCS12 FILE LOCATION IS MOVED FROM HVR_CONFIG/FILES/ TO HVR_CONFIG/FILES/HVRWALLET-<HUBNAME>/ FOR SECURITY PURPOSES.	Upgrade HVR on the hub machine(s).
HVR-11249	FILEFORMAT /PARQUET SERIALIZES SOME OF BOOLEAN TRUE VALUES INCORRECTLY AS FALSE.	Upgrade HVR on the integrate machine(s).
HVR-11265	FIXED CRASH IN CASE OF INCORRECT FORMAT OF SCHEMA REGISTRY PATH.	Upgrade HVR on the integrate machine(s).
HVR-11269	SALESFORCE: REFRESH FAILS WITH: F_JB000D CANNOT CONNECT TO SALESFORCE LOCATION.	Upgrade HVR on the gui machine(s).

Jira ID	Description	Resolution
HVR-11279	FIXED F_JG0E07: UNHANDLED ICU ERROR OCCURED (U_INVALID_CHAR_FOUND) DUE TO INVALID SOURCE BYTES.	Upgrade HVR on the integrate machine(s).
HVR-11329	FIXED POTENTIAL SIGSEGV DURING HUB CONNECT AFTER UPGRADE.	Upgrade HVR on the gui machine(s).
HVR-11336	FIXED CAPTURE FAILING WITH SAPAUGMENT ERROR F_JT073E.	Upgrade HVR on the capture machine(s).
HVR-11341	FIXED F_JD20FF DURING CATALOG UPGRADE OF HVR_STATS_STAGING.	Upgrade HVR on the hub machine(s).
HVR-11351	FIXED SELECTING TIMESTAMP_LTZ OR TIMESTAMP_NTZ EXPRESSIONS FROM SNOWFLAKE: ZERO TIMESTAMP OR F_JD22B9: UNSUPPORTED TIMESTAMP VALUE.	Upgrade HVR on the integrate machine(s).

Problems Fixed in HVR 5.6.5/13

Jira ID	Description	Resolution
HVR-4281	CLEAN LOCKED TRANSACTIONS IN OLD SNOWFLAKE SESSIONS.	Upgrade HVR on the hub and integrate machine(s).
HVR-8666	FIXED MISSING INTERMEDIATE CHANGES DURING INTEGRATE /BURST WITH /TIMEKEY.	Upgrade HVR on the hub and integrate machine(s).
HVR-9904	FIXED F_JD0ABD DURING CAPTURE OF WRITETEXT AND UPDATETEXT OPERATIONS FROM SQL SERVER.	Upgrade HVR on the capture machine(s).
HVR-9993	REFRESH JOB INTO ONE LOCATION SUSPENDS INTEGRATE JOBS INTO OTHER LOCATIONS THAT ARE NOT ALIASES.	Upgrade HVR on the hub machine(s).
HVR-10090	REPLACED SLOW AND EXPENSIVE INFORMATION_SCHEMA QUERIES IN FAVOR OF SHOW TABLE ON SNOWFLAKE WHEN POSSIBLE.	Upgrade HVR on the integrate machine(s).
HVR-10203	FIXED HVR_BOOT CHECK OPTION WHEN HUBDB IS ORACLE.	Upgrade HVR on the hub machine(s).

Jira ID	Description	Resolution
HVR-10383	F_JD2420 DATA VALUE IN LOG RECORD COLUMN (DATATYPE NUMBER) IS TOO LARGE.	Upgrade HVR on the capture machine(s).
HVR-10642	FIXED GOOGLE BIGQUERY PLUGIN DELETES FILES IN USE BY OTHER REFRESH JOBS.	Upgrade HVR on the integrate machine(s).
HVR-10649	FIXED INTEGRATION ERROR AFTER ADAPTDDL DROPPED TABLE FROM CHANNEL.	Upgrade HVR on the hub machine(s).
HVR-10663	FIXED LOGGING MESSAGE ABOUT TIME SPENT UPLOADING.	Upgrade HVR on the integrate machine(s).
HVR-10666	IMPROVED ERROR MESSAGING. NOTE: ONE CHANGE INCLUDED IN HVR-9594 COMMIT BELOW.	Upgrade HVR on the integrate machine(s).
HVR-10768	CAPTURE FAILS WITH F_JT1456: LOG PARSING ERROR F_JZ1201. SUPPLEMENTAL LOGGING INFORMATION IS MISSING FOR CHANGE TYPE 5.1.	Upgrade HVR on the capture machine(s).
HVR-10885	FIXED: STATE TABLES WERE GRANTED TO PUBLIC.	Upgrade HVR on the integrate machine(s).
HVR-10886	ORACLE LBC: ORACLE CAPTURE FAILS WITH F_JD2420: DATA VALUE IN LOG RECORD COLUMN IS TOO LARGE.	Upgrade HVR on the capture machine(s).
HVR-10995	FIXED HVRSTATS -F CANNOT RUN WHEN REGULAR STATS JOB IS RUNNING.	Upgrade HVR on the hub machine(s).
HVR-11012	FIXED CATALOG UPGRADE NOT BEING FULLY AUTOMATED.	Upgrade HVR on the gui machine(s).
HVR-11015	FIXED HVRSTATS CATCH-UP AFTER SUSPENSION MIGHT HAVE BAD PERFORMANCE.	Upgrade HVR on the hub machine(s).
HVR-11059	FIXED TOPOLOGY DISAPPEARING WHEN THERE ARE JOBS WITH LOCATIONS MISSING FROM CHANNEL.	Upgrade HVR on the gui machine(s).
HVR-11071	FIXED PQ TABLE CREATE FAILING WITH F_JD22D4 [ERROR: INDEX ROW SIZE Y EXCEEDS MAXIMUM Y] SQL STATE [54000].	Upgrade HVR on the integrate machine(s).
HVR-11108	FIXED DURING INTEGRATE /BURST: F_JD20DB: DBMS ERROR [ORA-26085: DIRECT PATH OPERATION MUST START ITS OWN TRANSACTION].	Upgrade HVR on the integrate machine(s).

Jira ID	Description	Resolution
HVR-11136	FIXED HVRSTATS COMPUTATION OF BURST SPEED METRICS.	Upgrade HVR on the hub machine(s).

Problems Fixed in HVR 5.6.5/12

Jira ID	Description	Resolution
HVR-9579	HVR ERRONEOUSLY SELECTS PARTIAL UNIQUE INDEX AS REPLICATION KEY FOR POSTGRESQL.	Upgrade HVR on the capture machine(s).
HVR-10248	FIXED ADAPTDDL UNEXPECTEDLY PERFORMING A REFRESH WHEN A SQLSERVER CHAR COLUMN IS INCREASED IN LENGTH.	Upgrade HVR on the hub machine(s).
HVR-10809	FIXED HVRSTATS PERFORMANCE ISSUES ON CERTAIN HUB DBMS DUE TO EXCLUSIVE TABLE LOCKS.	Upgrade HVR on the hub machine(s).
HVR-10929	CHANGED DEFAULT FOR HVR_KAFKA_TOPIC_CREATE_DELAY FROM 2 TO 0.	Upgrade HVR on the integrate machine(s).
HVR-10970	FIXED CHAR COLUMNS' LENGTH IS QUADRUPLED IN TARGET AVRO AND PARQUET FILES.	Upgrade HVR on the integrate machine(s).
HVR-10996	FIXED HVRSTATS FAILING WITH ENCODING ERROR ON HVR ERROR MESSAGE.	Upgrade HVR on the hub machine(s).

Problems Fixed in HVR 5.6.5/11

Jira ID	Description	Resolution
HVR-8805	FIXED SAP REPLICATION FOR CASE SENSITIVE DATABASES.	Upgrade HVR on the capture, hub and integrate machine(s).
HVR-8866	FIXED POSSIBLE CSV FILE CORRUPTION WHEN HVRSTATISTICS.PL IS INTERRUPTED.	Upgrade HVR on the hub machine(s).
HVR-9332	FIXED DAYLIGHT SAVING TIME MANAGEMENT.	Upgrade HVR on the hub machine(s).
HVR-9361	FIXED SAPXFORM LOOKING FOR /BIN/BASH ON WINDOWS MACHINE.	Upgrade HVR on the hub machine(s).

Jira ID	Description	Resolution
HVR-9366	FIXED F_JR0313 DURING HVRROUTERCONSOLIDATE -L WITH RUNNING INTEGRATE JOBS.	Upgrade HVR on the hub machine(s).
HVR-9536	FIXED HVRMAINT -ARCHIVE_FILES PATTERN MATCHING.	Upgrade HVR on the hub machine(s).
HVR-9710	FIXED F_JD0250 UNEXPECTED DATATYPE '-5' ENCOUNTERED WHILE TRYING TO CONNECT TO SNOWFLAKE.	Upgrade HVR on the integrate machine(s).
HVR-9717	FIXED POTENTIAL RACE CONDITION THAT MAY CAUSE SPORADIC F_JZ0A1B DURING CAPTURE FROM HANA.	Upgrade HVR on the capture machine(s).
HVR-9884	FIXED F_JD0F01 WHEN REFRESHING DB2 XML COLUMN TO FILE TARGET.	Upgrade HVR on the capture, hub and integrate machine(s).
HVR-9992	FIXED F_JZ0A43 DURING CAPTURE FROM HANA.	Upgrade HVR on the capture machine(s).
HVR-10063	FIXED F_JD22A1 'TOP N SYNTAX ERROR' DURING EVENT SELECT ON TERADATA HUB.	Upgrade HVR on the hub machine(s).
HVR-10138	FIXED SAPXFORM INTEGRATE SORTING.	Upgrade HVR on the hub machine(s).
HVR-10140	FIXED ACTION ADAPTDL AND TRANSFORM /SAPXFORM COULD BE COMBINED.	Upgrade HVR on the hub machine(s).
HVR-10302	FIXED LOG PARSING ERROR F_JZ193E. PARSER ENCOUNTERED UNKNOWN OP FLAG 0X00 WHILE PARSING RECORD 'UNDO UKR' AT DBA=<HEX LITERAL>".	Upgrade HVR on the capture machine(s).
HVR-10348	ORACLE LBC: F_JT1456: LOG PARSING ERROR F_JZ1149. RECEIVED A ROW PIECE (OP:19.1) BUT NO MATCHING PARTIAL ROW EXISTS.	Upgrade HVR on the capture machine(s).
HVR-10393	FIXED CAPTURE FAILS WITH F_JT0736: CAPTURE ENCOUNTERED DDL STATEMENT TO CREATE THE TABLE [<TABLE NAME>] BUT TABLE IS ALREADY ENROLLED.	Upgrade HVR on the capture machine(s).
HVR-10423	FIXED SAPAUGMENT GENERATING INCORRECT MULTI-DELETES.	Upgrade HVR on the capture machine(s).

Jira ID	Description	Resolution
HVR-10446	FIXED HVRROUTERCONSOLIDATE NOT CONSOLIDATING .TX FILES.	Upgrade HVR on the hub machine(s).
HVR-10447	FIXED F_JX0D03 CLIENT OBJECT HAS NO ATTRIBUTE 'LIST_DATASET_TABLES'.	Upgrade HVR on the integrate machine(s).
HVR-10453	FIXED F_JT1431 PIPE DIFFCMP ENCOUNTERED DIFFERENT DATATYPES FOR TABLE DURING ROW-WISE COMPARE TO A HANA TARGET FOR A TABLE WITH RESTRICT /COMPARECONDITION.	Upgrade HVR on the integrate machine(s).
HVR-10463	IMPROVED PERFORMANCE OF REFRESH FROM POSTGRESQL TABLES WITH LOBS.	Upgrade HVR on the capture machine(s).
HVR-10507	FIXED F_JG2901 IN ORACLE CAPTURE WITH NON-ASCII USERNAME.	Upgrade HVR on the capture machine(s).
HVR-10556	FIXED F_JZ0A18 DURING CAPTURE FROM HANA.	Upgrade HVR on the capture machine(s).
HVR-10599	INTEGRATE /BURST FROM HANA SOURCES FAILS WITH F_JT1478: INTEGRATION DELETE AFFECTED <X> ROWS; LESS THAN THE <Y> ROWS EXPECTED.	Upgrade HVR on the integrate machine(s).
HVR-10622	FIXED DURING ORACLE TABLE DESCRIBE: F_JD20DB: DBMS ERROR [ORA-00933: SQL COMMAND NOT PROPERLY ENDED] WITH A CLAUSE [FROM SYS.ALL_TAB_COL_STATISTICS AHVR_SYS_TABLE S].	Upgrade HVR on the capture and integrate machine(s).
HVR-10627	FIXED F_JG200A IN CAPTURE WITH INTELLIGENT ROUTING AND EMPTY LOC.GROUP.	Upgrade HVR on the hub machine(s).
HVR-10636	LOG RECORD IMPLIES A NULL FOR COLUMN 1.	Upgrade HVR on the capture machine(s).
HVR-10643	FIXED F_JD21AE WHEN CONNECTING TO ORACLE PHYSICAL STANDBY PLUGGABLE DATABASE.	Upgrade HVR on the capture machine(s).
HVR-10658	FIXED ORACLE DESCRIBE COLUMN STATISTICS ON MULTIPLE TABLES MIGHT RETURN DUPLICATE COLUMNS.	Upgrade HVR on the capture and integrate machine(s).
HVR-10670	FIXED READING INGRES CONFIG FILE AAAAAAAA.CNF FOR INGRES DATABASE IN NON-DEFAULT LOCATION.	Upgrade HVR on the capture machine(s).

Jira ID	Description	Resolution
HVR-10697	FIXED ABORTED HVRROUTERCONSOLIDATE WITH LINK ERROR.	Upgrade HVR on the hub machine(s).
HVR-10718	FIXED F_JT0527 COALESCE ENCOUNTERED ILLEGAL DELETE-UPDATE PAIR WHILE CAPTURING FROM DB2 (LUW).	Upgrade HVR on the capture machine(s).
HVR-10787	ONLINE REFRESH FOR TRIGGER BASED CAPTURE CREATES CONTROLS BASED ON HVR_TX_SEQ NOT HVR_CAP_TSTAMP.	Upgrade HVR on the hub machine(s).
HVR-10792	ORACLE LBC: MISSED ROLLBACK FOR DELETE-INSERT PAIR RESULTS IN F_JT0527: COALESCE ENCOUNTERED ILLEGAL DELETE-DELETE.	Upgrade HVR on the capture machine(s).
HVR-10839	FIXED HVR BULK COMPARE SOMETIMES RETURNING DIFFERENCES WHILE DATA IS ACTUALLY IDENTICAL.	Upgrade HVR on the capture and integrate machine(s).
HVR-10857	EXTENDING TIME RANGE (FROM NOW) FOR MINUTE AND 10 MINUTE GRANULARITIES.	Upgrade HVR on the gui machine(s).
HVR-10863	FIXED WHEN USING A HUB DATABASE NAME WITH DASHES OR OTHER SPECIAL CHARACTERS: F_JG2142: FPROC INVOCATION DID NOT MATCH THE EXPECTED PROTOTYPE: HUBENCRYPTION.	Upgrade HVR on the hub machine(s).

Problems Fixed in HVR 5.6.5/10

Jira ID	Description	Resolution
HVR-5792	DO NOT EMIT W_JZ0A01 WARNING WHEN NESTED TRANSACTION IS ENCOUNTERED DURING CAPTURE FROM HANA.	Upgrade HVR on the capture machine(s).
HVR-6794	INITIALIZE WITH DROP OBJECTS ON SQL SERVER SOURCE DROPS SUPPLEMENTAL LOGGING FOR TABLES NOT IN THE CHANNEL.	Upgrade HVR on the hub and capture machine(s).
HVR-7323	SCHEDULER INTERACTION WITH A REMOTE HUB OVER A LONG DISTANCE NETWORK TIMES OUT.	Upgrade HVR on the gui machine(s).

Jira ID	Description	Resolution
HVR-8392	POSTGRESQL/GREENPLUM FUNCTIONAL INDEXES IGNORED DURING TABLE EXPLORE.	Upgrade HVR on the capture and integrate machine(s).
HVR-8766	DB2 FOR I : NO LONGER CONSIDER PARTIAL INDEXES AS REPLICATION KEY CANDIDATES.	Upgrade HVR on the capture machine(s).
HVR-9256	FIXED F_JD20F2 FOR RESILIENT INSERT ON TABLE WITHOUT A KEY WITH /EXTRA COLUMNS.	Upgrade HVR on the integrate machine(s).
HVR-9312	FIXED WRONG CONVERSION OF ORACLE TIMESTAMP 01-JAN-0001 00:00:00.000000 INTO AVRO EPOCH.	Upgrade HVR on the hub and integrate machine(s).
HVR-9706	FIXED HVRSCHEDULER DOES NOT RETRY JOBS AFTER: W_JJ1097.	Upgrade HVR on the hub machine(s).
HVR-10111	FIXED F_JT0527 COALESCE ENCOUNTERED ILLEGAL DELETE-UPDATE PAIR WHILE CAPTURING FROM DB2 (LUW).	Upgrade HVR on the capture machine(s).
HVR-10132	F_JG2142: FPROC INVOCATION DID NOT MATCH THE EXPECTED PROTOTYPE AFTER HVR-8571.	Upgrade HVR on the capture machine(s).
HVR-10152	CLOUDERA SCHEMA REGISTRY SUBJECT NAMES COLLIDE WHEN POINTING MULTIPLE TABLES TO SAME KAFKA TOPIC, BREAKS SCHEMA EVOLUTION COMPATIBILITY.	Upgrade HVR on the integrate machine(s).
HVR-10167	FIXED EXPLICITLY SPECIFIED ACTION INTEGRATE /MESSAGECOMPRESS WAS NOT OVERRIDING COMPATIBILITY CHECKS.	Upgrade HVR on the hub machine(s).
HVR-10213	DB2 FOR Z/OS : FIXED F_JD029D WHILE CAPTURING CHANGES FOR TABLE WITH BASIC RECORD FORMAT WITH NULLABLE COLUMNS WITH FIXED LENGTH.	Upgrade HVR on the capture machine(s).
HVR-10233	ADDING TABLE WITH BASENAME WHICH CANNOT BE USED AS HVRNAME ADDS TABLEPROPERTIES /BASENAME.	Upgrade HVR on the gui machine(s).
HVR-10251	FIXED HVRSTATS JOB RETRY TIMER IS NEVER RESET.	Upgrade HVR on the hub machine(s).

Jira ID	Description	Resolution
HVR-10252	DB2 (LUW) : SOME DELETES ARE NOT REPLICATED.	Upgrade HVR on the capture machine(s).
HVR-10258	DB2 (LUW) : FIXED UNEXPECTED COMPARE DIFFERENCES.	Upgrade HVR on the capture machine(s).
HVR-10279	HVRSTATS REPORTS REFRESH-JOB OUTPUT AS IRREGULAR.	Upgrade HVR on the hub machine(s).
HVR-10343	ORACLE LBC: F_JD2420: DATA VALUE IN LOG RECORD COLUMN IS TOO LARGE: SKIPPED PARTIAL ROLLBACK.	Upgrade HVR on the capture machine(s).
HVR-10346	ORACLE LBC: F_JD2420: DATA VALUE IN LOG RECORD COLUMN IS TOO LARGE: WRONG COLUMNS IDS ASSIGNMENT.	Upgrade HVR on the capture machine(s).
HVR-10361	FIXED F_JZ6222 WHILE READING POSTGRESQL HISTORY WHICH DOES HAVE ENTRIES FOR ALL TIMELINES.	Upgrade HVR on the capture machine(s).

Problems Fixed in HVR 5.6.5/9

Jira ID	Description	Resolution
HVR-7602	HVRLOGRELEASE FOR ORACLE BROKEN DUE TO CHANGED SCAN_START_ADDR.	Upgrade HVR on the hub machine(s).
HVR-9160	LOGENCAP_4061, LOGMINER SEGMENTATION VIOLATION DUE TO DATA ALIGNMENT ON SOLARIS.	Upgrade HVR on the capture machine(s).
HVR-9513	ORACLE LBC: CAPTURE WITH DIRECT-IO FAILS: F_JZ1517. NON-TERMINAL PAGE IN REDO LOGFILE FAILED CRC TEST.	Upgrade HVR on the capture machine(s).
HVR-9580	FIXED F_JT04EC WITH UNEXPECTED TAG !BYTES IS ENCOUNTERED WHILE GENERATING XML FILES.	Upgrade HVR on the integrate machine(s).
HVR-9802	FIXED DB2 FOR Z/OS SOURCE TABLES BEING LOCKED CAUSING TIMEOUTS WITH SAP DDL MODIFICATION.	Upgrade HVR on the capture machine(s) and upgrade HVR's stored procedures on the DB2 for z/OS capture machine(s).

Problems Fixed in HVR 5.6.5/8

Jira ID	Description	Resolution
HVR-8786	LOGMINER : UPDATE CAPTURED INSTEAD OF INSERT.	Upgrade HVR on the capture machine(s).
HVR-9131	FIXED HVR REFRESH DOES NOT REMOVE UNIQUE INDEX ON TARGET WHEN MISMATCHED WITH SOURCE WHEN ALTER OR RECREATE EXISTING TABLES IS SET.	Upgrade HVR on the hub machine(s).
HVR-9334	ERROR DURING INITIALIZE: F_JD070F: COLUMN NOT FOUND IN DBMS CATALOGS CACHE.	Upgrade HVR on the capture machine(s).
HVR-9834	CHANGED DEFAULT COMPRESSION CODEC FOR KAFKA TO GZIP IF /FILECOMPRESS IS NOT SET DUE TO KAFKA COMPATIBILITY ISSUES.	Upgrade HVR on the hub machine(s).
HVR-9897	FIXED CSV CAPTURE OF COLUMN VALUES LARGER THAN 32K.	Upgrade HVR on the capture machine(s).
HVR-9900	FIXED CSV FILE CORRUPTION FOR LOB VALUES WITH /MAPBINARY=COPY WHEN /QUOTECHARACTER IS DEFINED.	Upgrade HVR on the integrate machine(s).
HVR-9913	FIXED HANDLING OF EXPLICIT LOG SWITCHES DURING DIRECT CAPTURE FROM POSTGRESQL.	Upgrade HVR on the capture machine(s).
HVR-9929	FIXED F_JT0527 COALESCE ENCOUNTERED ILLEGAL INSERT-INSERT PAIR WHILE CAPTURING FROM DB2 (LUW).	Upgrade HVR on the capture machine(s).
HVR-9932	FIXED HVRSTART -I -R: F_JG0E64: ATTEMPT TO CALL UNKNOWN SUBROUTINE SUB_HVR_EXEC.	Upgrade HVR on the hub machine(s).

Problems Fixed in HVR 5.6.5/7

Jira ID	Description	Resolution
HVR-6969	FIXED SQL SYNTAX ERROR WHILE TRYING TO INTEGRATE A TRUNCATE WHEN A RESTRICT /INTEGRATECONDITION IS DEFINED.	Upgrade HVR on the integrate machine(s).
HVR-8632	FIXED "F_JD229B: LOG RECORD HAS OUT OF BOUND VARIABLE DATA" ERROR AFTER UPDATING VARCHAR COLUMN.	Upgrade HVR on the hub and capture machine(s).

Jira ID	Description	Resolution
HVR-8648	BURST INTEGRATION LOGS HANDLE CLOCK SKEW BETWEEN HUB AND INTEGRATION MACHINE.	Upgrade HVR on the hub machine(s).
HVR-9031	FIXED PRIMARY KEY CONSTRAINT VIOLATION WITH HVR STATS.	Upgrade HVR on the hub machine(s).
HVR-9655	FIXED HVRMAINT WRONG MATCH ON - LATENCY_LOCATION FILTER.	Upgrade HVR on the hub machine(s).
HVR-9726	DB2 FOR Z/OS : FIXED INTEGRATE STATE TABLE LIST OF TABLES.	Upgrade HVR on the capture, hub and integrate machine(s).
HVR-9731	DB2 FOR Z/OS : FIXED F_JD2129 WHILE TRYING TO CALL OLDER VERSION OF HVRCAPNW.	Upgrade HVR on the capture machine(s).
HVR-9782	FIXED ROWWISE COMPARE DOES NOT RESPECT KEY ORDER IN CATALOGS, MIGHT PREVENT USE OF INDEX IF COLUMN ORDER AND KEY ORDER ARE DIFFERENT.	Upgrade HVR on the hub machine(s).
HVR-9869	ORACLE LBC FAILS WITH SIGSEGV ON A PARTIAL ROLLBACK WITHIN PLUGGABLE DB.	Upgrade HVR on the capture machine(s).

Problems Fixed in HVR 5.6.5/5

Jira ID	Description	Resolution
HVR-8712	FIXED HVRSTATS F_JT1B12: MORE THAN ONE VALUE FOUND FOR METRIC WHILE AGGREGATING WITH CACHE.	Upgrade HVR on the hub machine(s).
HVR-8942	FIXED F_JT0736 DURING CAPTURE FROM SQL SERVER.	Upgrade HVR on the capture machine(s).
HVR-9282	FIXED F_JZ220B WHILE CAPTURING FROM INGRES 11.	Upgrade HVR on the capture and hub machine(s).
HVR-9378	FIXED DEADLOCK ON EXCESSIVE RESILIENT WARNINGS OVER SSL LINK.	Upgrade HVR on the hub, capture and integrate machine(s).

Jira ID	Description	Resolution
HVR-9456	FIXED /ADDRESSSUBSCRIBE ON SPECIFIC TABLES IN CHANNELS THAT REUSE ADDRESSSUBSCRIBE PATTERNS.	Upgrade HVR on the hub machine(s).
HVR-9599	IMPROVED MEMORY CONSUMPTION WHILE INTERGRATING INTO KAFKA WITH SCHEMA REGISTRY SUPPORT.	Upgrade HVR on the integrate machine(s).
HVR-9600	FIXED F_JG200A WHEN USING AMAZON HIVE ODBC DRIVER.	Upgrade HVR on the integrate machine(s).
HVR-9622	ORACLE LOGMINER: ORA-01291: MISSING LOGFILE.	Upgrade HVR on the capture machine(s).
HVR-9653	FIXED INVALID S3 OR GOOGLE CLOUD STORAGE BUCKET NAMES CAN CAUSE F_JG200A.	Upgrade HVR on the gui and integrate machine(s).
HVR-9670	FIXED F_JT057C DURING A KEY-UPDATE WHEN COMBINING RESTRICT /CAPTURECONDITION WITH COLUMNPROPERTIES /CAPTUREEXPRESSION.	Upgrade HVR on the capture machine(s).
HVR-9697	FIXED INTEGRATE FAILS WHEN ROUTER FILES HAVE MIXED ENDIANNESS OR COMPRESSION LEVEL: F_JG2901 F_JD222F OR F_JD1485.	Upgrade HVR on the hub machine(s).

Problems Fixed in HVR 5.6.5/4

Jira ID	Description	Resolution
HVR-7328	FIXED F_JG20E6 SIGABRT WHEN HANDLING LARGE FLOAT VALUES USING TEXT-BASED BINDING WITH POSTGRESQL.	Upgrade HVR on the capture machine(s).
HVR-7709	FIXED MEMORY CORRUPTION FOR TERADATA, GREENPLUM, REDSHIFT AND DATETIME COLUMNS.	Upgrade HVR on the integrate machine(s).
HVR-7713	FIXED MEMORY CORRUPTION WHILE PROCESSING FILES ON S3 CSE.	Upgrade HVR on the capture and integrate machine(s).
HVR-8342	FIXED SALESFORCE CAPTURE FAILING WITH F_JD0F01: LOCALIZING DATATYPE WAS UNSUCCESSFUL.	Upgrade HVR on the hub machine(s).

Jira ID	Description	Resolution
HVR-8568	FIXED F_JT0451 WHILE CAPTURING FROM DB2 FOR I WITH /LOGJOURNALSYSSEQ.	Upgrade HVR on the capture machine(s).
HVR-8587	FIXED XML EXTERNAL ENTITY (XXE) INJECTION WHILE IMPORTING XML FILES.	Upgrade HVR on the hub machine(s).
HVR-8687	REGRESSION IN DB2I: F_JT110C: SQL STATEMENT {CALL QSYS2.QCMDEXC('STRQSH CMD('/HVRSUPPLEMENTALIMAGE.QSH HVR_DEMO52 OSSRC "DM52_TAB3"'))} FAILED TO ENABLE SUPPLEMENTAL IMAGE SETTINGS FOR CAPTURED TABLES ON DB2 FOR I.	Upgrade HVR on the hub and capture machine(s).
HVR-8724	FIXED F_JT0723: SELECT FROM 'HVR_STATS' RETURNED A VALUE WHICH IS BIGGER THAN EXPECTED.	Upgrade HVR on the hub machine(s).
HVR-8863	ORACLE LBC: RAC: OCI: F_JG200A: INTERNAL ERROR TRIGGERED SEGMENTATION VIOLATION TRAP SIGSEGV.	Upgrade HVR on the capture machine(s).
HVR-8957	FIXED MISSING OLD VALUES WHILE FILEFORMAT /BEFOREUPDATECOLUMNS IS USED.	Upgrade HVR on the hub machine(s).
HVR-9022	FIXED PASSING INCORRECT LIST OF COLUMNS INTO AGENTPLUGIN WHEN COLUMNPROPERTIES /ABSENT IS USED.	Upgrade HVR on the hub machine(s).
HVR-9132	FIXED F_JZ0A4A WHILE CAPTURING FROM HANA 1.	Upgrade HVR on the capture machine(s).
HVR-9208	DB2 FOR Z/OS : ADD SUPPORT FOR CAPTURING BRP (BASIC RECORD FORMAT) LOG RECORDS.	Upgrade HVR on the capture machine(s).
HVR-9234	FIXED FILE INTEGRATE DATA CORRUPTION OR F_JT04EC ON BAD HVRADAPT USAGE.	Upgrade HVR on the integrate machine(s).
HVR-9293	FIXED F_JZ0A5B WHILE CAPTURING LOBS FROM HANA.	Upgrade HVR on the capture machine(s).
HVR-9296	FIXED F_JT14A8 WHEN CAPTURING REMOTELY FROM DBMS THAT IS NOT SUPPORTED NATIVELY ON HUB MACHINE.	Upgrade HVR on the hub machine(s).

Jira ID	Description	Resolution
HVR-9300	FIXED F_JD022A 'SPECIFIED KEY WAS TOO LONG' WHILE RUNNING HVRREFRESH TO CREATE TABLES IN A MYSQL DATABASE.	Upgrade HVR on the integrate machine(s).
HVR-9328	FIXED F_JZ920C WHILE CAPTURING DB2 FOR Z/OS COMPRESSED LOG RECORDS.	Upgrade HVR on the capture machine(s).
HVR-9356	FIXED F_JG2901 WHILE CONVERTING FROM UTF-8 TO GBK.	Upgrade HVR on all machine(s).
HVR-9358	FIXED F_JT0297 DURING COMPARE OR REFRESH OF A TABLE REUSING A COLUMN NAME WITH /ABSENT AND /BASENAME.	Upgrade HVR on the integrate machine(s).
HVR-9362	FIXED F_JZ0C0D WHILE CAPTURING LOBS FROM HANA.	Upgrade HVR on the capture machine(s).
HVR-9386	FIXED SAPXFORM CHANNEL WITHOUT /SAPAUGMENT FAILS IF BOTH POOL AND CLUSTER TABLES ARE PRESENT.	Upgrade HVR on the hub machine(s).
HVR-9429	FIXED F_JZ0C06 WHILE READING HANA 1 BACKUPS.	Upgrade HVR on the capture machine(s).
HVR-9434	FIXED F_JG0726: FPAIRLIST FORMAT ERROR WHILE REFRESH INTO HIVE.	Upgrade HVR on the integrate machine(s).
HVR-9482	FIXED F_JR0F06 DURING CREATION OF TABLES THAT MAP VARCHAR TO NVARCHAR.	Upgrade HVR on the hub machine(s).
HVR-9489	FIXED F_JD21AE UNABLE TO CONNECT TO HIVE VIA INCORRECT BUFFER LENGTH INTRODUCED BY HVR-9434.	Upgrade HVR on the integrate machine(s).
HVR-9507	FIXED HVRMAINT SENDS EMAIL EVEN IF NO ERRORS AND EMAIL_ONLY_WHEN_ERRORS IS SPECIFIED.	Upgrade HVR on the hub machine(s).

Problems Fixed in HVR 5.6.5/3

Jira ID	Description	Resolution
HVR-8571	ORACLE: ENROLL AND APPLY DEFAULT-ON-NULL VALUES FOR COLUMNS ADDED THROUGH DDL.	Upgrade HVR on the capture machine(s).

Jira ID	Description	Resolution
HVR-8791	IMPROVE TEXT SYNTAX ERROR (F_JR0361) TO EXPLAIN UPDATED SYNTAX AND COL-SPEC AND NOT MENTION DEPRECATED SYNTAX.	Upgrade HVR on the gui and hub machine(s).
HVR-8807	FIXED SAME TOOL TIP TEXT IS DESCRIBED FOR BUTTONS 'CLEAR' & 'EDIT' IN THE "TABLE EXPLORER" DIALOG.	Upgrade HVR on the gui machine(s).
HVR-8808	FIXED RENAME 'MAPDOC' TO 'TABLE FILTER MAPPING DOCUMENT'.	Upgrade HVR on the gui and hub machine(s).
HVR-8820	FIXED F_JG2301: ASSIGNMENT FROM LIST ENCOUNTERED UNEXPECTED ELEMENT TYPE.	Upgrade HVR on the hub and gui machine(s).
HVR-8853	FIXED INCORRECT FILTER CONDITION IS CREATED WHEN MAPPING DOCUMENT CONTAINS EMPTY LINES BETWEEN THE TABLES.	Upgrade HVR on the gui machine(s).
HVR-8946	FIXED F_JZ0A5B WHILE CAPTURING LOBS FROM HANA.	Upgrade HVR on the capture machine(s).
HVR-9134	FIXED SAPXFORM CHANNEL FAILING WITH F_JT0527 DUE TO DUPLICATE INSERT.	Upgrade HVR on the hub and integrate machine(s).
HVR-9138	FIXED F_JT04E8 WHILE USING /MESSAGEKEY WITH {HVR_KEY_NAMES} SUBSTITUTION.	Upgrade HVR on the hub and integrate machine(s).
HVR-9140	FIXED SLOW REFRESH AND INTEGRATE PERFORMANCE FOR AZURE DLS GEN1, AZURE DLS GEN2, AZURE BLOB FS, HDFS LOCATIONS.	Upgrade HVR on the integrate machine(s).
HVR-9157	FIXED F_JD029B WHILE BURST REPLICATING TIME(STAMP) DATA TYPES TO HIVE ACID.	Upgrade HVR on the hub and integrate machine(s).
HVR-9166	SYS.ECOL\$ PRIVILEGE REQUIRED IN THE HUB DATABASE.	Upgrade HVR on the capture machine(s).
HVR-9168	FIXED PROCESSING OF SLOWDOWN RESPONSE FROM GOOGLE CLOUD STORAGE.	Upgrade HVR on the integrate machine(s).

Jira ID	Description	Resolution
HVR-9189	FIXED F_JR0539 DURING INTEGRATION TO KAFKA IF 'HVR_TBL_NAME' COLUMN IS USED IN /MESSAGEKEY (REGRESSION OF HVR-9138).	Upgrade HVR on the hub and integrate machine(s).
HVR-9218	FIXED READING FROM SQL SERVER TRANSACTION LOG BACKUP FILES WITH SFMB BLOCK SIZE OF 64K OR BIGGER.	Upgrade HVR on the capture machine(s).
HVR-9240	FIXED IRREGULAR OUTPUT IN HVRSTATISTICS.	Upgrade HVR on the integrate machine(s).

Problems Fixed in HVR 5.6.5/2

Jira ID	Description	Resolution
HVR-6950	FIXED F_JD2149 DATE CONTAINING NANoseconds ENCOUNTERED WHILE REPLICATING TO HIVE.	Upgrade HVR on the integrate machine(s).
HVR-7297	FIXED ROW-WISE REFRESH IGNORING DIFFERENCES IN IDENTITY COLUMNS WHICH ARE NOT PART OF THE REPLICATION KEY.	Upgrade HVR on all machine(s).
HVR-8025	FIXED THE 'COLLISION CHANGES DISCARDED' METRIC USAGE FOR EMPTY UPDATES.	Upgrade HVR on the hub machine(s).
HVR-8223	FIXED REFRESH/INTEGRATE OF SURROGATE PAIRS FROM CESU8 SOURCE TO UTF8 FILE TARGET (CSV): F_JG2901: STRING '..' CONTAINING INVALID SEQUENCE ENCOUNTERED WHILE ENCODING FROM UTF-8 TO UTF-8.	Upgrade HVR on the hub machine(s).
HVR-8446	ADD CREATION OF INGRES ROLE HVR_REFRESH TO HVRROLECREATE.SQL.	Upgrade HVR on the integrate machine(s).
HVR-8447	FIXED F_JD0C13 DURING CAPTURING FROM SQL SERVER IN /ARCHIVELOGONLY MODE.	Upgrade HVR on the capture machine(s).
HVR-8533	FIXED ENROLL OF ORACLE TDE WALLET FAILING IN PLUGGABLE DATABASES.	Upgrade HVR on the capture and hub machine(s).
HVR-8544	ORACLE LBC: F_JZ1976. PARSER ENCOUNTERS EMPTY RECORD PIECE WITH TX_ID.	Upgrade HVR on the capture machine(s).

Jira ID	Description	Resolution
HVR-8546	FIXED F_JZ6217 WHILE CAPTURING FROM POSTGRESQL USING LOG METHOD DIRECT.	Upgrade HVR on the capture machine(s).
HVR-8556	REESTABLISH CONNECTION TO KAFKA BROKER WHILE 'ALL BROKER CONNECTIONS ARE DOWN'.	Upgrade HVR on the integrate machine(s).
HVR-8625	FIXED COLUMN MIN_HVR_CAP_TSTAMP NOT FOUND WHILE USING BURST INTEGRATE INTO TERADATA FROM HANA.	Upgrade HVR on the hub and integrate machine(s).
HVR-8628	FIXED WARNING W_JTOA03 UNNECESSARILY FLOODING THE LOG FILE.	Upgrade HVR on the capture machine(s).
HVR-8693	FIXED F_JD223A: UNEXPECTED DATATYPE '13' [BOOLEAN] ENCOUNTERED FOR COLUMN WHILE CREATING HIVE DA WITH HIVE ACID.	Upgrade HVR on the integrate machine(s).
HVR-8743	FIXED DATE DATA TYPE IS SILENTLY CONVERTED TO 0 IF FILEFORMAT /PARQUET INTRODUCED BY HVR-7705.	Upgrade HVR on the integrate machine(s).
HVR-8792	GUI TABLE EXPLORE GIVES F_JG2143 WHEN MAPPING DOC SPECIFIES TABLE NAME MAPPING.	Upgrade HVR on the gui machine(s).
HVR-8826	FIXED INCORRECT SETTING OF MAXIMUM KAFKA MESSAGE SIZE.	Upgrade HVR on the integrate machine(s).
HVR-8836	FIXED F_JD21B5 WHILE WORKING WITH GREENPLUM VERSION 4.3.99.	Upgrade HVR on all machine(s).
HVR-8854	TABLE MAPPING '# COMMENTS' [HASH COMMENTS] WITH SPACES ARE TREATED AS A SYNTAX ERROR.	Upgrade HVR on the hub and gui machine(s).
HVR-8858	FIXED SQL SERVER DDL CAPTURE REGRESSION INTRODUCED IN HVR-3817.	Upgrade HVR on the capture machine(s).
HVR-8874	FIXED HVRADAPT WITH OPTION -D TABLENAME THROWS F_JR034D.	Upgrade HVR on the hub machine(s).
HVR-8913	FIXED NON-VERBOSE ROW-WISE REFRESH IGNORING DIFFERENCES IN IDENTITY COLUMNS WHICH ARE NOT PART OF THE REPLICATION KEY.	Upgrade HVR on all machine(s).

Jira ID	Description	Resolution
HVR-8914	DISABLED SUPPORT OF HIVE EXTERNAL TABLES FOR MS AZURE DLS GEN2.	Upgrade HVR on the gui machine(s).
HVR-8915	FIXED UNEXPECTED STRING TRUNCATIONS WHILE INTEGRATING VARCHARS WITH CHARACTER LENGTH GREATER THAN THE DEFINED MAXIMUM CHARACTER LENGTH IN THE TARGET DATABASE.	Upgrade HVR on the hub and integrate machine(s).
HVR-8979	TABLE MAPPING CHANGE THE MANDATORY LINE BREAKS INTO OPTIONAL LINE BREAKS.	Upgrade HVR on the hub and gui machine(s).

Problems Fixed in HVR 5.6.5/1

Jira ID	Description	Resolution
HVR-5622	FIXED F_JD21B5 WHILE BURST INTEGRATING INTO ORACLE WITH CASESENSITIVENAMES.	Upgrade HVR on the hub and integrate machine(s).
HVR-7605	FIXED F_JZ0A1B DURING CAPTURE FROM HANA WHEN READING DATA FROM LOG BACKUP FILE.	Upgrade HVR on the capture machine(s).
HVR-7631	FIXED PERMISSION ERRORS WERE IGNORED WHEN CLEANING OLD STAGING FILES (ON S3, AZURE, HDFS) CAUSING FURTHER HARD TO DIAGNOSE ERRORS.	Upgrade HVR on the integrate machine(s).
HVR-7779	FIXED HVR MAINTENANCE TASK NOT REPORTING ERRORS/WARNINGS ON DB2I HUB.	Upgrade HVR on the gui and hub machine(s).
HVR-7831	FIXED F_JD0006 WHILE INTEGRATING TABLES CONTAINING NON-ASCII CHARACTERS INTO SNOWFLAKE USING A HVR INSTALLATION ON WINDOWS.	Upgrade HVR on the hub and integrate machine(s).
HVR-8257	FIXED ADAPTMATCH SHOULD NOT RENAME PACKED/UNPACKED SAP TABLES BY ACTION.	Upgrade HVR on the gui machine(s).
HVR-8296	IMPROVED MEMORY CONSUMPTION WITH FILEFORMAT /AVRO /AVROCOMPESSION=DEFLATE.	Upgrade HVR on the integrate machine(s).

Jira ID	Description	Resolution
HVR-8316	FIXED 'F_JD072D: USING SQL LIMIT ON DRIVER CLASS ... IS NOT SUPPORTED.'	Upgrade HVR on the hub machine(s).
HVR-8338	FIXED F_JG201F WITH ACCESS IS DENIED FOR WINDOWS WHEN CLEANING UP CHILD PROCESSES.	Upgrade HVR on all machine(s).
HVR-8450	FIXED ONLINE COMPARE (DIFF_CAP) WITH CUSTOM /COMPARECONDITION OR EXPLICIT /SLICECONDITION FAILS WITH F_JG0732.	Upgrade HVR on the hub machine(s).
HVR-8451	FIXED INCORRECT PROCESSING OF /SOFTDELETE FOR KAFKA LOCATION.	Upgrade HVR on the hub machine(s).
HVR-8456	FIXED NEW WAY OF SLICING (VIA NO CONFIG FOR MODULO/BOUNDARY OR VIA /SLICECONDITION FOR COUNT/SERIES) NOT SUPPORTED DURING BULK REFRESH.	Upgrade HVR on the hub machine(s).
HVR-8478	CONTEXT VARIABLE SUBSTITUTIONS IN RESTRICT /SLICECONDITION ARE NOT DISPLAYED IN GUI REFRESH/COMPARE CONTEXT VARIABLES LIST.	Upgrade HVR on the gui machine(s).
HVR-8512	FIXED ONLINE COMPARE (DIFF_CAP) DOES NOT WORK WITH INTEGRATE /BURST.	Upgrade HVR on the hub machine(s).
HVR-8517	FIXED DIRECT FILE COMPARE OR ONLINE COMPARE (DIFF_CAP) WITH MODULO SLICING ON NUMBER/DECIMAL COLUMNS F_JD2201: OUT OF RANGE VALUE.	Upgrade HVR on the capture and integrate machine(s).
HVR-8523	FIXED F_JZ0A4A DURING CAPTURE FROM HANA.	Upgrade HVR on the capture machine(s).
HVR-8524	FIXED REFRESH/COMPARE WITH MODULO SLICING ON COLUMNS WITH NON-INTEGGER VALUES MIGHT SKIP SOME ROWS.	Upgrade HVR on the hub and gui machine(s).
HVR-8527	FIXED DB2I HUB IDENTIFIER CHANGED WITH DIFFERENT DB CONNECTION.	Upgrade HVR on the gui and hub machine(s).
HVR-8574	FIXED TABLE EXPLORE SHOWS "WRONG TYPE" FOR TABLES THAT ARE NOT IN THE CURRENT SCHEMA (REGRESSION FROM HVR-4196).	Upgrade HVR on the gui machine(s).

Jira ID	Description	Resolution
HVR-8594	FIXED LAST BOUNDARY SLICE WHEN USING OLD STYLE SLICING WITH /COMPARECONDITION OR /REFRESHCONDITION WITH EXTRA RESTRICTIONS.	Upgrade HVR on the hub and gui machine(s).
HVR-8608	FIXED SUPPORT FOR DB2 FOR I USER DEFINED DATA TYPES BASED ON CHAR DATA TYPE.	Upgrade HVR on the capture machine(s).
HVR-8647	FIXED HVRSTATS JOB NOT GATHERING METRICS DUE TO HUB NAME MISMATCH.	Upgrade HVR on the hub machine(s).
HVR-8651	FIXED F_JZ920D WHILE CAPTURING COMPRESSED DB2 FOR Z/OS RECORDS.	Upgrade HVR on the capture machine(s).
HVR-8654	F_JT04A5: COPROCESS 'X' HAS EXITED ABRUPTLY BECAUSE EXCEPTION STACK WAS CORRUPTED.	Upgrade HVR on the capture machine(s).
HVR-8673	FIXED TERADATA - F_JD22A1: DBMS ERROR [COLUMN 'METRIC_NAME' IS AMBIGUOUS].	Upgrade HVR on the hub machine(s).
HVR-8711	EXCLUDE COLUMN WITH /EXTRA /TIMEKEY OPTIONS FROM CALCULATION OF DISTRIBUTION KEY.	Upgrade HVR on the hub machine(s).
HVR-8755	FIXED DUPLICATION OF STARTING QUOTE IN POSTGRESQL CHARACTER DATA WHILE CAPTURING USING LOGREADMETHOD=SQL.	Upgrade HVR on the capture machine(s).

Problems Fixed in HVR 5.6.5/0

Jira ID	Description	Resolution
HVR-5220	FIXED F_JD20F2 [CONNECTION IS BUSY WITH RESULTS FOR ANOTHER COMMAND] DURING CAPTURE FROM SQL SERVER WITH /LOGREADMETHOD=SQL.	Upgrade HVR on the capture machine(s).
HVR-7333	TABLEPROPERTIES /CHARACTERMAPPING MIGHT AFFECT ROWWISE COMPARE: W_JT002D: AN UNEXPECTED ORDERING OF ROWS WAS DETECTED.	Upgrade HVR on the hub machine(s).
HVR-7409	FIXED INCORRECT DATA TRUNCATION DUE TO CORRUPT CHARACTERS.	Upgrade HVR on the capture, hub and integrate machine(s).

Jira ID	Description	Resolution
HVR-7482	FIXED INCORRECT HANDLING OF DATES WITH YEAR BEFORE CHRIST WHEN REPLICATING FROM CSV TO ORACLE DATE OR TIMESTAMP.	Upgrade HVR on all machine(s).
HVR-7483	FIXED INCORRECT BEHAVIOR OF CHARACTER MAPPING IN COMBINATION WITH CORRUPT CHARACTERS.	Upgrade HVR on the capture, hub and integrate machine(s).
HVR-7959	FIXED HVRCRYPTDB'S INCORRECT BEHAVIOUR WITH THE AT-SIGN IN PASSWORDS.	Upgrade HVR on the hub machine(s).
HVR-8186	FIXED F_JZ0A04 DURING CAPTURE FROM HANA WHEN READING DATA FROM LOG BACKUP FILE.	Upgrade HVR on the capture machine(s).
HVR-8201	FIXED BEHAVIOR WHEN SOME COLUMNS MAY ERRONEOUSLY BE MARKED MISSING DURING CAPTURE FROM HANA.	Upgrade HVR on the capture machine(s).
HVR-8296	IMPROVED MEMORY CONSUMPTION WITH FILEFORMAT /AVRO /AVROCOMPESSION=DEFLATE:	Upgrade HVR on the integrate machine(s).
HVR-8385	FIXED F_JJ10BF FOR 'QUOTA_SPEED' WHEN CHANGING 'Q' ARG.	Upgrade HVR on the hub machine(s).

Problems Fixed in HVR 5.6.0/2

Jira ID	Description	Resolution
HVR-8344	ORACLE RAC: F_JT0451: PIPE TXGROUP ENCOUNTERED A COMMIT WITH SEQUENCE <= EARLIER SEQUENCE.	Upgrade HVR on the capture machine(s).

Problems Fixed in HVR 5.6.0/1

Jira ID	Description	Resolution
HVR-8190	FIXED ADAPTDDL ACTION PROPAGATING DDL CHANGES TO LOCATIONS WHICH DO NOT INTEGRATE THE AFFECTED TABLE.	Upgrade HVR on the hub machine(s).
HVR-8057	ADDED ERRONEOUSLY MISSING WINDOWS-949 SUPPORT BY REBUILDING ICU.	Upgrade HVR on all machine(s).