

Teradata[®] Vantage 2.3.0.0 Release Summary

Deployment Platforms:

Teradata Vantage on AWS

Teradata Vantage on Azure

Teradata Vantage on Google Cloud

Teradata Vantage on IntelliFlex™

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Teradata Vantage™ is our flagship analytic platform offering, which evolved from our industry-leading Teradata® Database. Until references in content are updated to reflect this change, the term Teradata Database is synonymous with Teradata Vantage.

Advanced SQL Engine (was NewSQL Engine) is a core capability of Teradata Vantage, based on our best-in-class Teradata Database. Advanced SQL refers to the ability to run advanced analytic functions beyond that of standard SQL.

The following lists the fixed and known issues in this release. If you experience any of the following issues, open an incident with Teradata Customer Support and include the Reference ID in your description.

Compatibility Matrix

For component compatibility information:

1. Go to support.teradata.com.
2. Log in.
3. Search for KB0027406.

Key Features

Vantage on AWS/Azure/Google Cloud/On-Premises 2.3.0.0 customer value is aligned to three key themes:

Strengthen the Core Engine

1. Increased performance to support your most demanding workloads
2. Enhanced security to better control access to your data
3. Reduced downtime to provide higher availability

Modernize Data Management

1. NOS Performance improvements to accelerate access to data in object storage
2. UX improvements to speed time to value for discovery and data exploration

Operationalize Analytics At Scale

3. New Advanced Analytics functions to deliver business value at scale

The Vantage on Google Cloud 2.3.0.0 release includes several new features that enable customers to choose the size and location of Vantage compute instances most aligned to their workload requirements as well as support for additional third party products.

Key Features:

1. New generally available regions Las Vegas (Nevada, United States), Jakarta (Indonesia), and Warsaw (Poland)
2. New instance sizes for Advanced SQL Engine: XSmall (8 vCPU) and Medium 2 (48 vCPU)
3. Increased default Access Module Processor (AMP) density for Medium 1 instances for greater cost efficiency
4. Support for third party software for monitoring and governance: IBM Guardium, and Imperva
5. Support for third party software for column-level encryption: Thales CipherTrust Database Protection (CDP)

Fixed Issues

Server Management Software

Reference ID	Description
SM-31370	CVE-2021-28165 Jetty
SM-31356	CVE-2021-21344, CVE-2021-21346, CVE-2021-21347, CVE-2021-21348, CVE-2021-21350 XStream

Advanced SQL Engine

Reference ID	Description
SQLE-1619	<p>-----TD17.10.x CADENCE PDE/TVSA DRs-----</p> <p>*****</p> <p>***** 17.10.03.01 created 06/28/2021 *****</p> <p>*****</p> <p>TVSA: DR 195903 Priority 2 Import new Security fixes</p> <p>PDE: DR 195903 Priority 2 Import new Security fixes DR 196053 Priority 2 tskinfo: version 7 sleep_net_wait fields not updated for new reasons from DR194315</p> <p>-----TD17.10.x CADENCE TDBMS DRs-----</p> <p>*****</p> <p>***** 17.10.03.01 created 06/28/2021 *****</p> <p>*****</p> <p>DR 194631 Priority 2 In an out of space situation, system can hang without returning a disk full error to the AMP. Also, multiple 14500 events with 'ERR_NO_SPACE' exception backtrace could be logged in the log messages.</p> <p>DR 195151 Priority 2 Create foreign table query if user provided location till directory which has both .csv and .parquet files, latest file is csv file then csv table is created. while executing the foreign table the parquet files are not skipped.</p> <p>DR 195330 Priority 2 Executing Monitor Physical Summary for a given logging period when multiple drives in a volume group (LUN) have gone offline may result in a 3277 Error and an automatic database restart.</p> <p>DR 195812 Priority 2 10811 restart after aborting DSA restore during index or fallback build phase</p> <p>DR 195831 Priority 2 We will get 3899 error when we do DML operation on a table with varchar compress columns with the total column sizes matches the</p> <p>DR 195863 Priority 2 While running UNPIVOT table operator with more than one column in IN list, if combined sum</p>

of length of all columns exceeds 128 characters then error 6704 (The ISF subsystem was requested to export a string to the client which is too large) is occurred.

DR 195894 Priority 2

DBQLXMLTbl reports missing stats on a column which already has stats

DR 195903 Priority 2

Import new Security fixes

DR 195915 Priority 2

READ_NOS/WRITE_NOS table operators causing Internal Error when ran on foreign server

DR 195954 Priority 2

Customer query can fail pardie when below parameter matches:

- 1)Query uses same view multiple time in outer join.
- 2)Complex predicate's present like below simplified query when Ored term with subquery is present.

```
SELECT 1 FROM
v1 a10
LEFT OUTER JOIN v1 a11
ON a11.B1 = 29 OR
a11.A1 IN (SELECT 10 (NAMED b1 ) FROM DR195954.t3 ) <<<<<<<<<<<
LEFT OUTER JOIN v1 a12
ON a12.A1 NOT IN (SELECT 11 (NAMED b2 ) FROM DR195954.t3 );
```

DR 195969 Priority 2

Complex Outer Join queries conditions not pushed to single table retrievals

DR 195995 Priority 2

Select from Foreign table Query with following traits can fail with pardie()

- 1)Export clause contains multiple nested DT's.
- 2)Or Multiple nested export clause combine with DT's.

DR 196008 Priority 2

CFT failure 3610 when bucket name is invalid(not exist) and Authorization is created with PEM key as PASSWORD

DR 196022 Priority 2

getschema() with READ_NOS function mapping returns wrong results.

DR 196024 Priority 2

Leftover segment(s) remaining when running nested SP(s) having dynamic result set with allocate cursor.

DR 196027 Priority 1

The incorrect result happens in casting from NUMBER datatype to Large Decimal when data magnitude is exact half, and dbscontrol general flag RoundHalfwayMagUp sets to true.

DR 196029 Priority 2

In some queries, one row is missing in parquet data

DR 196035 Priority 1

Wrong result could happen when:

1. the query has zero input table operators including QG operator. AND
2. output of the concerned operator directly participates in a in memory hash join. AND
3. the output is used as AROA hash table for the in memory hash join. Example AROR hash table is like "Hash table is built from Spool 4 (Last Use) and is duplicated to all AMPs".

DR 196036 Priority 2

DSA IR restore job may cause dbs restart when we met below conditions:

- DSA IR restore into MPP system(i.e more than 1 node box).
- Source and target system should have different AMP configuration.
- Source backup saveset should be DELTA backup.

DR 196040 Priority 2

Tbl Op queries with ReadNos CSV1 and Json are erroring out due to DR195299 fix

DR 196046 Priority 2

6697 restart while reading msg via rsgcontsk.

DR 196047 Priority 2

See DR195903

DR 196050 Priority 2

A AMP step failure is seen when the direct merge feature is picked for Source NOS Parquet tables and target NOPI and CPNOPI tables.

DR 196052 Priority 2

FOr Payload JSON, the character set is LATIN during CFT. We are getting an error source is too large.

DR 196059 Priority 2

BuildFTColumnList doesn't get a proper character set

DR 196061 Priority 2

We have observed that for few NVPs, there is a difference of behavior between READ_NOS (NOSREAD_RECORD) and CFT. In this DR, we are fixing them. More details can be found in the related records 1. email_conv.msg 2. Observations_new.xlsx

DR 196065 Priority 2

3610 Can be reported for INS/SEL query when in below scenario.

- 1)Target is PPI table.
- 2)There is NCSSQ in where clause.
- 3)Group by clause is present.

DR 196072 Priority 2

3610 may happen for query with conditions on partitioning columns.

DR 196074 Priority 2

Database crash and reset in s2slobbackup

DR 196076 Priority 2

Query may fail with 3610 if

1. Stats are there on same set of columns in table and JI
2. Diagnostic OCSDEBUG is enabled

DR 196079 Priority 1

Wrong results seen when BYTE NOT NULL column is explicitly specified in CSV2 DDL

DR 196082 Priority 1

DBC Only restore job from 15.10 backup will produce a WARNING 1160

DR 196094 Priority 2

Database reset observed during error table insert

DR 196095 Priority 2

This fix generates clear and different plan for count(*) and regular queries enabling users to understand the plans better.

DR 196096 Priority 2

A select query may cause 3610 when the below condition met-

1. The 1MB table has a NUMBER datatype column with precision > 15.
2. NUMBER datatype column used into grouping field. (Query has Distinct, group by, order by).

DR 196100 Priority 2

Locking table for exclusive on alter table map can cause snapshot when map changing from small number of amps to larger number of amps.

DR 196113 Priority 2

May get 7487 error while running sample SQL on CP table.

DR 196117 Priority 2

Whenever we have a JSON file with a columnName length > 130, we will see a crash inside SetCFGByAutoSchemaJson() because we are trying to copy decodedColName of the length > 130 to a fixed length of 130 in Cfg->csvSchemaInfo.colNames[i]

DR 196119 Priority 2

Issues with SCOPE DICTIONARY or SCOPE ALL clause in checktable

DR 196129 Priority 2

Compilation error 3798 occurs in SP genDDLForParquetData.spl while upgrading to 17.05 from 16.20.

DR 196135 Priority 2

Online backup job with nosync option fails with 7423 when rowhash write locks could not be granted on DBC.ArchiveLoggingObjsTbl.

DR 196172 Priority 2

Create function mapping and NOS query with error tables are run in the same database but different sessions.

In one session NOS query is skipping many records and trying to insert into error tables and in another session running "Create function mapping" will result in hang.

-----TD17.10.x TDGSS/teragssAdmin DRs-----

***** 17.10.03.01 created 06/28/2021 *****

DR 195903 Priority 2
 Import new Security fixes
DR 196062 Priority 3
 No customer visible symptoms - build issue in pre-GCA software

-----TD17.10.x GATEWAY DRs-----

***** 17.10.03.01 created 06/28/2021 *****

DR 195903 Priority 2
 Import new Security fixes