Teradata® Vantage 2.4.1.0 Release Summary

VantageCloud Enterprise

January 2023

Product Safety

Safety type	Description
NOTICE	Indicates a situation which, if not avoided, could result in damage to property, such as to equipment or data, but not related to personal injury.
CAUTION	Indicates a hazardous situation which, if not avoided, could result in minor or moderate personal injury.
WARNING	Indicates a hazardous situation which, if not avoided, could result in death or serious personal injury.

Warranty Disclaimer

Feedback

To maintain the quality of our products and services, email your comments on the accuracy, clarity, organization, and value of this document to: docs@teradata.com.

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

Teradata Vantage 2.4.1.0. release supports these capabilities including:

1. Improving performance, scale and availability of Analytics Database on VantageCloud Enterprise on Azure by launching support for next-gen Esv5 VM series.
2. Provides flexibility to specify how much of the data set to read as part of the schema discovery. This feature is enabled on demand.
3. NOS partition by clause with virtual columns. Virtual columns on foreign tables is a PARTITION BY extension to the functionality that already exists for regular relational tables. For foreign tables, PARTITION BY specifies how the object store data is organized within a bucket making each folder a virtual column.
4. Support for Smaller Storage option for VantageCloud Enterprise on Google Cloud – Smaller storage options – starting with minimum of 1 TB RAW per node.

Fixed Issues

Platform Services Intelligent Monitoring

Reference ID	Description
PSIM-32875	**Description**: The upgrade addresses the following high (CVSS >=7.0) security risks: * CVE-2016-1000027 Sprint Framework **Workaround**: N/A **Deployments**: All

Teradata Analytics Database

Reference ID	Description

SQLE-2801	--------------------------------TD17.20.x PDE / TVSA DRs---------------------------
	***
	**************************** 17.20.03.04 created 08/22/2022 ********************
	***
	
	TVSA:
	DR 197538 Priority 2
	   During sysinit an allocator restart occurs with a 16016 event.
	
	PDE:
	DR 197458 Priority 2
	   Work and WorkFCount tdnstats
	
	DR 197555 Priority 2
	   PDE SEG: Deplete segment cache in partition faster incase of ERRSEGNOVIRTUAL (10309)

```
----------------------------------TD17.20.x TDBMS DRs-----------------------------
********************************************************************************
**************************** 17.20.03.04 created 08/22/2022 ********************
********************************************************************************
```

DR 197137 Priority 2
   With introduction of NOS-406 we are now supporting parquet file metadata size up to 128MB
   and which is not being taken under consideration of NOS memory estimation because of which
   we are underestimating the NOS usage by a huge margin because of which we are seeing issues
   like page failures and UDT threshold limit.

DR 197379 Priority 2
   The PDCRMigration16xx_17xx procedure copies wrong values to ResUsage history tables for
   back ported spare and new UDF columns.

DR 197393 Priority 2
   For UAF, some AMPs have too much data and cpu usage.
DR 197431 Priority 2
   checktable is not detecting 'SysUdtLibDBId' mismatch in table header with compresscheck option.
DR 197455 Priority 2
   in function: ProcessRowsInMsg

   -> variable 'BufferPtr' containing segment address is getting freed twice using
      segdiscard in case of ERRASPINVLDDREQ8 error from 'hutrfm1' function call.

   -> One time, this segment address is discarded inside 'hutrfm1' function and then
      same segment address is again getting freed when for loop of table counters
      break as this 'BufferPtr' is not updated to NILPTR after previous segdiscard.

   -> This multiple segdiscard is causing build crash (10302 event) i.e. Invalid pointer.

DR 197505 Priority 2
    2935 restart loop @ rcvbacmt CommonCase rcvph2 due to FAT table header
    corruption.

    2935 error can be seen when FAT table header having multiple rows spawning across
    Multiple DB is interrupted due to restart.
DR 197512 Priority 2
   Since these are coverity issues involving uninitialized variables, the
   symptom cannot be clearly described.
DR 197513 Priority 2
   Error messages were not self explanatory and some of the spellings were wrong. Whenever
   there was error encountered , users need to go through code even its for minor issue so now

we have improved error messages to have specific description.

DR 197514 Priority 2
  ansi mode query with nested cast and trim fails with error 5355

DR 197516 Priority 2
  Noticed multiple SEGVs and restarts resulted in "DBS is not running" state.

DR 197547 Priority 2
  A T2H QG query or table operator queries may cause SegV or unexpected failure when
  having more than 32 STRING/BINARY datatype columns into the result with 16.20+ LOB
  Support on the target connector. It is because internally, these STRING/BINARY datatypes
  get treated as LOBs datatype.

DR 197552 Priority 2
  Join Index can be logged as Table in dbqlobjtbl during execution of some DML statement.

DR 197553 Priority 2
  For online bkp job we may get DBS restart with 5100 error if we have down AMP.

DR 197556 Priority 1
  Data conversion failure occurred when varchar value is imputed into target column
  without casting

DR 197561 Priority 2
  TOPN query with DENSE_RANK and group by would fail with 3610.

DR 197564 Priority 2
  there is left-over spool when run AF without into clause and no rows in input file

DR 197567 Priority 2
  SQLMR Volatile Output Tables are currently allowed to be fallback but undergo
  DML operations. As per the requirements of this DR, it will be no longer so.

DR 197570 Priority 3
  In cases where a column specified for a parameter is missing from the table where
  it is expected, but present in another input stream, an ambiguous error message
  can result.

DR 197573 Priority 2
  Currently, when there is an unsupported datatype in the partition by clause, we throw
  an error. This is now modified to create the foreign table without partition by clause
  when there is an unsupported datatype in the partition by clause (implicit case only).

DR 197574 Priority 2
  The if-condition was checking for a ParFieldRef node. But for a phase-1 query, a
  payload..a column will have a ParUdf node. This was not handled and was being bypassed.

DR 197575 Priority 2
  3610 may happen for query with cross join and subqueries.

DR 197576 Priority 2
  Error Message is in-complete for SQL which fails with 6902.

DR 197580 Priority 2
  The symptom is described in Comment #2 (Problem Description). Unique backtraces were
  observed on the builds that has SCANPCT feature. Some when the feature is ON and some with

the feature is OFF. These backtraces did not cause any mismatches and can be found in Comments #1 and #3. Also, the reproducible test cases can be found in Comment #4 and the ones in the Unite Test Note comment that corresponds to the backtraces in Comment #1

DR 197583 Priority 2

The API returned only an estimate of rows when dealing with larger tables, which was discovered when it was incorporated into a new AF that processes larger tables.

DR 197592 Priority 2

2803 error is seen when DIPPATCH is ran multiple times.

Executing DIPPATCH at Wed Jul 27 12:48:06 2022
Please wait...

Failures in DIPPATCH:
        *** Failure 2803 Secondary index uniqueness violation in DBC.ConstantDefs.

DIPPATCH is complete at Wed Jul 27 12:48:44 2022
Please review the results in /var/opt/teradata/tdtemp/dip45.txt on node 001-01

Would you like to execute another DIP script (Y/N)?

DR 197596 Priority 2

Customer may encounter AMP crash when feeding a large row (>64k) to UAF

DR 197601 Priority 2

Change the default behavior of SCANPCTOption to OFF

DR 197602 Priority 2

While executing the HSC-CLeanup(session cleanup) for twice on same session which containes the temporary tables may leads to segv with restart.

DR 197605 Priority 2

When executing the qry "ALTER TYPE ArrayVec COMPILE" an 3610 error is triggered.

DR 197606 Priority 2

When the fit table rows are duplicated using the multiset table, the number of rows in the fit table which is duplicated does not match with the number of bins. As we are allocating memory using number of bins, memory is getting overwritten to the extra size, causing the 7487 amp step failure.

DR 197609 Priority 2

SQLE As-A-Service Users have their logons enabled with default passwords

DR 197610 Priority 2

DSC job_status shows that no objects are copied for DATA phase when we have sparse map tables.

DR 197619 Priority 2

The symptom is described in Comment #2, and it was because of the wrong setting of
ObjectFilterJoin option to the DBScontrol NOS 191 SCANPCTOption as shown in the following
line of code in src/par/opt/optdump.c :

```
DBSCtlRow.ValueLen = sprintf(DBSCtlRow.Value, "%d",
                ctrlgdop->ObjectFilteringJoin);
```

So, the SystemFe.Opt_DBSCtl_Table was incorrectly reflecting the value of DBScontrol NOS 111
ObjectFilterJoin instead of DBScontrol NOS 191 SCANPCTOption
DR 197620 Priority 2
   In a corner usecase where a partition (document) has all invalid input rows (no
   valid tokens), function fails with segmentation fault.

DR 197625 Priority 2
   TD_PLOT geometry plot without color bar will have incorrect color range
DR 197639 Priority 2
   UAF runs into 7487 amp failure on Antares build
DR 197644 Priority 2
   Customer sees incorrect plot when ROW_AXIS is timestamp and multiple series in the
   data.

--------------------------TD17.20.x TDGSS/teragssAdmin DRs-----------------------
****
*************************** 17.20.03.04 created 08/22/2022 *********************
****

DR 197608 Priority 2
   There will be no customer visible symptom.

Known Issues

Teradata Analytics Database

Reference ID	Description
SQLE-3035	**Description**: Description of the existing or fixed problem or system behavioral changes. Blackduck issues must include the CVEs. **Workaround**: Complete steps of how to work around the issue. If possible, create a CUSTOMER VIEWABLE KCS and provide the link to the KCS. (Do not include links to internal wiki pages). **Deployments**: Affected deployments (Azure, AWS, IFX, VMware, GC) or "All".

Analytics Database Analytic Functions

Reference ID	Description
TDAF-10427	**Description**: While executing the UAF queries if max spool size is exceeded, the system crashes. **Workaround**: Increase the max spool size according to your requirements. It may require to try various sizes. **Deployments**: All
TDAF-10395	**Description**: 3706 Error is thrown after many iterations of stress testing. Error occurs since the paramstyle is not being set correctly for certain cases. **Workaround**: None. As this is a very intermittent problem under heavy stress the customer should retry the query. **Deployments**: All