Teradata® Vantage 2.2 Release Summary

Deployment Platform: Teradata Vantage on Google Cloud

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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.

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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

The global Vantage on Google Cloud 2.2 release includes highly anticipated features such as Native Object Store (NOS) with added write support for Google Cloud Storage (GCS). NOS enables customers to derive immediate value from lower cost object stores across Google Cloud, Microsoft Azure, and AWS. Vantage on Google Cloud is delivered as-a-service so that customers can focus on answers instead of managing the underlying infrastructure.

Key Features:

- Advanced SQL Engine 17.05 with read-write NOS support for Google Cloud Storage (GCS) using the S3-compatible GCS API (CSV, JSON, and Parquet data formats)
- Customer-managed Encryption Keys (CMEK) for Vantage data store offer customers greater control over sensitive data, enabling them to meet regulatory and strict information security (infosec) requirements through integration with Google Cloud Key Management Service (Cloud KMS) (Limited Availability)
- Support for SAS Embedded Process for Teradata (SAS EP) for in-database SAS processing; licensed separately and enabled though Bring Your Own License (BYOL)
- Self-service partial and incremental conventional backups
- QueryGrid 2.14 now supports Google Cloud Dataproc 1.4 through QueryGrid Hive and Spark Connectors for seamless processing and analysis of data in Hadoop and Spark data lakes
- Payment Card Industry Data Security Standard (PCI DSS), Service Organization Control (SOC) 1 and 2, and ISO-27001 compliance attestations help customers meet privacy standard obligations such as General Data Protection Regulation (GDPR), California Consumer Privacy Act (CCPA), and Personal Information Protection and Electronic Documents Act (PIPEDA)

Fixed Issues

Operating Systems

Reference ID	Description
OSEDEV-10796	Dynaswap can enter a CPU bound loop which locks out handling of softirq kernal threads. This can result in Lost IO panics and ethernet driver timeouts. **Deployments**: All

Server Management Software

Reference ID	Description
SM-30807	CVE-2020-26217 Xstream
SM-30701	CVE-2017-7525 & CVE-2017-15095 Jackson-databind

Known Issues

Native Object Store

Reference ID	Description
NOS-5473	**Description**: All AMP WRITE NOS query on Row table is treated as group-AMP query and TDWMAllAmpFlag is updated as NULL. This will cause TASM to incorrectly classify these queries as non ALL AMP. **Workaround**: There are two ways to workaround the issue by either using system throttle or workload. Please see Knowledge Article KB0036037. **Platform**: 17.05 Write NOS

Advanced SQL Engine Analytic Functions

Reference ID	Description
TDAF-4433	**Description**: Text Field Analyzer parameter 'extendedunicodeanalysis' is ignored and the Unicode Analysis Matrix is not created. **Workaround**: None. **Platform**: All
TDAF-4423	**Description**: If 'scoreandevaluate' option is used when scoring a single node decision tree you may get a null pointer exception. **Workaround**: When scoring a decision tree, just use score or evaluate instead of score and evaluate, or build a more complex model. **Platform**: All
TDAF-4422	**Description**: Decision Tree fails with null pointer exception when dependent variable has null values. **Workaround**: Remove null values, possibly with Variable Transformation, creating a new input table. **Platform**: All

Teradata Data Migration

Reference ID	Description
TDM-6081	**Description**: Data Migration speed for large migrations could be paced by certain network limitations on Google Cloud Platform itself. **Workaround**: To minimize system downtimes during migration, instead of migrating large systems in one go, you may look into using alternate approaches like selective migrations in multiple sessions. Our Onboarding Specialists can provide customized solutions for you that will best suit your unique situation. Please consult your Onboarding Specialist to discuss your specific scenario. **Deployments**: Google Cloud

Vantage on Google Cloud

Reference ID	Description
GCP-3686	**Description**: In some edge-case scenarios, as with any service, Vantage may experience a service interruption. For example one or more virtual machines that power Vantage may not be sufficiently responsive. Vantage has auto-recovery protocols in place that enable continued operations without much interruption to the customer's workload. However, certain situations may require the Teradata team to investigate the virtual machine data and hinders our ability to investigate such issues. Teradata is working closely with Google to resolve this limitation as soon as possible. In the meantime, Teradata leverages all available and pertinent mechanisms to investigate and resolve issues in the most satisfactory way possible. **Workaround**: Mitigation actions will be provided if and when available **Deployments**: Google Cloud
GCP-1675	**Description**: Open issue regarding tactical query throughput when running mixed DSS, Tactical and NOS based workloads. The issue is being investigated. **Workaround**: Mitigation actions will be provided if and when available **Deployments**: Google Cloud
GCP-1602	**Description**: Initial Active Data Warehousing (ADW) testing that combines simple Single- and Multi-AMP Tactical queries with traditional Decision Support (DSS) type of queries has shown a greater percentage of Tactical queries that are considered outliers. 99.6% of the tactical queries complete in less than 1 second, but there are a significant number of queries that are taking longer than 30 seconds to complete. These are the outliers of concern. There are TASM rules limiting the DSS queries, but the IO associated with the DSS workload is still saturating the system. It is theorized that this is not allowing the Tactical queries to run without interference and is the source of the outliers. Testing is in progress to investigate the cause and propose appropriate corrections and mitigations. **Workaround**: Mitigation actions will be provided if and when available **Deployments**: Google Cloud
GCP-1585	**Description**: Backup jobs are failing when foreign tables with authorization are present. **Workaround**: If the customer uses the Invoker type Authorization object for using NOS then backups for the database may fail. It is advised the customer only uses Definer type NOS Authorization object. **Deployments**: Azure, AWS, IFX, VMware, Google Cloud.