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News Release

Teradata's 1,000 Node Test Operationalizes Complex Analytics at Scale in the Cloud

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Single system scale test completed on Amazon Web Services, Inc. (AWS) is one of the largest scale analytics tests ever undertaken

Teradata (NYSE: **TDC**) today announced the results of one of the largest-scale cloud analytic tests ever undertaken in the industry. Its success demonstrates that enterprise customers can run their complex analytic workloads on a single system in the cloud at unprecedented scale.

Modern data platforms in global 3,000 organizations often support tens of thousands of users and thousands of mission-critical business applications. This activity level drives upwards of 100 million queries-per-day, executed against petabytes of continuously updated data.

“As the physical world continues to be digitized and the digital world expands, in the next five years, the Global DataSphere or IDC's account of data created and replicated will reach 16.5 Exabytes. Today, less than half of that data is being analyzed and a tiny fraction of it is being used in AI/ML workloads,” said Dan Vesset, Group VP, Analytics and Information Management at IDC.

“The continuing proliferation of data, the accelerated adoption of AI/ML, IoT and 5G technologies, and a cultural shift toward data-driven decision making continue to drive demand for highly scalable data and analytics technology and services. As this demand increases, so will the workload volume of the world’s most complex organizations as they continue to derive value and competitive differentiation from their advanced analytics and predictive modeling capabilities,” added Vesset.

Enterprises of the future will consider analytics-driven decisions essential to their success. Whether it is using predictive maintenance to ensure life-saving MRI scanners stay operational, or accurately tracking and forecasting

the delivery of important packages, reliable and scalable analytics are critical to the day-to-day operations of Teradata's customers. Organizations rely on these solutions to optimize their analytics in the cloud with increased efficiency and flexibility.

With the success of its recent scale test, Teradata proved that it can successfully operationalize analytics at scale (1) on a single system of more than 1,000 nodes with (2) 1,023 active users submitting thousands of concurrent queries, (3) using a diverse set of mixed workloads, (4) and with no system downtime or outages.

Gartner® recently named Teradata as a Leader in the 2021 Gartner Magic Quadrant™ for Cloud Database Management Systems report and Teradata Vantage ranked highest in all the analytical use cases in 2021 Gartner Critical Capabilities for Cloud Database Management Systems for Analytical Use Cases, including ranking highest in the Data Lake Use Case.

"As critical analytic workloads increasingly move to the cloud, we recognize the need to provide our largest enterprise customers with a single system to manage all of their complex analytics. Our solutions deliver easier automation, manageability and cost-efficiencies across their entire analytic ecosystem. Extending ease of management beyond scalability boundaries demonstrates that customers don't have to trade the complexity associated with managing multiple instances for performance at scale," said Hillary Ashton, Chief Product Officer at Teradata. "We've proven the flexibility of our cloud technology to reliably deliver complex analytics at scale on an integrated data foundation."

Teradata's Innovation Lab led the execution of the cloud scale test on AWS. The goal was to highlight the capabilities of Teradata's future cloud architecture by pushing the limits of what many people consider possible in the cloud. Teradata's analytic data platform featured multi-compute clusters, automated elasticity, low-cost object storage and push button provisioning.

"We're thrilled to see the progress Teradata has made," said Phil Cheetham, VP Instance Platforms, EC2, at AWS. "This scale test is one of the largest single system tests ever run on AWS, and it reflects the strength of the collaboration between our companies and the capabilities of our technologies when used together. We're excited to see how Teradata customers benefit from segregating workloads in a single system in the cloud."

AWS Scale Test Details

This single system test was executed over an extended period of several weeks on a distributed system consisting of over 1,000 servers with zero system downtime. It ran mixed workloads -- both operational and DSS -- something Teradata is uniquely differentiated to do with its robust workload management capabilities that give the platform a way to segregate workloads within a single system in the cloud.

Why executing on a single system matters

Executing on a single system delivers the lowest cost in the cloud, while enabling:

less data movement,
less duplication of work,
easier automation,
easier observability,
better resource utilization and
easier manageability.

What this means for Teradata customers

This scale test demonstrates the architecture flexibility that enterprises demand, in addition to the following capabilities that Teradata customers will soon be able to leverage in the cloud:

- Multi-cluster: Flexibility to deploy large clusters leveraging Teradata's industry leading workload management resource optimization capabilities for the lowest total cost of ownership, as well as dedicated compute to business users who want to leverage the enterprise environment while maintaining isolation from critical production workloads.
- Elastic Scaling: A single tenant can start small and auto-scale, based on policy, to greater than 1,000 nodes, with zero down time.
- Low-Cost Object Storage: Teradata's Native Object Storage techniques provide enterprise price performance at scale.
- Thousands of concurrent queries: Highest number of concurrent queries on a Teradata cloud platform, with 1,023 active user sessions.
- Resiliency: No outages in the face of incidental hardware node failures.

Disclaimer:

Gartner, Magic Quadrant for Cloud Database Management Systems, Henry Cook, Merv Adrian, Rick Greenwald, Adam Ronthal, Philip Russom, 14 December 2021

Gartner, Critical Capabilities for Cloud Database Management Systems for Analytical Use Cases, Rick Greenwald, Merv Adrian, Adam Ronthal, Philip Russom, Henry Cook, 14 December 2021

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About Teradata

At Teradata, we believe that people thrive when empowered with trusted information. We offer the most complete cloud analytics and data platform for AI. By delivering harmonized data and trusted AI, we enable more confident decision-making, unlock faster innovation, and drive the impactful business results organizations need most. See how at **Teradata.com**.

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