

# The Benefits of Migrating from Hadoop to Teradata Vantage™

Companies today understand the importance and value of corporate-wide analytics. Both the data warehouse and data lake have moved from a nice-to-have to a must-have piece of IT infrastructure. To be competitive, organizations need to be able to make critical strategic and tactical business decisions based on as much data as possible. A robust connected analytical ecosystem is key for that process.

Many organizations became aware of the hype and market momentum around Hadoop for analytics and went down the implementation route with the best intentions. Despite the stated value and promise, a number of companies ended up being disappointed with the actual deliverable business benefits and results. In many cases, the overall cost and complexity greatly outweighed the actual benefit and insights of the analytical workload. But because analytical needs are always changing within dynamic business environments, some companies find that those platforms are limited in the scope of production analytics they can handle. Even more pronounced is the complexity and pain involved, not only in managing, but also in making changes to their Hadoop environment. Most importantly, companies are coming to realize that Hadoop is not meeting the needs of their business and are recognizing that they may be suffering because of these limitations.

As a result, many Hadoop customers are looking at more cost-effective, less complex solutions. Many are now considering migrating to a solution based upon Teradata Vantage™.

The following are questions we typically hear:

- What data do I actually have in my environment?
- What cost-effective alternatives to Hadoop exist?
- How does the migration take place?
- What value can my company see after migration?

This note will try to answer some of those questions by highlighting the Vantage/Hadoop migration

program. How your company can experience improved performance, decreased complexity and enabled analytic agility—but more importantly, they have achieved business benefits that justify the cost and effort involved in a migration.

## The Primary Complaint about Hadoop

Companies that implemented data warehousing and data lake solutions on Hadoop have come to find that the problem with the solution is not any single issue or performance pain, but the overall complexity of the environment as well as the complexity involved in responding to changing business requirements. It is also not the case that Hadoop is incapable of meeting requirements, but that the time, effort and pain required to affect the change is deemed worse than the potential benefits, and so no change is made. Large, long-term Hadoop customers also tell us that they become increasingly reluctant to make needed changes to their environment because, as the size and complexity of the system grows, Hadoop becomes much harder to manage, tune, or to even find the relevant data they are looking for. Plus, changes take longer and longer, often with unintended and detrimental consequences.

## The Teradata Hadoop Migration Program

The Teradata Hadoop Migration program consists of services, methodologies and tools that enable companies to rapidly and easily migrate from their existing Hadoop environment to a new, less complex, modern Vantage-based environment. A main component of the program is a professional services led initiative that has three main pieces:

- Hadoop Migration Platform Assessment Service
- Hadoop Migration Planning Service
- Hadoop Migration Implementation Service

The **Hadoop Migration Platform Assessment Service** evaluates a company's exiting Hadoop environment. The Teradata professional services team goes through the process of a deep assessment of a company's existing Hadoop environment. The service looks at the value and perspective of the existing environment, system configuration, existing architecture, storage platform, ingestion patterns, workloads and many other components to get a complete picture of the effort, risk and timeline of the migration.

The **Hadoop Migration Planning Service** puts together a comprehensive migration plan that includes the creation of an architecture, and evaluation of technology for both the migration process as well as infrastructure components for the target platform and maps them to business and technology goals. The planning service looks at migration tools and technology and maps them to the execution strategy.

The **Hadoop Migration Implementation Service** executes on the migration plan, moving key components of the existing Hadoop environment to the new environment. The implementation service looks to physically migrate data, schemas, applications, data pipelines, BI tools and other processes to the new environment. As part of the process, the service looks to improve components such as implementing improved processes around data quality, data access, data lineage, and other key factors that will optimize the former data and processes in the new Vantage-centric environment.

## The Teradata Vantage-Hadoop Migration Solution

The centerpiece of the Hadoop migration solution is the Vantage platform. Not all data and workloads are a good fit for Vantage, but the vast majority of companies' Hadoop-based workloads are. Vantage simplifies analytic ecosystems by integrating data analytic functions and engines together, so users can focus on getting answers without concerns about where data resides or data access. Users can leverage the power of Vantage processing engines on their previous Hadoop data. The Vantage platform supports multiple data types with effortless scalability through fully parallel operations, mission-critical availability, and complex query performance.

The ability of Vantage to connect to and integrate with object store technologies, such as Amazon's S3 or Azure Blob using its Native Object Store (NOS) functionality allows companies to leverage low cost object storage as part of their new Vantage-based modern analytical environment. This low-cost object storage, coupled with the power of Teradata Vantage provides companies the highest performing, most cost-effective solution for their previous Hadoop workloads. Teradata connectivity and ecosystem technologies including Teradata QueryGrid, Data Mover, Listener and Teradata Connector for Hadoop (TDCH) can be leveraged as part of this migration process. The ecosystem connectivity that a Vantage-based solution provides allows for companies to maintain and actively access and query their Hadoop environment through Vantage. This provides a seamless user experience and acts as a bridge between the old Hadoop environment and new more modern environment as a company transitions in time off of Hadoop.

Let Teradata help you modernize your analytical ecosystem and bridge the gap between old and new. For more information, contact your Account Executive about this program.