

Teradata® Aster® AppCenter Enables Self-Service Big Data Analytics and Discovery for the Entire Enterprise

BIG DATA ANALYTICS

Web-Based Solution Democratizes Big Data Analytics

Deriving value from big data analytics and discovery is among the most important success factors in today's economy, regardless of industry. That's the consensus among leading analysts and executives who understand that mastery of big data is directly relevant to an era in which the customer is king.

Customers justifiably expect companies to cater to their needs across channels in timely and relevant ways. To do this, key decision makers and analysts need self-service big data analytics that help them understand customer behaviors and craft policies that increase customer acquisition and reduce or eliminate attrition.

Yet for many organizations, delivering fully on the promise of big data analytics has remained elusive. Despite major investments in the technology—and the fact that data scientist and business analyst continue to uncover unprecedented business insights—big data analysis typically involves the use of SQL and specialized techniques that are difficult to put into practice across the enterprise. Business people have not had an easy way to dig into the insights, ask targeted questions and obtain reliable answers to a wide range of pressing business questions.

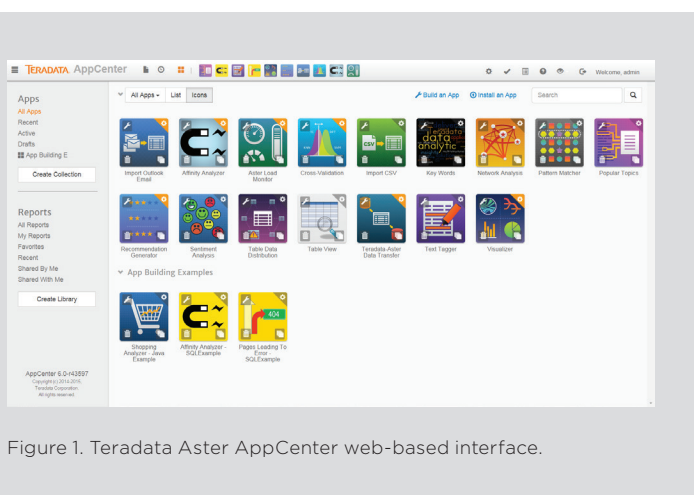


Figure 1. Teradata Aster AppCenter web-based interface.

That's changed with the introduction of Teradata Aster AppCenter (AppCenter). A web-based solution with a simple point and click interface for building, deploying, sharing and consuming interactive big data apps, AppCenter enables self-service big data analytics and discovery for users throughout your organization—not just the technical experts.

Teradata Aster AppCenter

AppCenter allows data scientists, business analysts and SQL users to embed their SQL-MapReduce™ and SQL-GR® scripts, prebuilt functions or analytic code into an app that can be parameterized and run repetitively, thus simplifying and accelerating the app building, configuring, running and sharing experience. AppCenter also allows non-SQL business users to directly access and modify allowed parameters for reuse.

AppCenter consists of the following components:

- Portal is a web-based interface that enables users to easily:
 - Configure apps to run with new data.
 - Parameterize apps when launching.
 - Organize, find, delete and display apps and results.
 - Visualize results through interactive charts and graphs.
 - Share results between users to encourage collaboration.
 - Sort, search, filter and export data through the Table view.
- Services and a software development kit (SDK) that simplify app development:
 - App management services include authorization, data access and usage.
 - App services are available for app execution, scheduling and logging.

- External Tool integration:
 - RESTful API exposes apps, results and platform services through a standard interface, which allows third party tools to access Aster Discovery Platform analytic functions, visualization and database services.
 - AppCenter generates URLs for each app allowing web-based interfaces to embed app results.
 - AppCenter visualizations are also available as JSON objects for integration with third party tools.
- AppCenter server can be run on a separate, dedicated commodity server or a backup Queen or Loader node. The server manages installation, usage and launch of apps that leverage the analytic in the Teradata Aster Discovery Platform.
- Productivity and simplicity - Intuitive visualization services allow users to easily interact with their data to discover new insights.
- Easy access - The web-based interface allows users to access apps via web browsers from any device, including tablets.
- A central analytic repository - A single location to store and manage your SQL, SQL-MapReduce and SQL-GR analytics apps.

Using AppCenter to Create Big Data Apps

By bringing together all of these innovative, technological capabilities in one place, AppCenter is the heart of your organization's big data apps solution; it makes big data analysis as accessible to enterprise users as using an app on any web-based device, including tablets. Big data apps make it possible for data scientists and analysts to solely focus on new analytics initiatives without having to repeat projects; IT personnel no longer have to maintain a large variety of single purpose analytics solutions.

The big data apps solution has four key components:

- AppCenter's technology characteristics include:
- Common languages - Applications are written in SQL and Java, with access to more than 100 prebuilt algorithms for big data analysis.
 - Scalable apps - Apps run in parallel against massive volumes of data for optimal performance.
 - Security, auditing and access controls - AppCenter leverages application services to manage access and data security. IT can fully control sensitive data and application access.
 - Transparent access - Teradata QueryGrid enables Aster apps to transparently reach across to the Teradata IDW and Hadoop to access data.

- **Teradata Aster Discovery Platform** provides a high-performance analytic environment that allows analysts to combine SQL, MapReduce, Graph and R within a single query for big data analytics and discovery.
- **Teradata Aster AppCenter**, as noted, is a web-based solution for building, deploying, sharing and consuming interactive, big data apps.

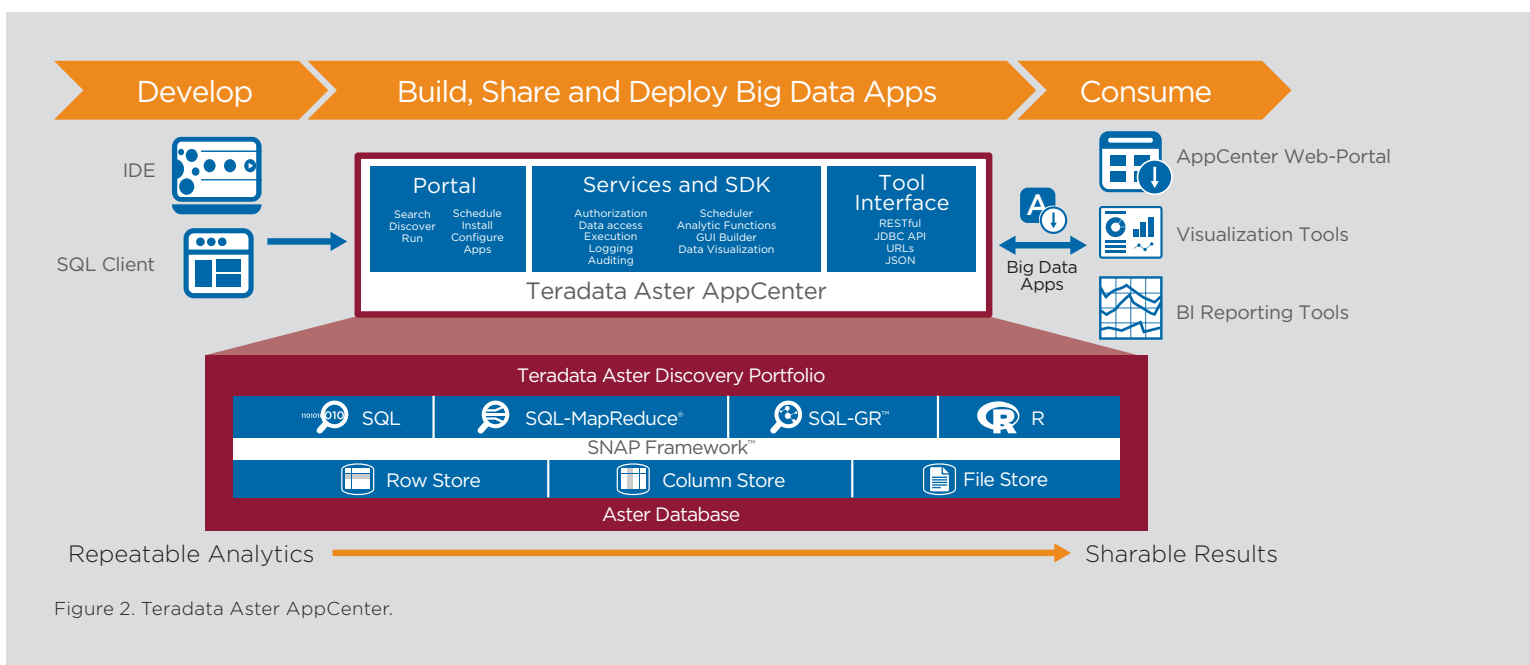


Figure 2. Teradata Aster AppCenter.

- **Industry-focused, analytical apps** capture best practices for analytics in customizable, prebuilt templates that answer specific business questions and are available for a number of industries. The templates address use cases that range from customer churn, financial fraud and paths to purchase to manufacturing optimization, market baskets, network influence and many more.
- **Teradata Professional Services** partners with you to accelerate implementation by configuring the program logic, schema, visualization, security and access interface captured in the templates to meet your specific business requirements.

This end-to-end, scalable and flexible stack of technology and services empowers you to build, deploy, consume and share your own custom big data apps. In doing so, you will:

- Create self-service access and actionable insights for users throughout your organization.
- Accelerate time-to-value for your big data analytics.
- Lower the total-cost-of-ownership for big data technology.
- Strengthen organizational commitment to evidence-based decision-making.

Benefits Reach Across the Organization

AppCenter’s capabilities offer benefits for every aspect of your organization.

Data Scientists and Analytics Professionals can unilaterally configure (or build) apps, deploy reusable analytics that facilitate “needle-in-the-haystack” discovery, test code against data using different parameters or inputs and share results with key business users. The ease-of-use dramatically reduces the amount of time you’ll spend preparing data and optimizes the time spent in pervasively deploying big data apps that uncover game-changing, high-value business insights.

IT personnel, especially database administrators can concentrate on high priority, high-value work because everything in AppCenter is self-contained, based on standards and running on a web server.

Powerful Tools for All Users

For data scientists, Teradata Aster Discovery Platform possesses:

- Powerful Analytic Engines
 - SQL engine
 - MapReduce engine
 - Graph engine
 - R engine
- SNAP Framework
 - Integrated optimizer
 - Integrated executor
 - Unified SQL interface
 - Storage system and services
- Data Stores
 - Row
 - Column
 - Aster File Store

For business analysts, Teradata Aster Discovery Portfolio provides pre-built functions to perform the following tasks and analysis:

- Data Access
- Data Preparation
- Analytics
 - Statistics
 - Predictive
 - Path
 - Pattern
 - Connections
 - Text
- Visualization

Enterprise business users enjoy easy and timely access to apps that deliver answers to pressing business questions. In turn, business users can grow and maintain the types of customer relationships vital to business success today.

By creating AppCenter—a technology home that eases and democratizes the use of big discovery and analytics—Teradata has taken an innovative step forward in the big data evolution.

For more information, visit Teradata.com/Big-Data-Apps

About Teradata

Teradata helps companies get more value from data than any other company. Our big data analytic solutions, integrated marketing applications, and team of experts can help your company gain a sustainable competitive advantage with data. Visit Teradata.com.

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