

# Microsoft Azure Databricks

## Data Analytics Platform Optimized for Microsoft Azure

Carahsoft has been providing cloud solutions since opening its doors in 2004. US Public Sector entities have relied on Carahsoft and our extensive network of industry and resellers partners to provide a wide variety of cloud technologies and procurement strategies. Carahsoft serves as the cloud distributor with our core offerings of innovative ISV technology partners products and services. Together with our industry and reseller partners we combine software, cloud, and service providers into comprehensive relevant solutions for our customers.

### Deploying Databricks on Microsoft Azure

Azure Databricks is the Databricks platform optimized for Azure and offered as a fully integrated Azure-native service. The optimization includes integrating with, and leveraging, many complementary Azure services. The integration of Azure Databricks with other Azure services enable several use cases for Azure Databricks—such as machine learning pipelines, stream analytics and data warehousing—and underpin the many unique, differentiated, benefits of using Azure Databricks vs Databricks on other public clouds.

Azure Databricks platform is deployed across all three branches of the U.S. government, all cabinet-level agencies and all four branches of the U.S. military as well as in State and Local Governments across the country.

### Why Customers benefit from Azure Databricks:

- Deploy auto-scaling compute clusters with highly-optimized Spark that performs up to 50x faster
- Azure Databricks is trusted by thousands of customers who run millions of server hours each day across more than 30 Azure regions.
- Recognize up to 37% savings with pre-purchase of Azure Databricks Commit Units

### Federal | Civilian

- Predict the needs of citizens, fight fraud and reduce waste by analyzing demographics, health stats, claims and other public data sets at scale

### Defense and Public Safety

- Detect and prevent criminal activities, cyberattacks and national threats with real-time analytics and machine learning

### Geospatial and IoT Analytics

- Analyze large volumes of streaming IoT and satellite data to improve disaster recovery, city planning, transportation and more

### Reliable data engineering

### Analytics for all your data

### Collaborative data science

### Azure Databricks Advisory Services

Leverage world-class data engineering, data science, and project management expertise at any point in your data and AI journey. All Advisory Services support the ongoing development of applications on the Databricks platform. Databricks Advisory Services teams often deliver the work product we create for you in the form of a Databricks Notebook — essentially an editable document, viewable within our UI, containing text, visualizations and code that can be directly run within Databricks.

# Leverage data analytics, machine learning and AI to make smarter, faster decisions with Azure Databricks

## Fully managed Apache Spark clusters in the cloud



- Create clusters in seconds
- Unify your data, without centralization, using the secure data integration capabilities
- Dynamically auto scale clusters up and down, including server less clusters, and share them across teams

## Optimized Runtimes



- Built on top of Apache Spark and optimized for Azure
- Provides purpose built runtimes for different use case and workloads
- Streamlined process of exploring data, prototyping, and running data-driven applications in Spark

## Enterprise Security



- Azure Active Directory integration, role based controls, and SLAs to protect your data
- Azure Databricks roles-based access enables user permissions for notebooks, clusters, jobs, and data

## Carahsoft-bundle solution: Azure Databricks

### Our promise to you

Carahsoft will work with you to understand your requirements to scale and provide the optimal Azure Databricks solution to ensure success.

### Getting started

- Utilize our proven, Solution-oriented approach to solving complex IT problems
- Leverage Databricks Advisory Services to make better use of the Databricks platform
- Extensive list of contract vehicles and partners for easy, streamlined acquisition and deployment

## Integration with Azure Services

### Azure Event Hubs

Act as both a structured streaming service and sink to read event data from Azure Databricks and write event data to Azure Event Hubs.

### Billing and Cost Management

Billing integrated with Azure billing so users get a single unified bill. Leverage cost management tools to optimize cost savings.

### Azure Data Factory

Azure Databricks is integrated with Azure Data Factory so that you can have an Azure Databricks Notebook as a step in the Azure Data Factory pipeline.

### Azure Active Directory

Supports Azure AD conditional access and Azure AD Single Sign-On.

### Azure Monitor

Send application logs and metrics from Azure Databricks to Azure Monitor.

### Azure ML

Track and share experiments, reproduce runs, and manage models collaboratively from a central repository.

### Azure Data Sources and Sinks

Directly read from, and write to, all the Azure data stores.

### Dev Ops

Develop and execute tests using Azure DevOps Test Plans.

### Power BI

Bring the advantages of Azure Databricks performance and technology to all business users.

## Why Azure Databricks?

Seamlessly integrate to Azure data stores and services with specialized connectors for fast data access and simplified management across your environment. This makes it easy to setup security controls, manage environments, and process all your Azure data.