

SOLUTION BRIEF

Enable AI Builders Across the Enterprise to Generate Scalable Business Impact with DataRobot on Microsoft Azure Cloud

INTRODUCTION

The Power of DataRobot on Azure

DataRobot AI Platform provides an AI platform with broad interoperability and end-to-end capabilities for machine learning experimentation and production that can be deployed in the Microsoft Azure cloud infrastructure. The DataRobot AI Platform improves collaboration among AI teams so they can get models into production faster to improve and optimize their business.

- **Machine Learning Experimentation:** Gives data scientists the ability to experiment over multiple problem types automatically and safely with the most mature and complete capabilities for trying new data sources to quickly determine how to best address the business problems.
- **Machine Learning Production:** Scales AI in production, providing a centralized control and command center to test, document, deploy, monitor, manage, and govern all your diverse models. Continuously monitors valuable metrics and calculates the ROI, no matter where models are deployed.

The Microsoft Azure cloud platform includes 200+ products and cloud services to help clients solve today's challenges and create the future. Customers can build, run, and manage applications across multiple clouds, on-premises, and at the edge using the tools and frameworks of their choice.

Organizations can purchase the DataRobot AI Platform using Azure Marketplace using cloud credits, through a channel reseller, or directly from DataRobot.

NATIVE INTEGRATIONS

Accelerate Your Path to Business Results

To increase their use of AI and machine learning models, organizations must improve their ability to bring models into production and realize business value faster. AI projects can stagnate, fail to deliver the expected value, or expose the business to risk. Other factors that affect AI success include project complexity, difficulty in scaling, lack of stakeholder buy-in, shortage of data science expertise, and keeping pace with the evolving AI regulations, governance, and laws.

The Microsoft Azure infrastructure offers the security and computational power to build and deploy accurate, scalable, and flexible machine learning models much faster than using traditional manual approaches. By leveraging Azure, the DataRobot AI Platform enables data scientists to rapidly experiment, prototype, build, and deploy highly complex machine learning models. The broad interoperability of the DataRobot AI Platform helps it fit easily into a customer's existing cloud strategy and architecture. Whether organizations are existing Azure customers or starting out, they can benefit from using these platforms together.

The reliability and scalability of Azure combines with the cutting-edge AI capabilities and decades of data science expertise of DataRobot to deliver faster, more scalable machine learning outcomes and unmatched levels of automation, accuracy, and intelligence. The intuitive automation of the DataRobot AI Platform, embedded with data science best practices, removes time-consuming tasks like version control, code reviews, or low-level infrastructure configurations. No-code AI apps make it easy for business users to simulate multiple scenarios without relying on data scientists to test each business strategy.

Seamless integration with Azure's broad variety of data platforms, machine learning services, and applications protects the customer's existing cloud ecosystem investments, such as Azure Synapse Analytics or Azure SQL Database. **(Figure 1)**

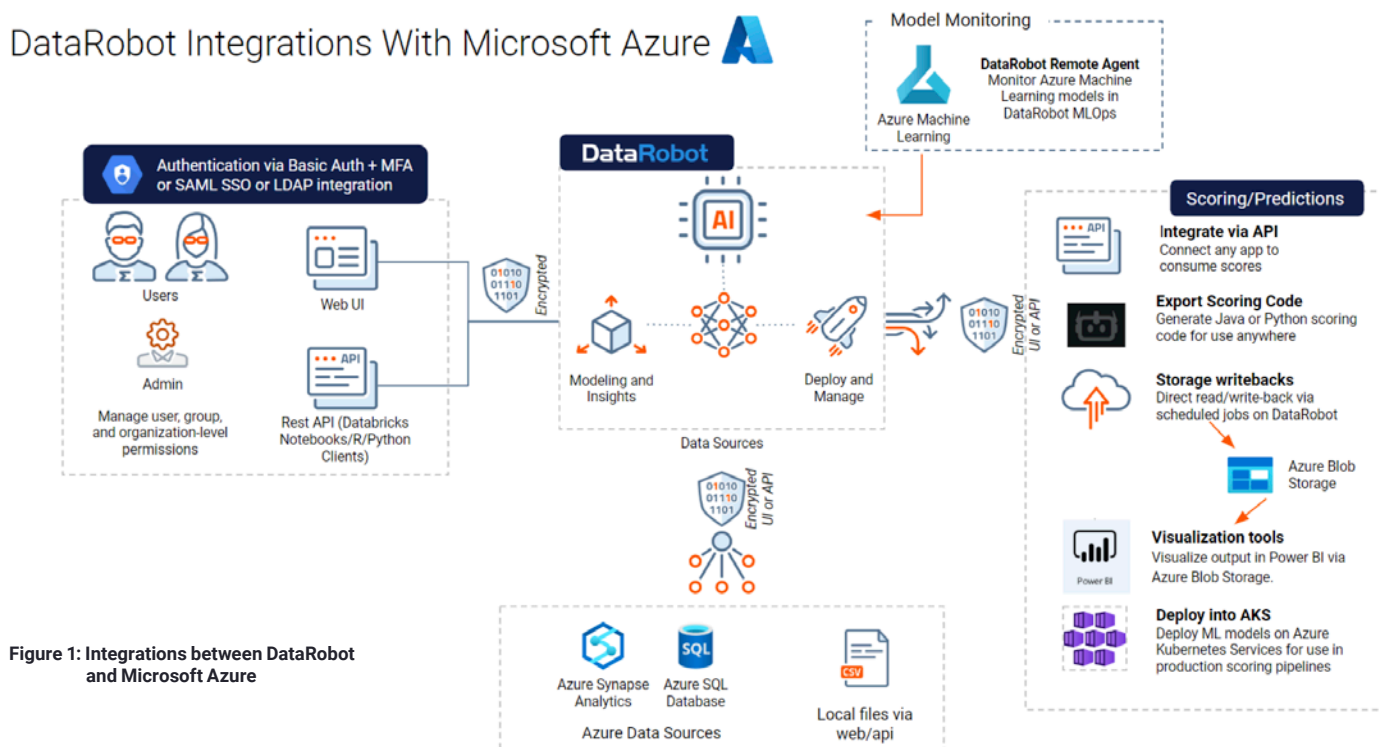


Figure 1: Integrations between DataRobot and Microsoft Azure

DataRobot and Microsoft Azure Integration and Complementing Capabilities

- **Seamless interoperability:** Models built externally in Databricks or AzureML, or any model registered in a GitHub repository, can easily be deployed, monitored, or used as a challenger model with DataRobot MLOps. DataRobot can connect to Azure SQL Database and Azure Synapse Analytics via APIs or DataRobot AI catalog in the GUI.
- **Data type support:** DataRobot automatically handles diverse data types like geospatial, image, and text without users writing any lines of code.
- **Prediction support:** Data scientists can easily make predictions from Azure Blob Storage or ADLS Gen2. DataRobot prediction jobs can also write predictions back to Azure Blob.
- **Time series capabilities:** Automated Time Series (AutoTS) from DataRobot enables users to build complex yet accurate forecasting models, even using sophisticated techniques like time series clustering and segmented modeling.
- **Compliance and governance:** Built-in compliance documentation and automated governance allows regulated industries such as Financial Services to solve business challenges such as credit risk management and scale AI with speed and confidence, remaining compliant with industry regulations.

Simplified Management with Single-Tenant SaaS

DataRobot AI Platform is available as Self-Managed deployment or as Single-Tenant SaaS, fully managed by DataRobot. Single-Tenant SaaS eliminates the time and cost of on-premises implementation and provides a solution that is fully managed by DataRobot. With Single-Tenant SaaS, organizations can replace disparate machine learning tools with one unique solution from DataRobot that addresses specific data management or data sovereignty needs and outsources the IT management tasks and set up of new software purchases. This offering can be purchased with committed cloud credits on Azure Marketplace.

Benefits from using DataRobot AI Platform with Microsoft Azure

Maintain security, governance, and compliance across all your AI projects

- Leverage built-in guardrails and automated model documentation to make significant business decisions quickly
- Upload DataRobot model score code to Azure Machine Learning managed batch or online endpoints for geographic isolation, security, and control over production models
- Gain full portability and control over machine learning models and deployment architecture using DataRobot MLOps portable prediction server (PPS)
- Enjoy maximum deployment flexibility and decide which of the DataRobot recommended models to use and where to deploy them
- Solve business problems faster and with less risk by using the self-service tools, explainable automation, and manual overrides to run hundreds of diverse models in minutes

Scale your AI team's productivity by simplifying complex AI

- Put models into production faster with the intuitive DataRobot user interface and APIs
- Incorporate geospatial, text, numeric, and image data into a single model with DataRobot multi-modal modeling capabilities
- Eliminate manual feature engineering tasks by using DataRobot automated feature discovery to discover and generate new features from multiple datasets
- Shrink machine learning cycle time with the most mature and complete toolset for trying new data sources, experimenting with multiple problem framings, testing thousands of models, identifying key drivers, and evaluating the best models to move into production
- Access the DataRobot model repository for advanced options tailored to different verticals, such as healthcare and financial services, to benefit Azure customers across different industries
- Use DataRobot MLOps to scale AI in production with one place to manage all models, no matter where they were built or deployed

Rapidly build an AI-powered organization with industry-specific solutions and expertise

- Leverage a library with hundreds of industry best practices, use cases, and other resources to expedite time to insight
- Access cutting-edge algorithms, model blueprints, and latest deep learning techniques that incorporate advanced data science best practices developed by Kaggle-ranked DataRobot data scientists



CUSTOMER SUCCESS STORIES

Steward Health Care Uses DataRobot Predictive Modeling to Save Millions Each Year

Looking to reduce costs across its 39 hospitals in the US, Steward Health Care needed a better way to predict hospital volume and staffing. Its current system of staffing against a static average meant the hospitals were often understaffed or overstaffed during peaks and valleys of patient volume. DataRobot provided the tools to help Steward Health Care manipulate its historical data, quickly build and test models from that data, and identify the best predictive models across multiple use cases. With DataRobot, data engineers rapidly experimented with 1500+ predictive models to increase staffing accuracy by 95 percent and netted US \$2 million in savings per year across eight of the hospitals in the network.

[Read the full story.](#)

Watch the video



Kroger Leverages DataRobot to Increase Productivity and Generate Millions in Revenue

Kroger 84.51 is the data science arm of the largest U.S. supermarket chain. The organization faced a large backlog as their 200+ data science team struggled to meet demands for predictive modeling projects. By using DataRobot automated machine learning, the Kroger 84.51 team could create, test, and deploy a greater number of predictive models with improved accuracy. Kroger worked through their backlog, realized a 3x productivity gain, and generated US \$10+ million in additional revenue.

Watch the video

84.51°

Learn more about DataRobot AI Platform to accelerate
value-driven AI in an Azure environment.

[Get Started with DataRobot on the Azure Marketplace](#)

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