

SOLUTION BRIEF

Enterprise MLOps platform with NetApp and Domino

A single portal to all your
data science infrastructure, tools,
and assets.



Challenge

Although the promise of and need for data science is great, becoming model-driven is hard. Most companies start off their data science efforts just fine. They start small, hiring a few experts and assigning them an exciting problem. But when companies try to scale data science, they run into problems:

- **Lack of access to tools and infrastructure:** For data science, you need powerful compute and storage resources, high-value and sensitive data, and the latest open-source tools and packages. Flexibility is essential for productivity and innovation.
- **Silos that inhibit knowledge sharing:** Because data science teams work with a variety of different tools, there are no standard ways of working—which reduces auditability and reproducibility. Lack of visibility into in-flight projects causes concerns about governance and security.
- **Complex processes to operationalize workflows:** A model needs to be put into production to make a measurable and repeatable business impact. Having to reinvent the process of model deployment delays business value and increases risk.

Without MLOps software, data scientists:

- Are stuck doing DevOps integration work
- Struggle to use shared infrastructure
- Are restricted by IT from accessing the software they need
- Constantly have to reinvent the wheel

The solution

The Domino Enterprise machine learning operations (MLOps) platform, combined with NetApp® AI, offers an integrated solution for companies looking to allocate compute resources and centralize data science work. For companies with large teams of code-first data scientists, Domino accelerates the process of developing data science projects and bringing them into production. The shorter process reduces the cost of supporting data science teams and reduces regulatory risks.

Key benefits

Openness and flexibility

Support the broadest ecosystem of open-source and commercial tools and infrastructure

- Deploy on premises and across all major cloud providers for flexibility.
- Provide data scientists with self-serve access to their preferred integrated development environments (IDEs), languages, and packages.
- Allow IT to consolidate tools onto a single platform—reducing your costs and support burden while providing governance across tools, packages, and compute frameworks such as Spark, Ray, and Dask.

Reproducibility and collaboration

Establish full visibility, repeatability, and reproducibility across the model lifecycle

- Automatically track all data science artifacts (including code, package versions, parameters, and more).
- Collaborate effectively with teams using different tools on a project while sharing collective wisdom and insights.

Enterprise scale

Centralize and orchestrate work with a system of record for data science

- Be more professional in your data science through common patterns and practices.
- Standardize workflows that reduce friction so you can speed up the time between an idea and production.
- Explore data, train machine learning (ML) models, validate and deploy them, monitor them, and repeat.
- Accelerate new user onboarding by enabling effective collaboration and reproduction of previous experiments.

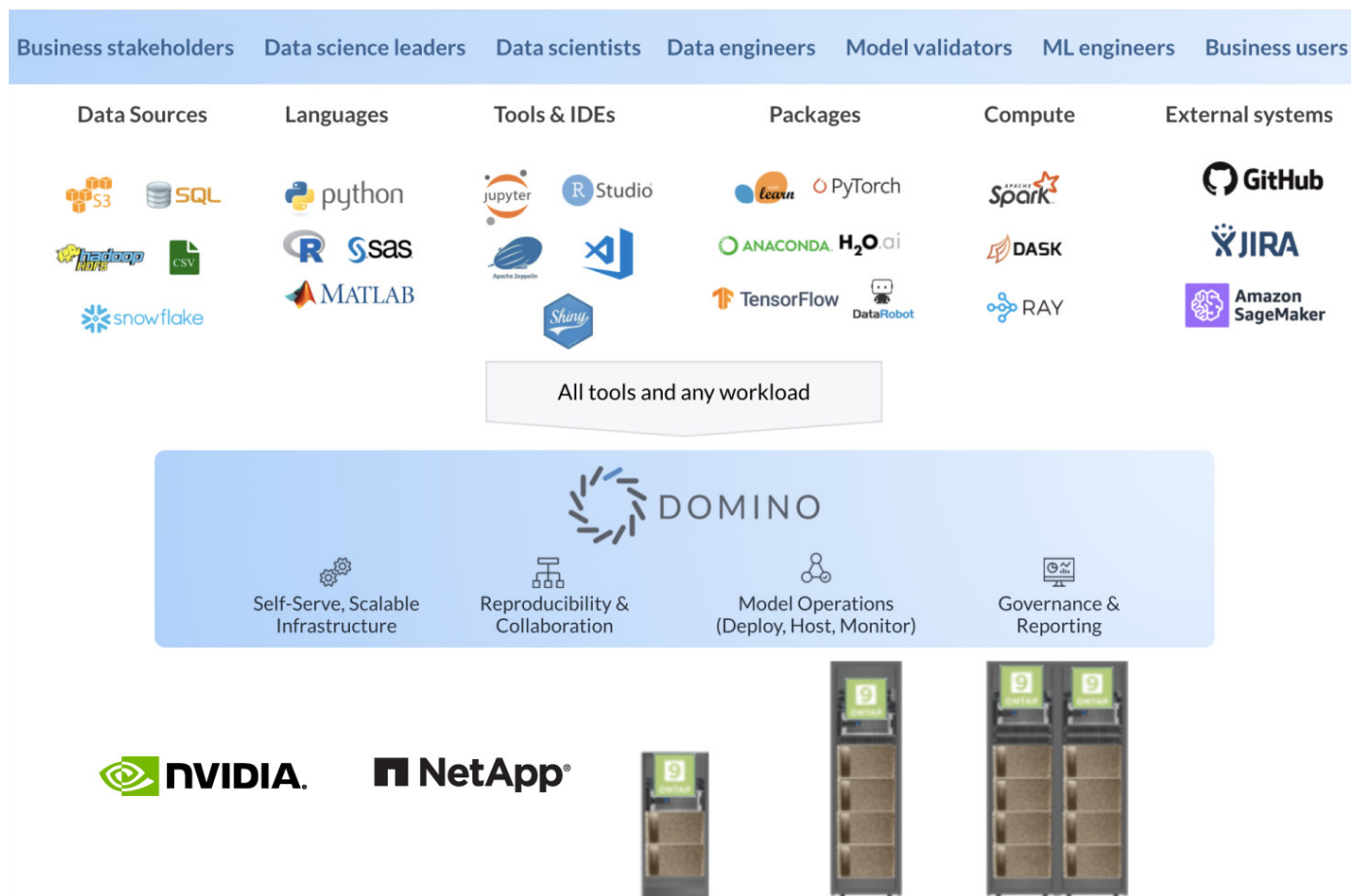


Figure 1: NetApp storage underpins the Domino Enterprise MLOps platform.

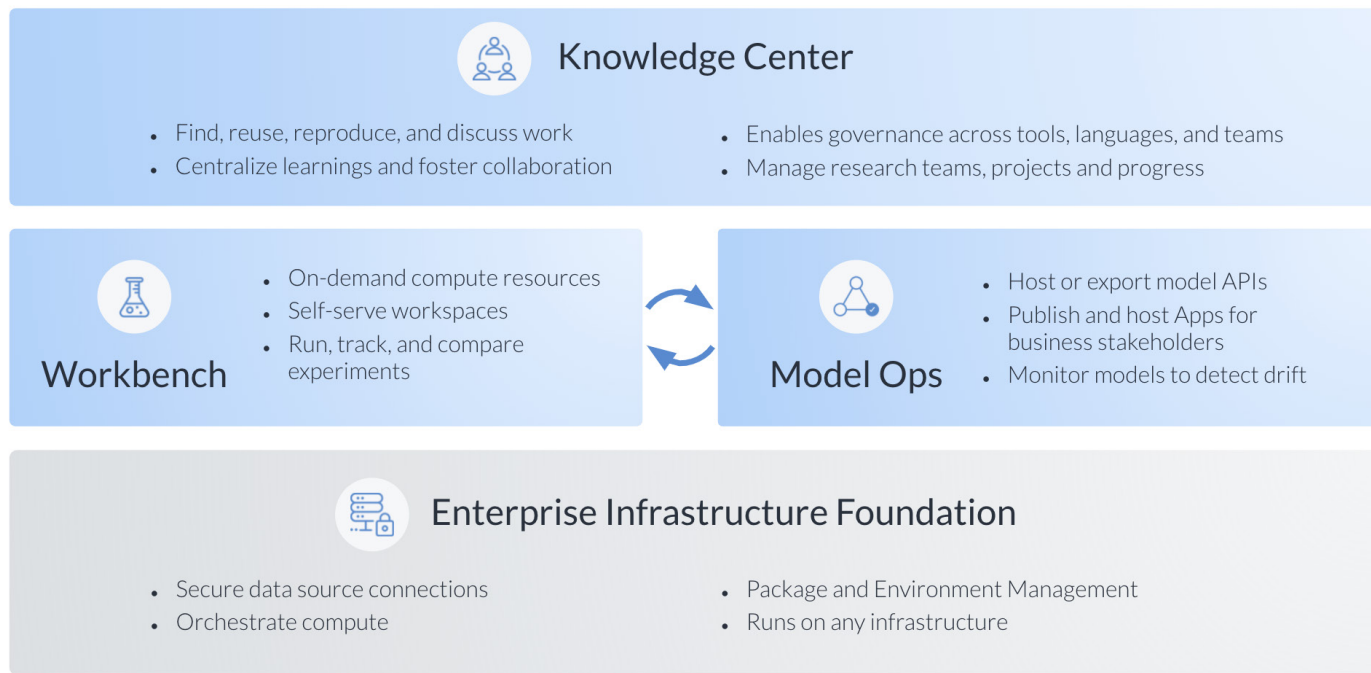


Figure 2: Domino Enterprise MLOps platform.

Unlike other MLOps platforms, Domino's enterprise MLOps platform:

- Offers an integrated experience through the end-to-end lifecycle for model management, development, deployment, and monitoring (it gives you integrated workflows across the data science lifecycle)
- Is tool and infrastructure agnostic
- Supports enterprise scaling and handles complexity

About Domino Data Lab

Domino powers model-driven businesses with its leading enterprise MLOps platform that accelerates the development and deployment of data science work while increasing collaboration and governance. More than 20% of Fortune 100 companies count on Domino to help them scale their data science, turning it into a competitive advantage. Founded in 2013, Domino is backed by Sequoia Capital and other leading investors.

About NetApp

In a world full of generalists, NetApp is a specialist. We're focused on one thing, helping your business get the most out of your data. NetApp brings the enterprise-grade data services you rely on into the cloud, and the simple flexibility of cloud into the data center. Our industry-leading solutions work across diverse customer environments and the world's biggest public clouds. As a cloud-led, data-centric software company, only NetApp can help build your unique data fabric, simplify and connect your cloud, and securely deliver the right data, services, and applications to the right people—anytime, anywhere.

