

Databricks workflow for existing Posit and shiny users

Service Overview

Jumping Rivers provides validated, secure deployment and integration of Posit data science platforms with Databricks environments, enabling organisations to build interactive dashboards, AI-powered applications, and production-ready machine learning workflows.

The service supports R and Python users to explore data, develop models, leverage large language models (LLMs), and deploy insights securely at scale using reproducible, QA-tested infrastructure.

Key Capabilities

- Deployment of Posit platforms (Posit Workbench, Connect, Positron) on validated cloud infrastructure
- Secure integration with Databricks data sources and managed LLM endpoints
- Development of interactive dashboards and applications using R and Python
- Natural language data interaction using LLM-powered query interfaces
- Production deployment of machine learning models using Orbital into Databricks workflows
- Infrastructure as Code (IaC) for reproducibility and disaster recovery readiness
- QA validation for security, performance, and cost efficiency

Typical User Workflow

1. Users access Posit environments (such as Positron or Workbench)
2. Explore and analyse Databricks data using R or Python
3. Build dashboards or interactive applications enhanced with LLM functionality
4. Deploy applications securely to Posit Connect or Databricks Apps

5. Translate and run ML models at scale in Databricks using Orbital

Service Features

- Validated QA-tested infrastructure and environments
- LLM integration for data analysis and application development
- Databricks-native execution and scheduling of models
- Secure authentication and role-based access control
- Reproducible deployments and version-controlled configurations
- Documentation, onboarding, and user handbooks
- Optional support, SLAs, and optimisation services

Service Benefits

- Faster development of dashboards and AI-powered applications
- Seamless connection between data science tools and Databricks data
- Reduced operational risk through validated infrastructure
- Scalable model deployment without rewriting code
- Secure and compliant environments
- Cost-efficient, optimised cloud setups
- Improved collaboration between data scientists, engineers, and business users