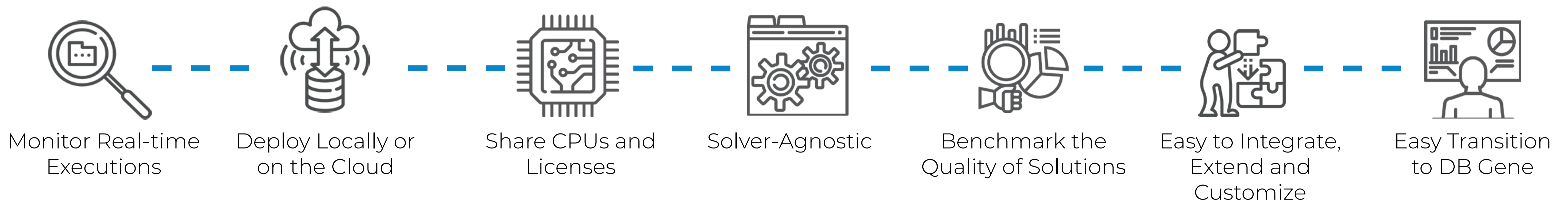# DBOS | DecisionBrain Optimization Server

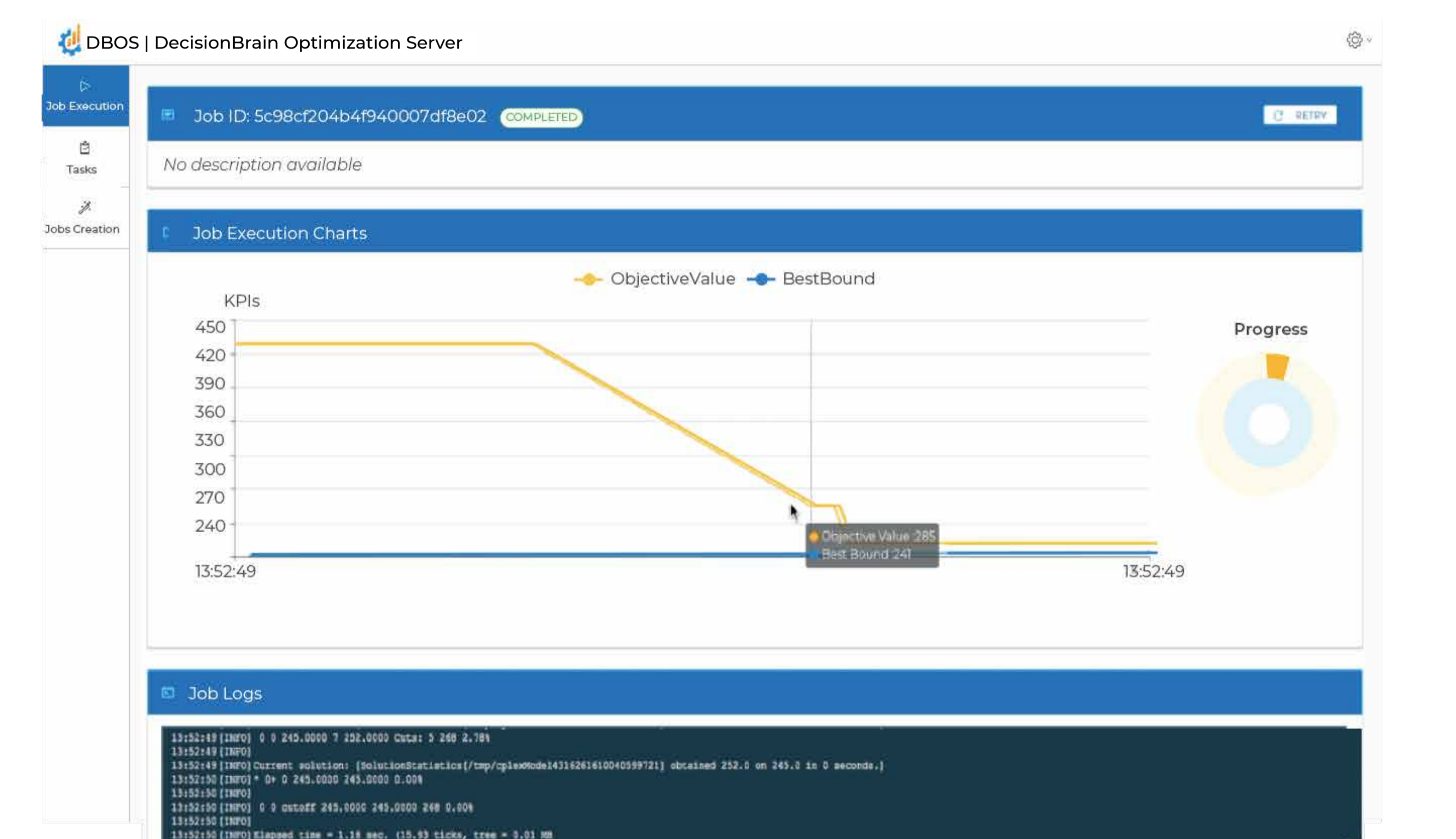## Built to Ease Optimization Development and Deployment

DecisionBrain Optimization Server is a framework designed by OR developers for OR developers. It allows Optimization Experts and Application Developers to focus on their competences, delegating infrastructure and architecture related issues.

Key features and Benefits

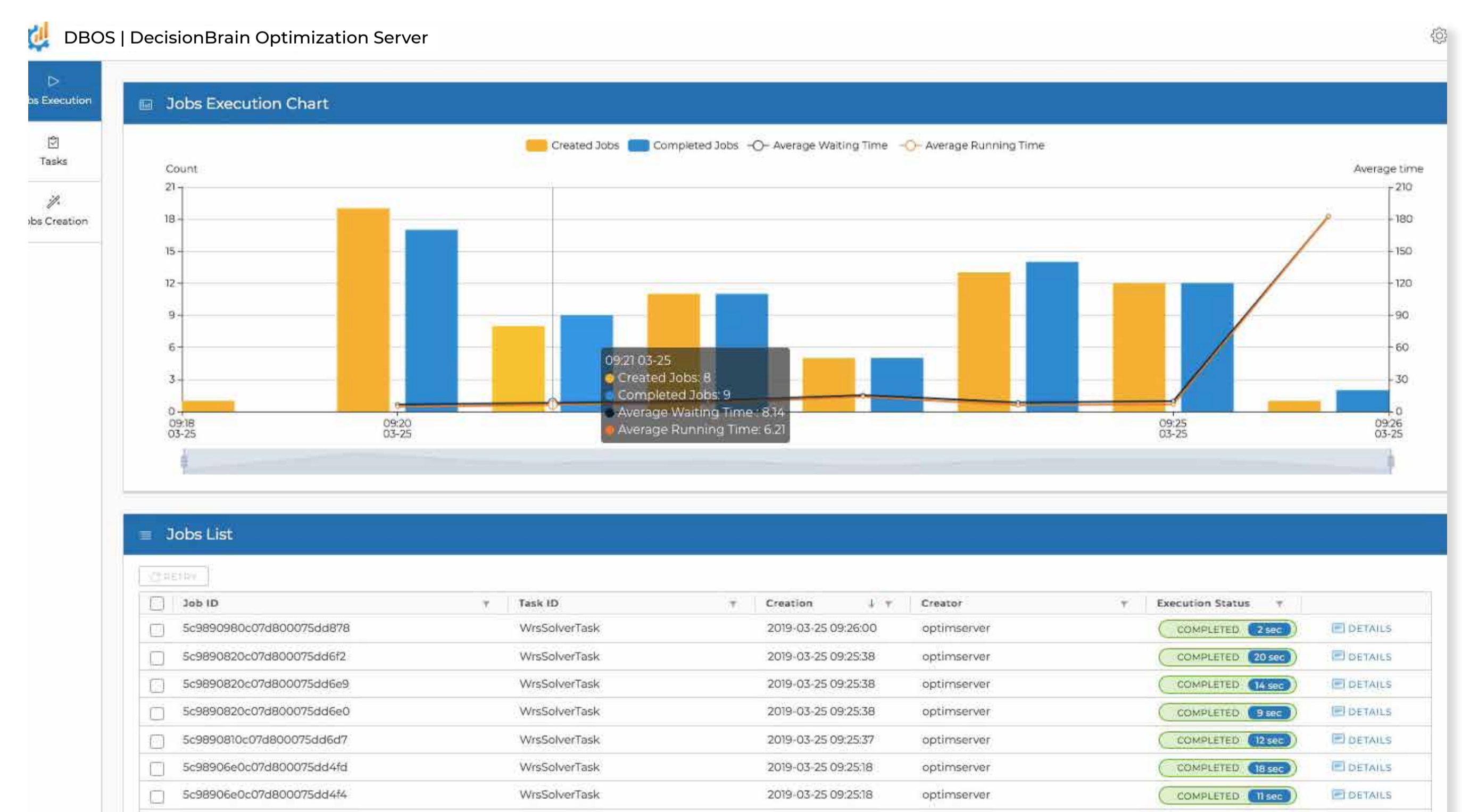| Monitor Real-time Executions | Deploy Locally or on the Cloud | Share CPUs and Licenses | Solver-Agnostic | Benchmark the Quality of Solutions | Easy to Integrate, Extend and Customize | Easy Transition to DB Gene |

Monitor Real-time Executions

DBOS orchestrates multiple CPU intensive jobs and provides an interactive web console to monitor and manage them: easily *retrieve information of past runs and replay the execution in a click.*

Deploy Locally or on the Cloud

Thanks to its light footprint DBOS supports both local (Docker) and industrial (Kubernetes/OpenShift) deployments: *easily deploy on your laptop, your servers or any cloud (IBM, AWS, Azure, etc.)*

Share CPUs and Licenses

DBOS can run any intensive computational jobs, locally or on the cloud: *share your CPUs and licenses across multiple users and applications.*

Solver-Agnostic

DBOS can be integrated with any optimization solver (e.g. IBM CPLEX, Gurobi) and any other types of analytics technology (e.g. machine learning, artificial intelligence, cognitive): *turn data insights into business action leveraging best-in-class technology.*

DecisionBrain™

DBOS | DecisionBrain Optimization Server

Benchmark the Quality of your Solutions

With this functionality, you can easily benchmark your solution across:

· Time and versions

· Different datasets

· Different models

Analyze the results by comparing the KPIs on the integrated charts, or by downloading the KPIs and the solutions.

Easy to Integrate, Extend & Customize

To simplify the integration with existing applications, DBOS provides REST APIs and connectors for a wide range of programming languages.

DBOS supports full extensibility and customization, providing libraries and templates to quickly embed any type of data processing (Python, Java, etc).

Easy Transition to the DB Gene platform

DBOS allows a smooth transition to DB Gene platform. Transform your model into a full-blown decision-support application for business users, thanks to:

· Data management and what-if analysis capabilities

· Modern and intuitive configurable Web UI

· Configurable user access roles

Use Cases

Operational Research and Data Experts

Focus on modeling competencies, rather than on IT complexities thanks to:

· Cloud-run to share licenses and CPUs

· Local-run with a minimal memory footprint

· Monitoring and reply execution capabilities

· Predefined support for CPLEX and OPL

IT and Deployment Teams

Rely on modern technologies to quickly deliver robust solutions:

· Modular architecture, fully customizable and highly scalable

· Deployment on standard environments (OKD, Kubernetes)

· Failover capabilities

· Monitoring and reply execution capabilities