



MCenter

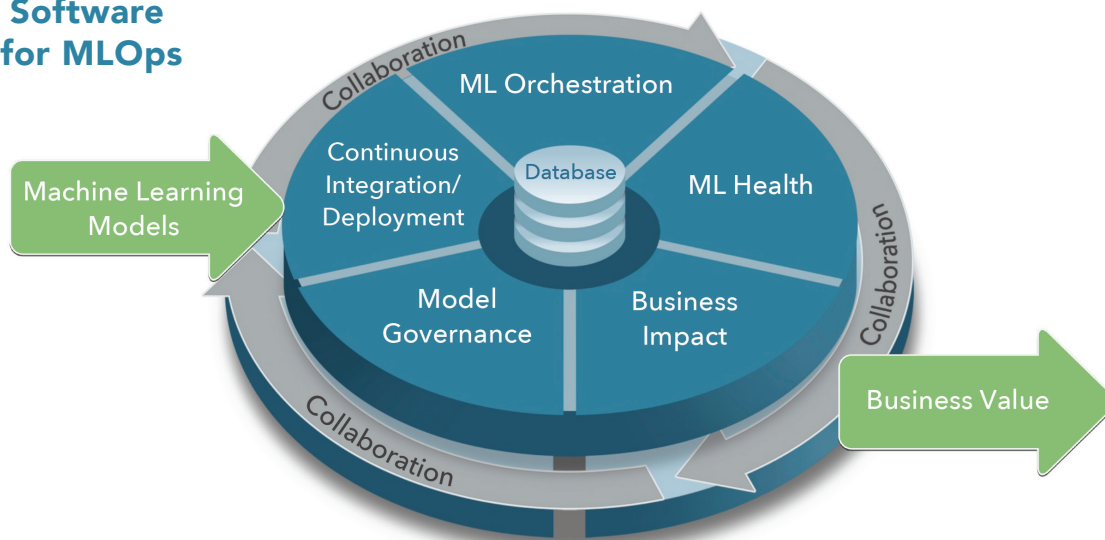
Machine Learning Operationalization
(MLOps) Software

MCenter Unlocks the Business Value of AI

Enterprise AI initiatives have largely failed to deliver the promised business advantages so far. Despite increasing investments in data science tools and personnel, few projects actually reach deployment into business applications. A new approach towards Machine Learning Operationalization, or MLOps, that embeds best practices in technology is needed to drive reliable deployment and management of AI at scale.

MCenter, ParallelM's MLOps software solution, provides a single, unified solution that enables implementation of ML across the enterprise to unlock the business value of AI. By automating complex ML deployment and management processes, MCenter helps data scientists and operations teams ensure the quality of ML model output. MCenter also enables line-of-business executives to mitigate risk, ensure compliance, and remain informed about the ROI of their AI initiatives.

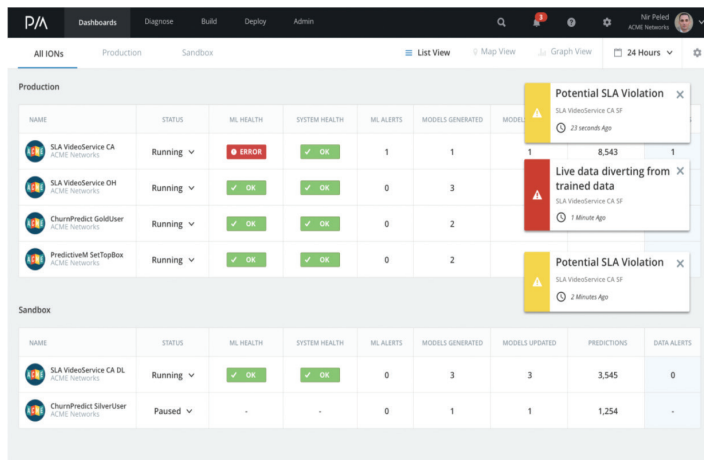
MCenter Software Solution for MLOps



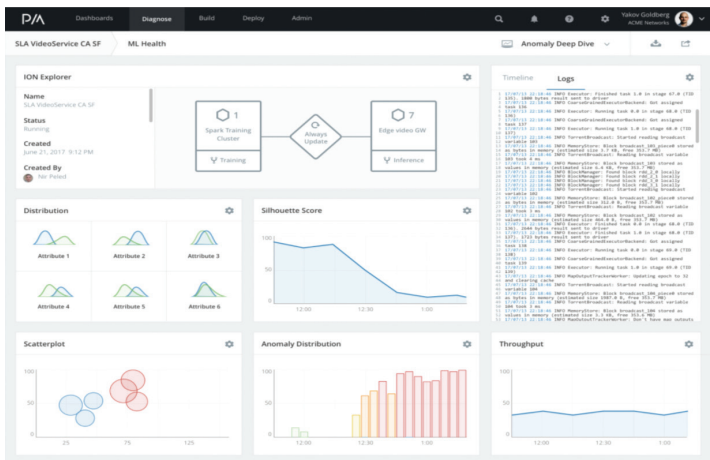
- **Deploy Continuously:** Run pipelines, workflows, and policies across diverse, distributed analytic engines with a single click. Validate new algorithms and run A/B testing with real data via 'sandboxing in production'.
- **Automated Orchestration:** Manage inter-relationships between ML pipelines and workflows; execute policies for model re-training, rollback, alerting, federated learning, and update.
- **ML Health:** Mitigate risk of wayward ML behavior. Flag inaccurate predictions, drifting models, and flawed ML pipelines. Snapshot model and data states, browse, and replay. Diagnose and resolve issues rapidly with rich visualization of ML behavior.
- **Business Impact:** Correlate ML outputs to business KPIs, assess ML ROI, drive ML investment decisions based on business outcomes.
- **Model Governance:** Ensure compliance and accelerate problem resolution. Comprehensive model lineage and audit information. Query and recreate all model and data parameters. Supports investigation into model explainability and bias.
- **Collaboration:** Single platform for data scientists, IT operations, MLOps and executive sponsors. Role-based dashboard views, continuous feedback for model optimization, and business KPIs serve specific needs of each stakeholder while making sure all are aligned towards maximizing the ROI of ML.

MCenter in Action

MCenter's role-based dashboards inform stakeholders about the performance of ML initiatives. By surfacing operational alerts and business KPIs, MCenter ensures alignment on priorities, and resolution and optimization efforts. Guided drill downs with full data and model trace information facilitate handoffs from front-line ops teams to data scientists. Advanced ML visualization combined with snapshot/replay capabilities help ensure ML continuity.



The MCenter dashboard displays ML Health, alerts, and key performance indicators



Deep diagnostic templates with data & model snapshots ensure rapid problem resolution & ML continuity

How It Works

MCenter can be deployed as a cloud service, on premises, or in hybrid scenarios. It works across distributed computing architectures that include inter-operating, diverse analytic engines and integrates with leading data science/AI platforms. Models are uploaded to the MCenter server, which communicates with local MCenter agents, to create a control and data collection layer for orchestrating and managing ML pipelines, executing policies, and running performance analytics. Users manage and visualize all ML operations via the MCenter interface.

