Informatica ModelServe

Key Benefits

- Deploy and operationalize just about any AI/ML model at scale with simple, wizard-driven approach

- Provide flexibility in building AI/ML models in most frameworks and consume them in just about any application

- Accelerate AI/ML initiatives with high-quality, trusted and governed data

- Boost productivity of data science teams

- Enhance AI/ML model performance with timely delivery of trusted data using integrated DataOps

Put AI Into Action

One Click. Serverless Deployment. Practically Any AI/ML Model. Consume in Most Applications.
With the rapid growth of structured and unstructured data, organizations want to get maximum value out of data to gain a competitive advantage and improve the customer experience. To achieve this goal, machine learning (ML) has become an important method to leverage the potential of data and allow businesses to be more innovative, efficient and sustainable. However, the success of many productive ML applications in real-world settings falls short of expectations.

According to a survey by NewVantage Partners, only 15% of leading enterprises have deployed AI capabilities into production at any scale[1]. Most leading organizations have significant AI investments, but their path to tangible business benefits is challenging.

With Informatica ModelServe, a service of Informatica's Intelligent Data Management Cloud™ (IDMC), data scientists and ML engineers can focus on solving business problems rather than worrying about model provisioning infrastructure. ModelServe operationalizes high-quality and governed AI/ML models built using just about any tool, framework or data science platform, at scale, within minutes instead of days and months. And, models can be consumed by any application, which saves time and improves productivity.

Key Features

Provides a Simple, Unified, Wizard-Driven Experience
Adopting new technology often comes with a learning curve. Informatica ModelServe provides a simple, wizard-driven experience that is easy to learn so you can provide value quickly. Informatica ModelServe simplifies ML model deployment by streamlining and automating the processes of building, registering, deploying and monitoring. This helps enterprises scale their AI adoption in minutes to make trusted decisions in real time.

---

[1] https://www.forbes.com/sites/gilpress/2020/01/13/ai-stats-news-only-146-of-firms-have-deployed-ai-capabilities-in-production/?sh=16dcfe8f2650

Build AI/ML Models in Most Frameworks and Consume in Just About Any Application

Data scientists and ML engineers use various data science and ML frameworks — such as TensorFlow, PyTorch, scikit-learn, Spark ML, Torch, Keras, ONNX, custom-built ML frameworks and more — to build their AI/ML models. However, they need a unified machine learning operationalization (MLOps) platform to register, deploy, train and operationalize the models into production. Informatica ModelServe enables data scientists and ML engineers to:

• Register the models built on just about any AI/ML framework

• Deploy the models in a serverless environment in minutes

• Monitor the performance of the deployed model

• Detect anomalies and take remedial action, like retraining the model
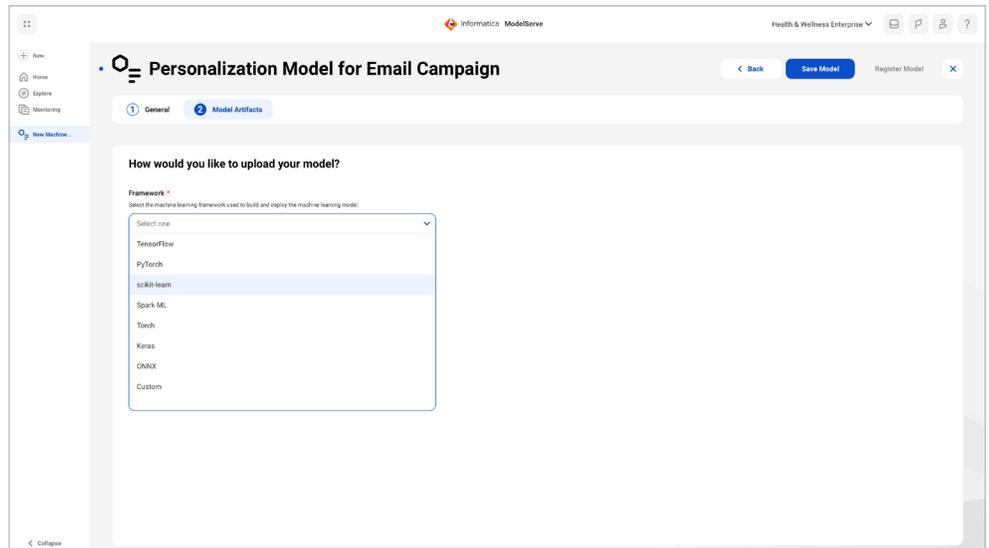
Post monitoring, the model can be consumed in practically any application.

Accelerate AI/ML Initiatives with High-Quality, Trusted and Governed data

Data is the fuel for AI/ML initiatives and a strategic differentiator for success. If an ML model is not performing, then the ML engineer will retrain the model to make it efficient. However, if the model is built on poor quality data, then the outcome will be "garbage in and garbage out." IDMC, Informatica's AI-powered, comprehensive data management platform, provides high-quality, trusted and governed data to build high-performing models for accelerating AI/ML initiatives at scale.
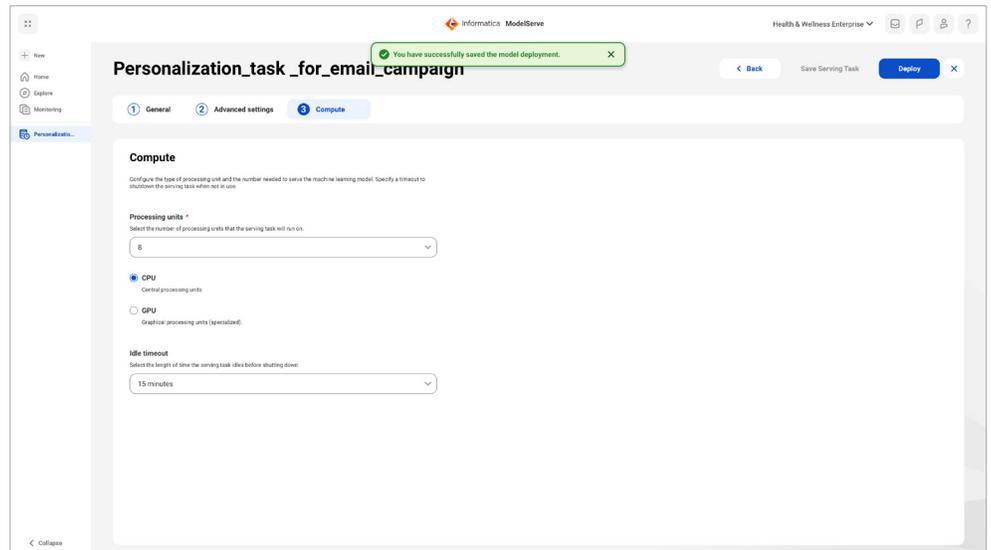
How to Operationalize Informatica ModelServe

1. **Model Registry:** Data scientists build their models using AI/ML frameworks like Python, TensorFlow, Spark ML, Keras, etc. and register the models seamlessly.
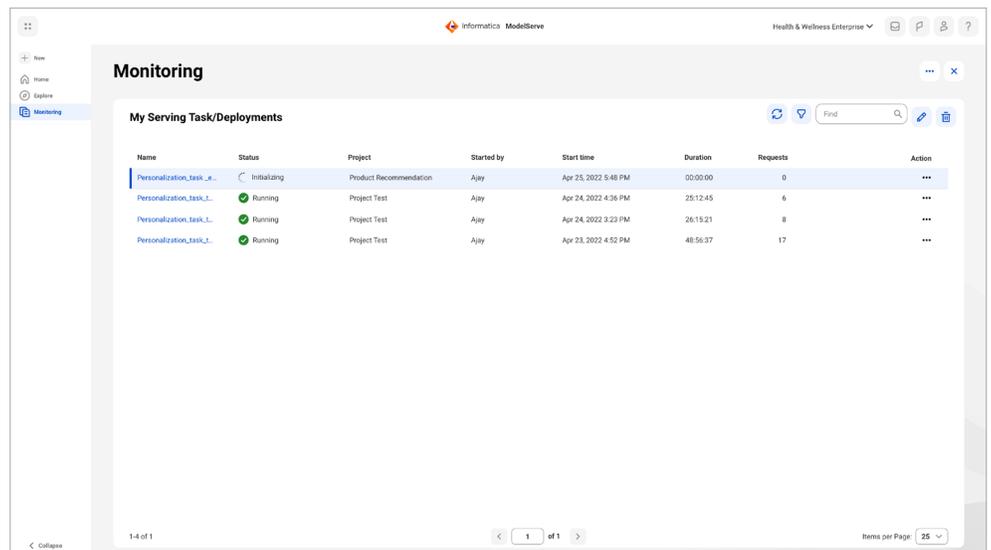

Register the model using just about any machine learning framework.

2. **Model Deployment:** Once registered, data scientists can deploy the AI/ML models in a serverless environment in minutes (versus days or weeks) without worrying about model provisioning infrastructure.

One-click serverless deployment.

3. **Model Monitoring:** With Informatica ModelServe, you can monitor the performance of the deployed model in a single pane of glass, identify inconsistencies and take the right action. Post monitoring, the model can be consumed in any application.

Monitor the deployed models for anomaly detection.

Key Benefits

Deliver Business Value for Data Science Projects

Businesses need powerful capabilities to develop and operate sophisticated ML models in production that drive mission-critical business applications. This extracts unique value from potentially massive amounts of data through data science projects. Informatica ModelServe improves the productivity of data science teams by streamlining and automating the process of building, deploying and monitoring ML models, which delivers ROI for data science projects.

Improve the Efficiency of the Data Science Team

Lack of available data science talent can lead to many challenges and long-term impacts. In an enterprise, data scientists build models using the frameworks and languages with which they are comfortable and fluent. However, the operations teams might not be familiar with these new AI/ML frameworks and are inclined to work with traditional data integration tools. This can cause bottlenecks in operationalizing the models into production.

Informatica ModelServe provides flexibility for data scientists and ML engineers to build their AI/ML models in just about any framework and consume them in most applications. This improves the efficiency of the data science team with better collaboration between other stakeholders, including data scientists, ML engineers, data engineers and IT operations.

Accelerate AI/ML Initiatives With High-Performing Data-Centric Models

For years, data scientists and ML engineers have been using the traditional practice of training ML models to improve model accuracy and performance. However, the model's performance will not improve if the quality of the data used for model building is substandard. With a data-centric approach to model development, IDMC provides an AI-powered, end-to-end data management platform to build high-performing models that significantly improve business insights and accelerate AI/ML initiatives.

To discover additional resources and connect with our team, please visit www.informatica.com/ModelServe.