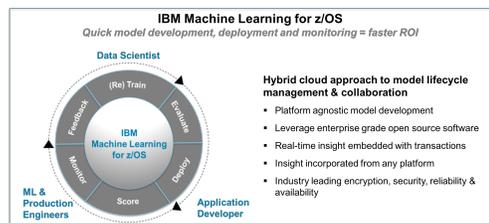


# IBM Machine Learning for z/OS V1.1.0.3

IBM Machine Learning for z/OS

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## Machine Learning Lifecycle

IBM Machine Learning for z/OS automates and manages the complete lifecycle of machine learning workflow to enable quick and easy “roll your own” model building across the enterprise.

## Synergy with IBM Z

IBM Machine Learning for z/OS takes full advantage of the high availability, reliability and scalability that are hall marks of IBM Z. It supports and leverages the new features available on IBM z14.

## Enterprise security and governance

IBM Machine Learning for z/OS integrates with existing IBM Z security behind the firewall, and provides state of the art governance for all assets on the platform.

## What's New in v1.1.0.3

- **Python and Scikit-learn.** Data scientists and other collaborators can use Python and scikit-learn packages to create, save and train machine learning models. Machine Learning for z/OS (ML for z/OS) leverages the new IBM Open Data Analytics for z/OS (“IzODA”) to support Python and scikit-learn.
- **High Availability for scoring service.** Multiple scoring service clusters can now be set up in one ML for z/OS system. Each scoring cluster can contain multiple scoring service instances across LPARs to ensure high availability as well as share the scoring workload for scalability. ML for z/OS leverages the Sysplex Distributor and Shareport technologies on IBM Z to support this feature.
- **Evaluation, Monitoring and Feedback Data Ingestion for PMML Models.** Existing PMML models that are imported into ML for z/OS will benefit from the same model lifecycle management characteristics as those developed on the platform, including deployment, scoring, monitoring, etc.
- **Batch Deployment and Scoring support.** Models can now be deployed for batch scoring in addition to online scoring.
- **Model Training off IBM Z for Linux.** Provides users an option to train ML models on Linux by leveraging the embedded SparkML runtime. Trained models can then be saved for deployment on IBM z/OS.
- **Spark 2.1.1 Support.** ML for z/OS supports Spark 2.1.1 as SparkML runtime as part of IBM Open Data Analytics for z/OS (IzODA).
- **Visual Model Builder Enhancement.** Introduces Automatic Data Preparation (ADP) to simplify the data preparation work for data scientist or data engineers. ADP has the capability to automatically fill missing values, normalize data, convert string/categorical data types to numeric data types. Support more transformers and estimators in visual model builder.
- **Multi-version support for ML models.** ML for z/OS users can deploy a new version of a model without any impact on applications.
- **On demand model retraining.** When performance of a model degrades, ML for z/OS allows users to trace back to the visual model builder or notebook. Users can review the model creation process, taking action to modify it or leverage new feedback data to retrain the model, save the retrained model as a new version and redeploy it.
- **Model governance - Role Based user Access Control to ML models.** ML for z/OS defined multiple roles including model developer, model administrator, application developer, system administrator. Each role embodies select privileges. This enables effective collaboration across various roles on ML for z/OS and concurrently allows for better governance on models and data.