

ClearScape Analytics ModelOps 7 Overview

ClearScape Analytics ModelOps

End-to-end lifecycle management and governance of AI/ML models

Feature catalog

Improve data preparation productivity by using Feast (open-source feature store) connector to Teradata to reuse features across models

Model deployment

Efficiently move analytical models from labs into production with no-code validation and monitoring; now compatible with SAS

Lifecycle management

Simplify model lifecycle management by enabling reusability and explainability

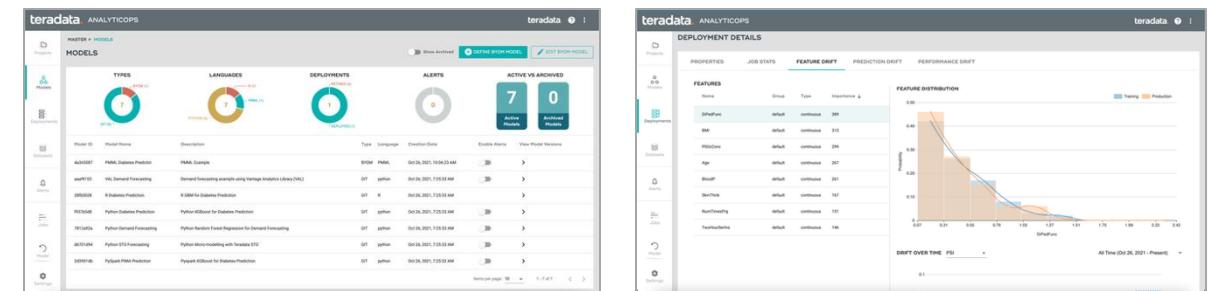
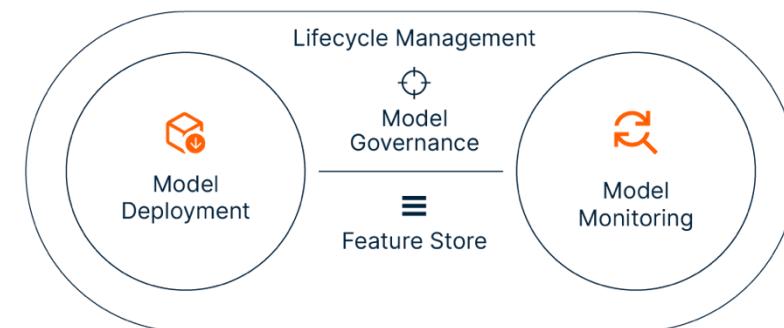
Model governance

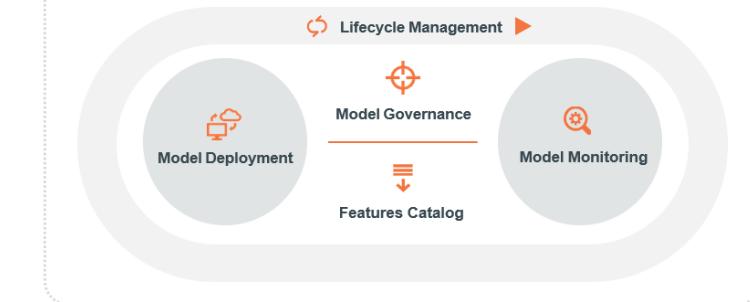
Enable robust governance that ensures transparency, auditability, and compliance throughout the model lifecycle

Model monitoring

Automatically monitor model performance and feature drift with zero configuration alerts

ModelOps automation capabilities





Feature Catalog

< Preview data		ENTITY & TARGET QUERY PREVIEW ENTITY, FEATURE & TARGET QUERY PREVIEW	
Query		<pre> 1 SELECT F."PatientId", F."NumTimesProg", F."PigicConc", F."BloodP", F."SkinThick", F."TwoHourSerIns", F."BMI", F. 2 "DiPedFunc", F."Age", E."HasDiabetes" 3 FROM SELECT * FROM pe100005.pima_patient_features F 4 JOIN (SELECT * FROM pe100005.pima_patient_diagnoses E ON F."PatientId" = E."PatientId" </pre>	
PatientId	NumTimesProg	PigicConc	BloodP
273	1	71	78
699	4	118	70
461	1	71	62
568	4	154	72
392	1	131	64
10 records sample		BMI	DiPedFunc
23.2		0.422	21
44.5		0.904	26
21.8		0.416	26
31.3		0.338	37
23.7		0.389	21

Model Governance

ID	Name	Description	Type	Language	Enable Alerts	Created at
53bf1ca	Bert geni Multilingual	nlpown/bert-base-multilingual-uncased-sentiment	BYOM	ONNX		Jun 7, 2023, 10:50:41 PM
6d5d228	OpenAI clip model	openai/clip-vit-large-patch14	BYOM	ONNX		Apr 27, 2023, 10:02:05 AM
7b3f71f	CNINX GenAI test	bert-large-uncased	BYOM	ONNX		Apr 25, 2023, 4:11:20 PM
8fa1905	Datalku	HuggingFace import stubs@2a19105ab303ab8a20991176953ae9fa	BYOM	python		Apr 17, 2023, 12:32:43 PM
ef0ff49	SAS	Scoring Accelerator for Teradata	BYOM	SAS		Apr 12, 2023, 12:04:53 PM
34c3742	H2O Mop Diabetes	test BYOM Mop	BYOM	H2O		Aug 3, 2022, 4:07:29 PM
60aa47c	CNINX Diabetes	test for BYOM ONNX	BYOM	ONNX		Aug 3, 2022, 4:07:09 PM
7b3f4df	PMML Diabetes	test for BYOM	BYOM	PMML		Aug 3, 2022, 4:06:51 PM
5af9e24	Python Diabetes Prediction	Python XGBoost for Diabetes Prediction	GIT	python		Jul 18, 2023, 12:18:30 PM

ModelOps Capabilities

Model Deployment

PROJECTS > MODELS > PYTHON DIABETES PREDICTION > LIFECYCLE

LIFECYCLE ARTIFACTS

MODEL VERSION DETAILS

EVALUATION DETAILS

DEPLOYMENT DETAILS

BYOM no Code

In-database functions

Open Analytics

Lifecycle Management

PROJECTS > MODELS > PYTHON DIABETES PREDICTION > LIFECYCLE

LIFECYCLE ARTIFACTS

MODEL VERSION DETAILS

EVALUATION DETAILS

DEPLOYMENT DETAILS

Model Monitoring



ClearScape Analytics ModelOps

Main Features and capabilities



End-to-End Model Lifecycle Management

- Standardize the entire AI/ML lifecycle and enable collaboration across teams
- Offers various interfaces suitable for different user roles, including easy-to-use no-code interfaces for business analysts
- A development toolkit for data scientists, and an operational dashboard for IT teams to ensure a seamless experience throughout the entire deployment process



Automated deployment

- With ClearScape Analytics ModelOps, you can now **deploy in days instead of months.**
- It is a ready-to-go solution that provides an automated way to validate and deploy models
- Efficiently move your models from the lab into your chosen production environment and reduce the time it takes to generate business value from your AI/ML investments



Model Monitoring

- Provides data scientists with a single view for continuous and automated monitoring of data drift and model performance
- Addresses IT teams' concerns by applying the same enterprise policies of the data warehouse to models in production, including data quality compliance, integration with other services and APIs, performance monitoring, availability monitoring, and access controls

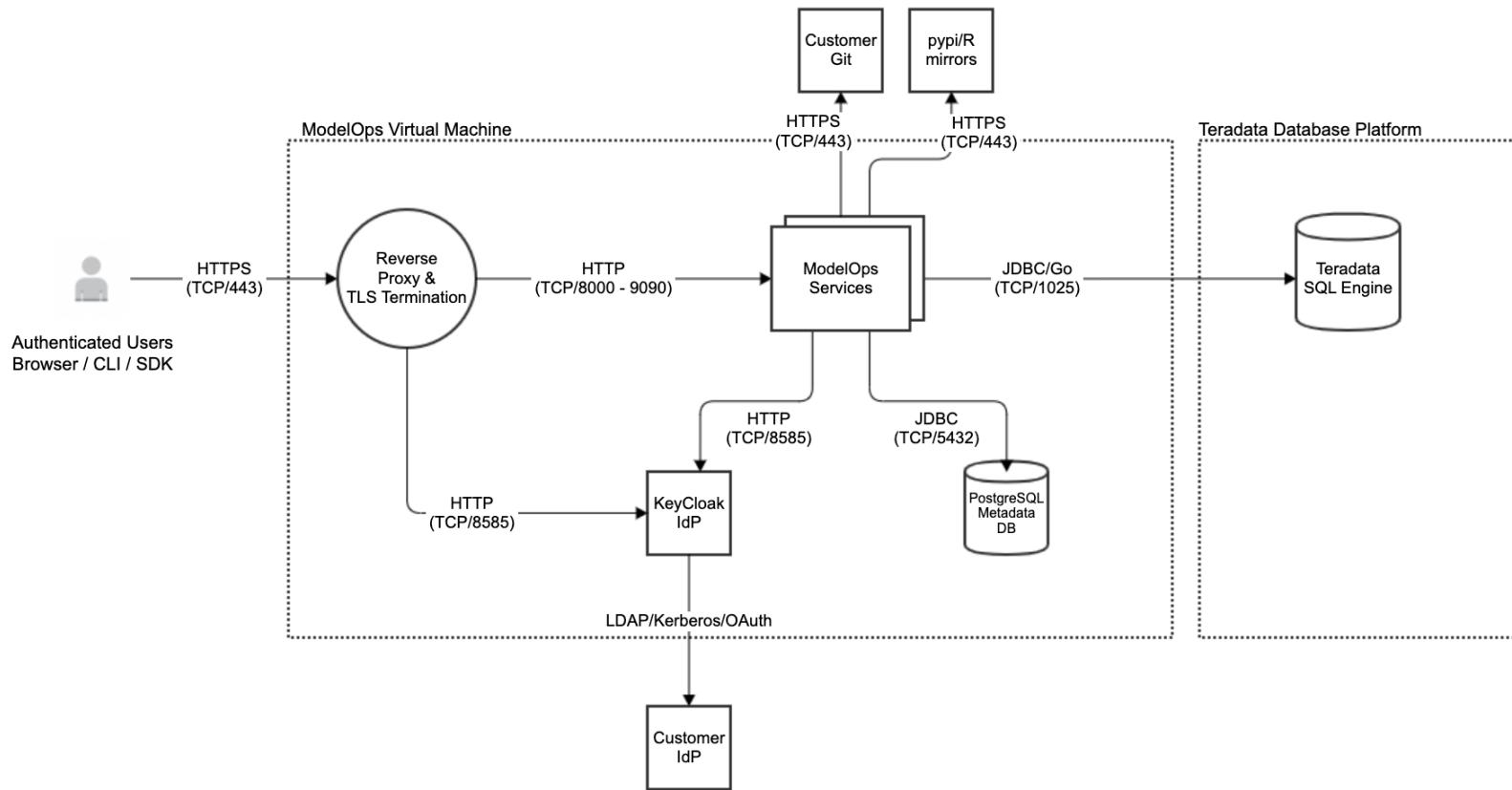


Governance for Responsible AI

- Provides a simple user interface showing a wealth of information on all models across the AI lifecycle
- Automatically provides detailed audit chains for every dataset used on every model job
- Makes Model Governance effective and easy to implement

Model Ops Architecture

ModelOps Architecture on Customer VM



Additional Information

Official docs documentation site - [link](#)

ModelOps Quickstarts: [BYOM](#) , [GIT](#) & [Airflow workflows](#)

ClearScape Analytics ModelOps Brief - [link](#)

ClearScape Analytics ModelOps Whitepaper - [link](#)

Open to all your users:

ClearScape Analytics Experience: <http://clearscape.teradata.com/sign-in>

Demo environment with Vantage Express, Jupyterlab, and ModelOps for 40 hours per month



ModelOps 5-minute video

teradata.