



Acumos AI

Introduction To Acumos AI

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Agenda

- Introducing Acumos AI
- Why Acumos AI
- What is the Architecture
- Quick Overview
- Platform and model seed code
- Project Infrastructure
- Project organization





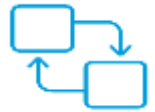
Introducing Acumos AI



A Collaborative Framework under Linux Foundation



Form a Distributed AI Marketplace and Community



Leverage Interoperable Microservices



Simplify the Training, Evaluation, and Deployment



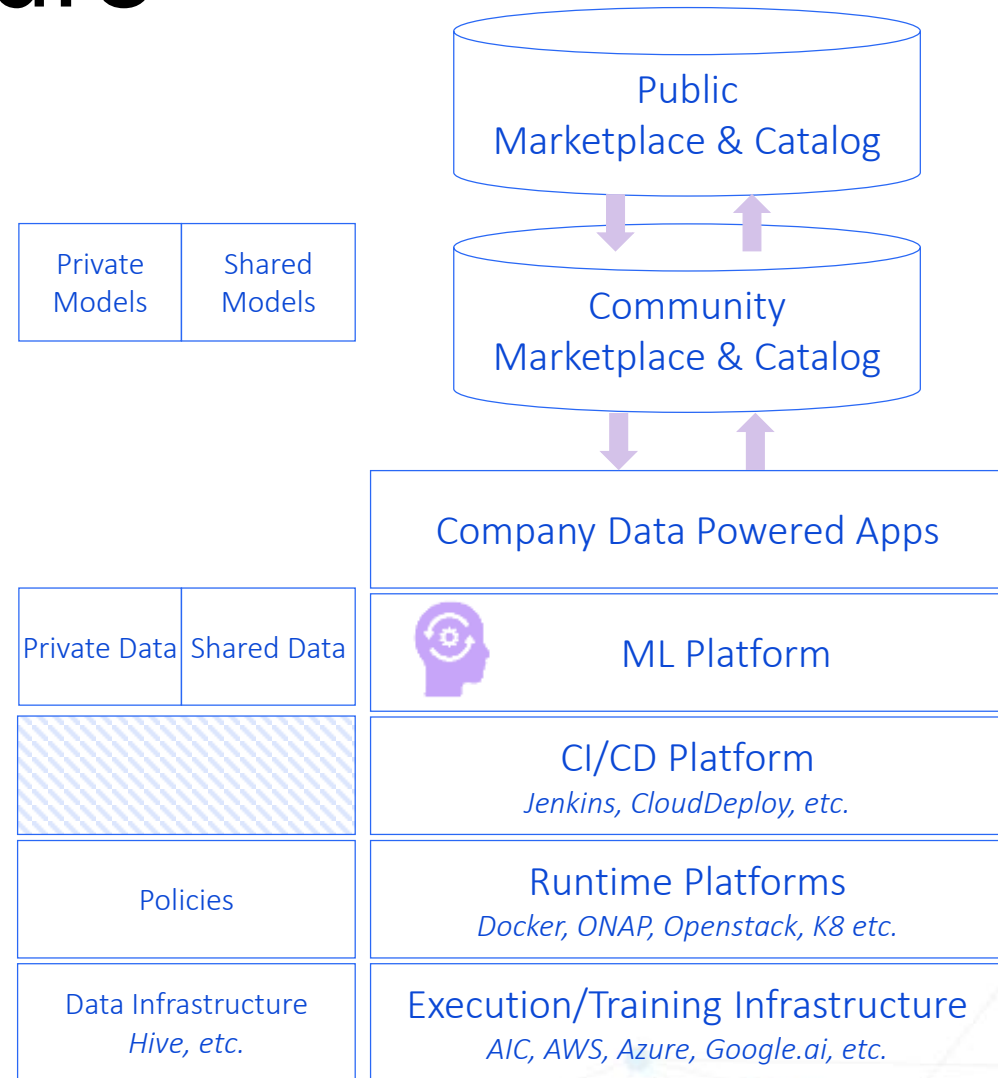
Why Acumos AI

- Grow awareness of AI/ML/DL as software tools
- Promote the use of AI across all parts of the company
- Increase communications and reduce redundancy
- Unify around a common catalog
 - Internal
 - External Partners
- Simplify the use models and predictors by IT and OPS.
- Provide an educational and a graduated experience for users



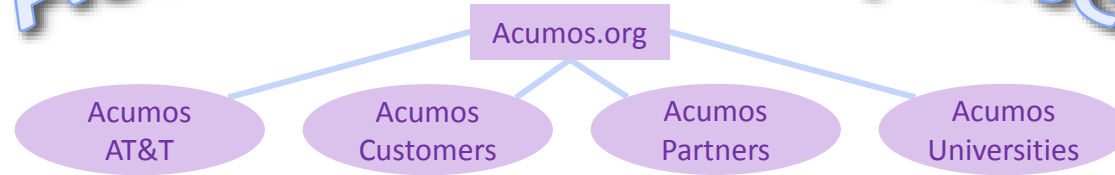
What is the Architecture

- Portable Onboarding Source Library
- Model Import and Microservice Creation
- Microservice Repository Manager
- Design Studio
- Federated Catalog Sharing
- Microservice Packager
- Marketplace Portal
- Cloud Deployment Tooling
- Portable Data Broker
- Training Client*
- Training Cache*
- License Manager*



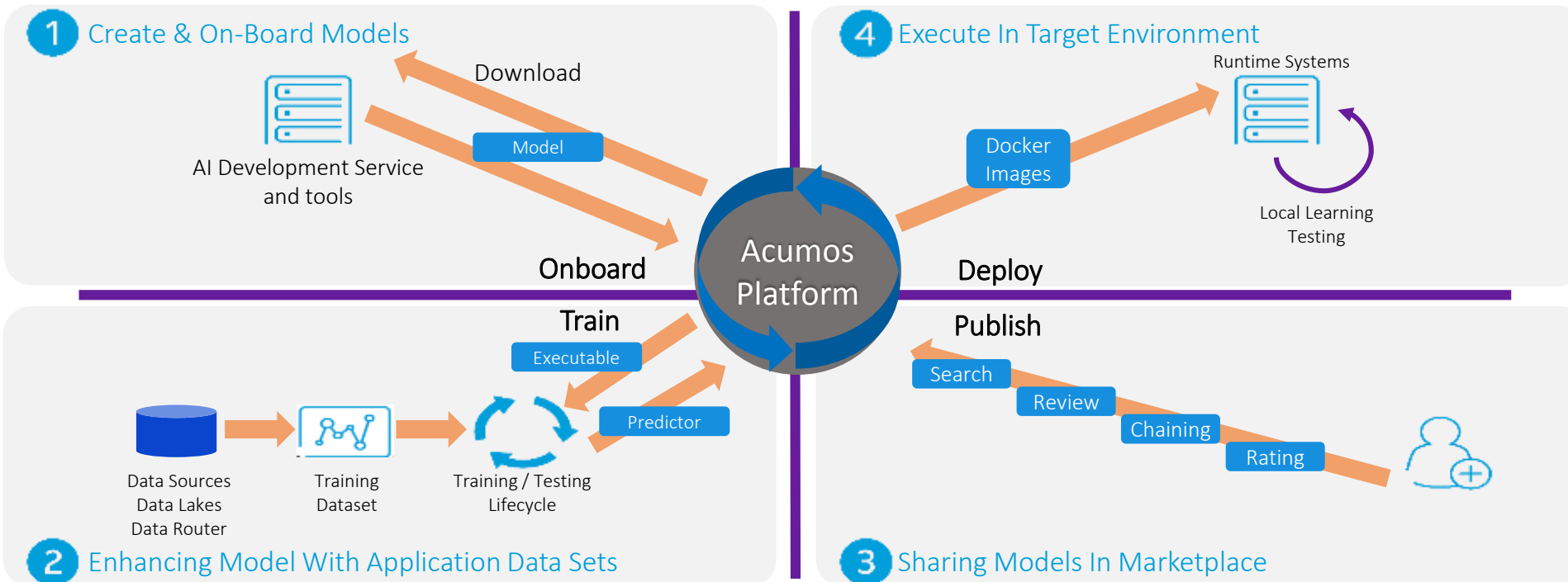
Quick Overview

Acumos Marketplace



Open Source

- SciKit
- Tensor Flow
- R
- H2O
- Python
- Java
- Docker-CE
- MariaDB
- Hippo CMS
- Maven/Nexus
- Sonar/ FOSSology
- Robot Framework
- Git/Gerrit/Jenkins/Robot
- ONAP/OpenStack



Model collaboration through Acumos

- The goal
 - A vibrant ecosystem of collaboratively developed AI solutions
- The method:
 - establish ways of working for the ecosystem, directly supporting collaborative relationships between modelers and model users
 - processes, best practices, supporting infrastructure
 - develop a roadmap of features for the Acumos platform
 - e.g. model training, training data source creation and curation, model versioning, processes for iterative collaboration on models and solutions

<https://wiki.acumos.org/display/AC/Developer+Wiki>



Seed code

- How to learn about it
 - docs.acumos.org, wiki.acumos.org
- How to get it
 - gerrit.acumos.org
- How to deploy it
 - [One Click Deploy User Guide](#)
- How to use it
 - [User Guides at docs.acumos.org](#)
- How to enhance it
 - [Developer Gerrit/CI/CD Resources](#), [Developer Wiki](#)



Acumos project infrastructure

- Collaboration and communication tools
 - [Jira](#), [Wiki](#), [git and Gerrit](#), [mail lists](#), [Slack](#), IRC
- Build, test, and repository tools
 - [Jenkins](#), [Nexus repositories](#)
- Model collaboration tools
 - [On-Boarding](#), [Catalog](#) and [Sharing](#), [Publishing](#), [Java Client](#), [Python Client](#), [R Client](#), [Design Studio](#), [Generic Model Runner](#)
- Community federation tools and much more

<https://wiki.acumos.org/display/INFRA>



Acumos project organization

- Acumos in the LF Deep Learning Umbrella project
- Acumos Board and Board committees
- Technical steering committee
 - Acumos project/community goals, policies, practices, processes
- Acumos component and model projects
 - Working proposal: [Acumos Architecture Mapping to Repos Jira etc](#)
 - Promote teams with comprehensive and cohesive technical focus
- Modeler and model user community
 - enable growth of the federated model marketplace and communities of modelers and model users

