

Introduction to AIOps, Project AI4CI and Operate First



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Agenda

- Introduction to -
 - Operate First
 - **AI Ops**
 - Project AI4CI
- **Hands on Workshop**

Operate First



Operate First is a concept to incorporate operational experience into software development, by extending development to include operating, testing, and proving code in a production environment.

Ideally Operate First becomes a partner to Upstream First as a basic tenet of our workflow."

What is AIOps?

AIOps

AI + DevOps

Artificial Intelligence
for IT Operations



Dev & Ops : **DevOps**

Audience Interaction

Raise your hands if you are familiar with Data Scientist or have worked with AI/ML before

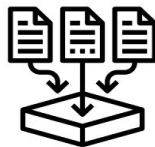
Audience Interaction

Raise your hands if you are familiar with **Jupyter
Notebooks**

AI4CI supports CI/CD and software dev processes

What is AI4CI?

Collection of **Open Source AIOps tools** including scripts, notebooks, pipelines, dashboards and data sources.



Data collection

Collection of open operations data from Kubernetes testing platforms eg: Testgrid, Github, and Prow.



Metrics

Collects metrics and **KPIs** and visualization dashboards.



ML Services

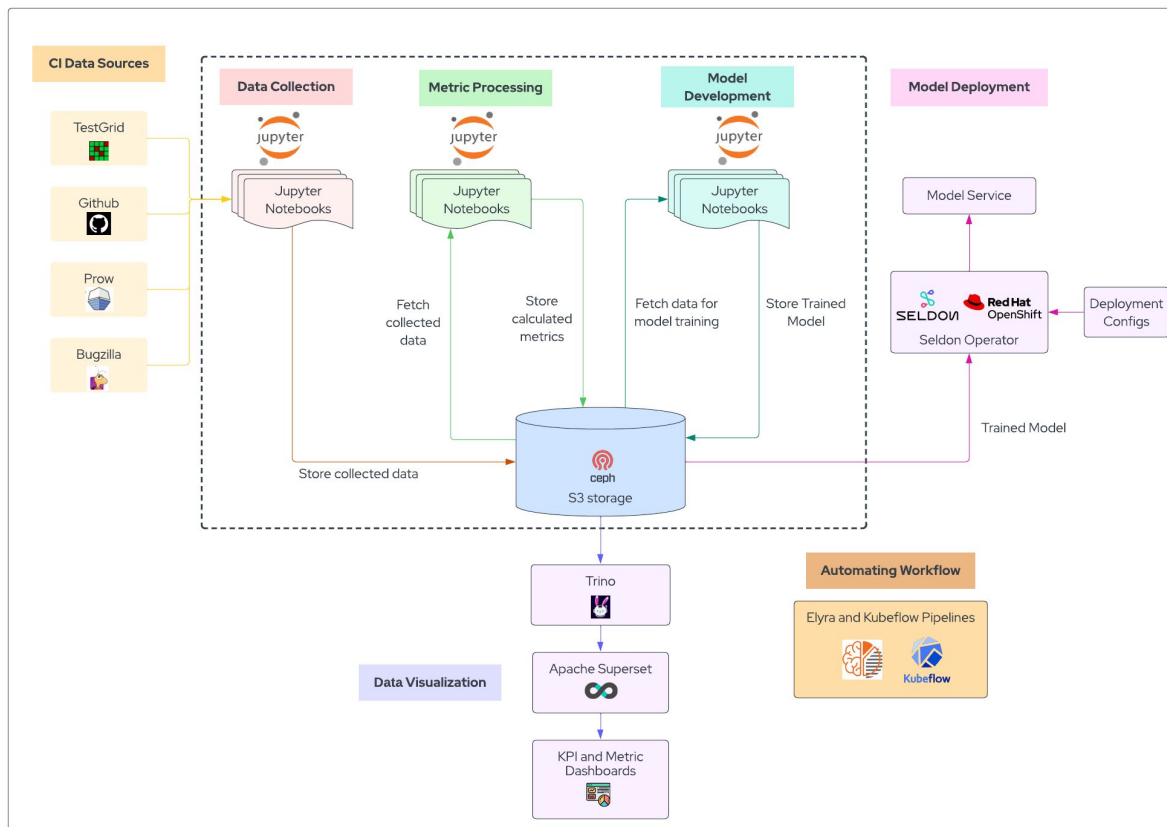
ML services which can support CI/CD processes.



Open source AIOps template

Resource for open source AIOps communities (notebooks, scripts, automated ML pipelines, dashboards, services tools)

AI4CI - Architecture Diagram



Next Steps

Workshop Materials:

Follow this link:

<https://aicoe-aiops.github.io/ocp-ci-analysis/docs/workshop/prerequisites.html>



Audience Interaction

Raise your hands if you are familiar with Python

Audience Interaction

Raise your hands if you are familiar with **Git**

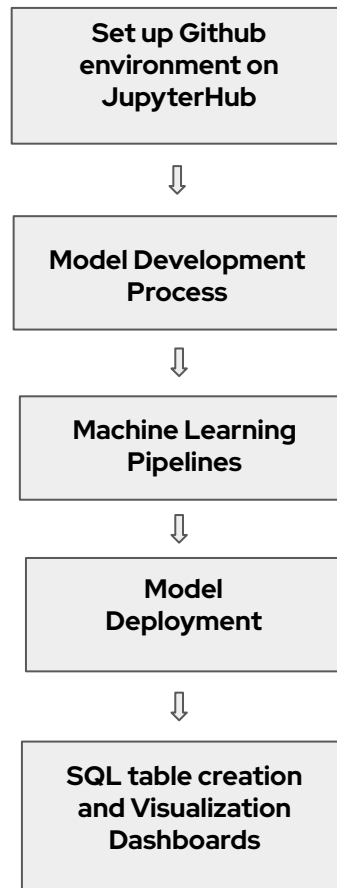
Audience Interaction

Raise your hands if you are familiar with **Command Line Terminal**

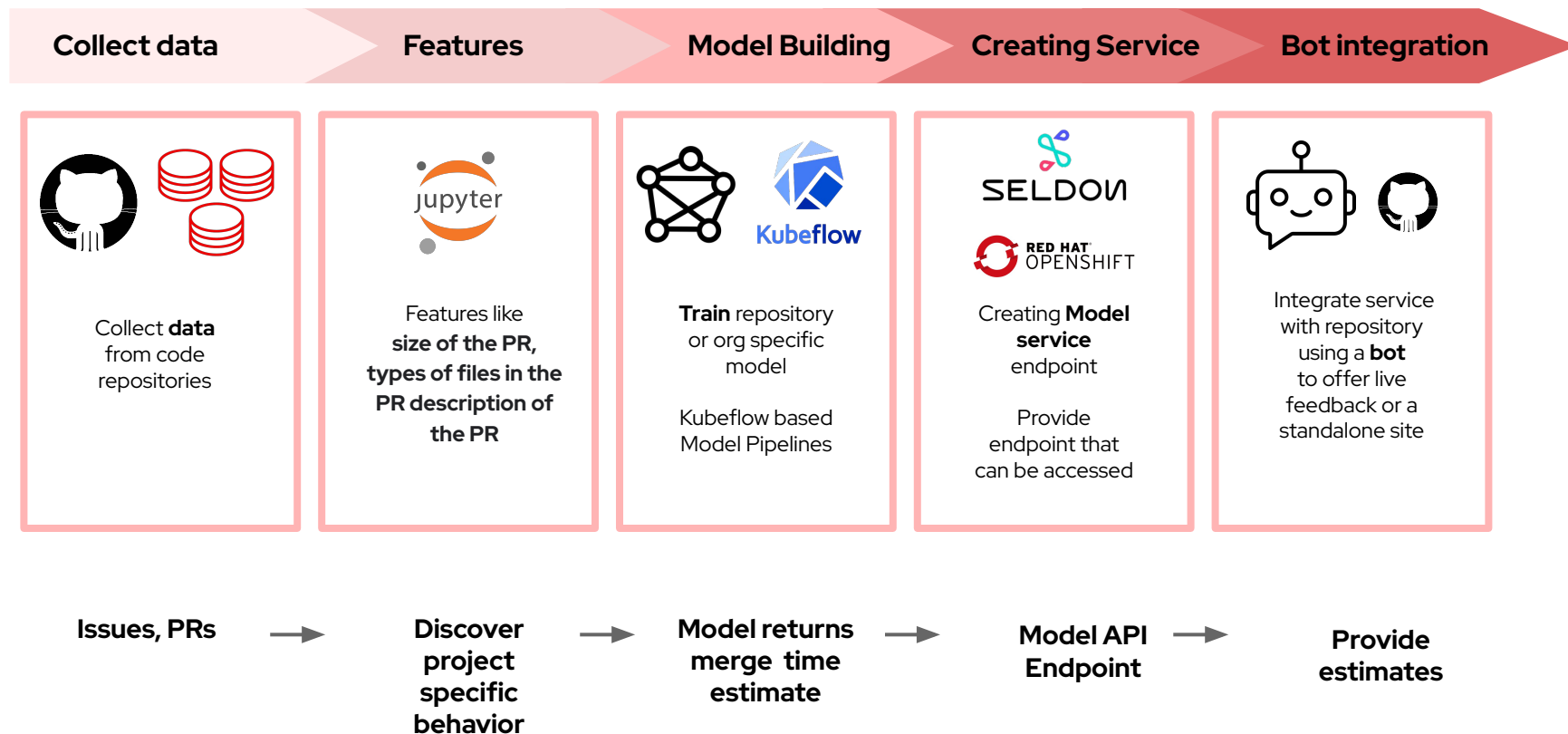
What's happening this afternoon?

Follow an end-to-end process of creating an AIOps tool:

We start with setting up the environment and go through the whole process of building the model, deploying it and visualizing metrics



Current workflow: Github time to merge prediction service



Next Steps

Workshop Materials:

Follow this link:

