

Building a Reproducible Model Workflow Cont.

Final Pipeline, Release and Deploy





01

Final Pipeline

Download, Preprocessing, Data Checks, Data Segregation, Model Training, Evaluate 02

Release Basics

One repository vs multiples ones

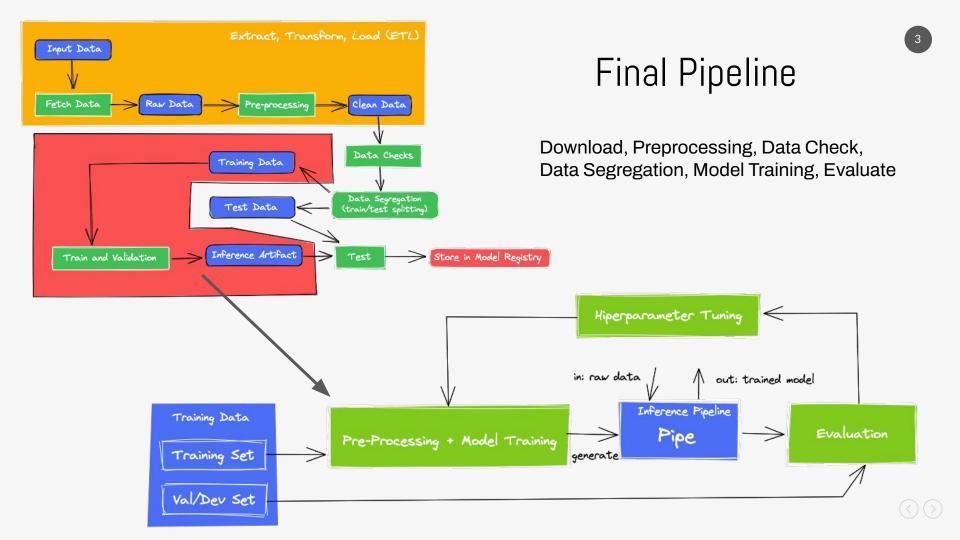
Deployment: The operation of taking an inference artifact and putting it into production, so it can serve results to stakeholders and customers.

03

Release for Reproducibility
Semantic version, remote execution

04

Deploy with MLflowOnline vs Offline



ML Pipeline in MLFlow

A project that calls other projects (the components)



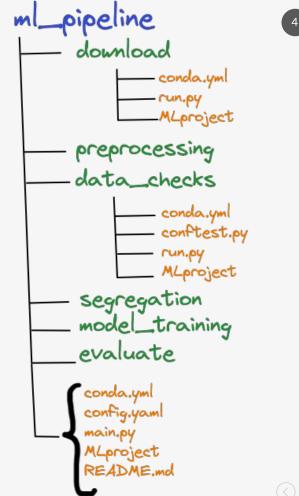
One repository

For simplicity



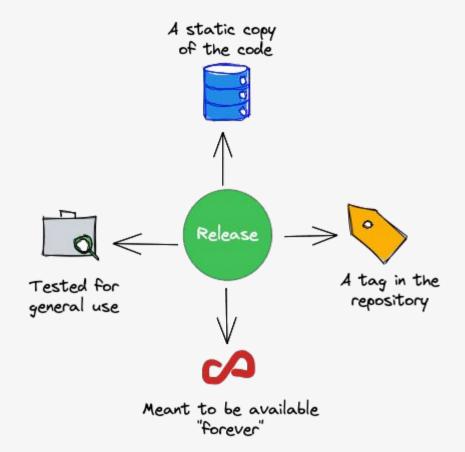
Another option

When your operations scale up, you will want one or more repos for the components and one or more repos for each project



What is a release?

A release is a static copy of the code that reflects the state of the code at a particular point in time. It has a version attached to it, and a tag. The tag can be used to restore the repository (or a local copy of the code in the repository) to the state it was when the release was cut.



Semantic Versioning

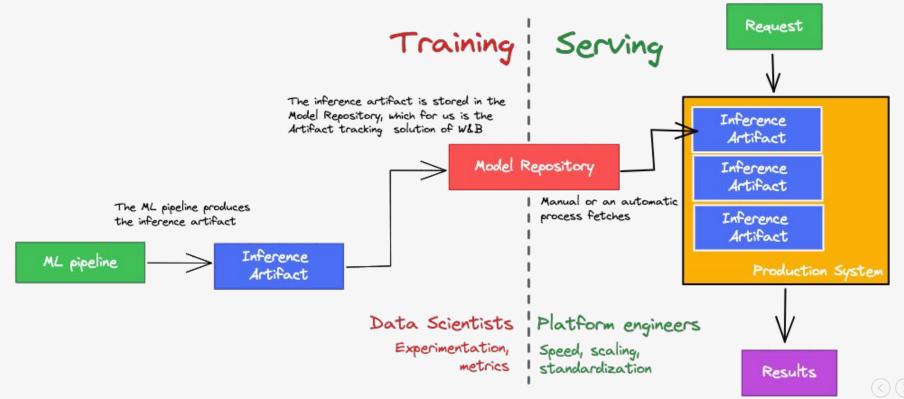




Major 1.4.13

Patch Bug fixes or small changes, backward compatible

Deployment



Using a model in production: Online vs Offline Inference



Here, we are interested in providing answers one at the time, typically through an API

Here, we are receiving several requests at once (a batch), and we want to process the entire batch in the shortest possible time.