

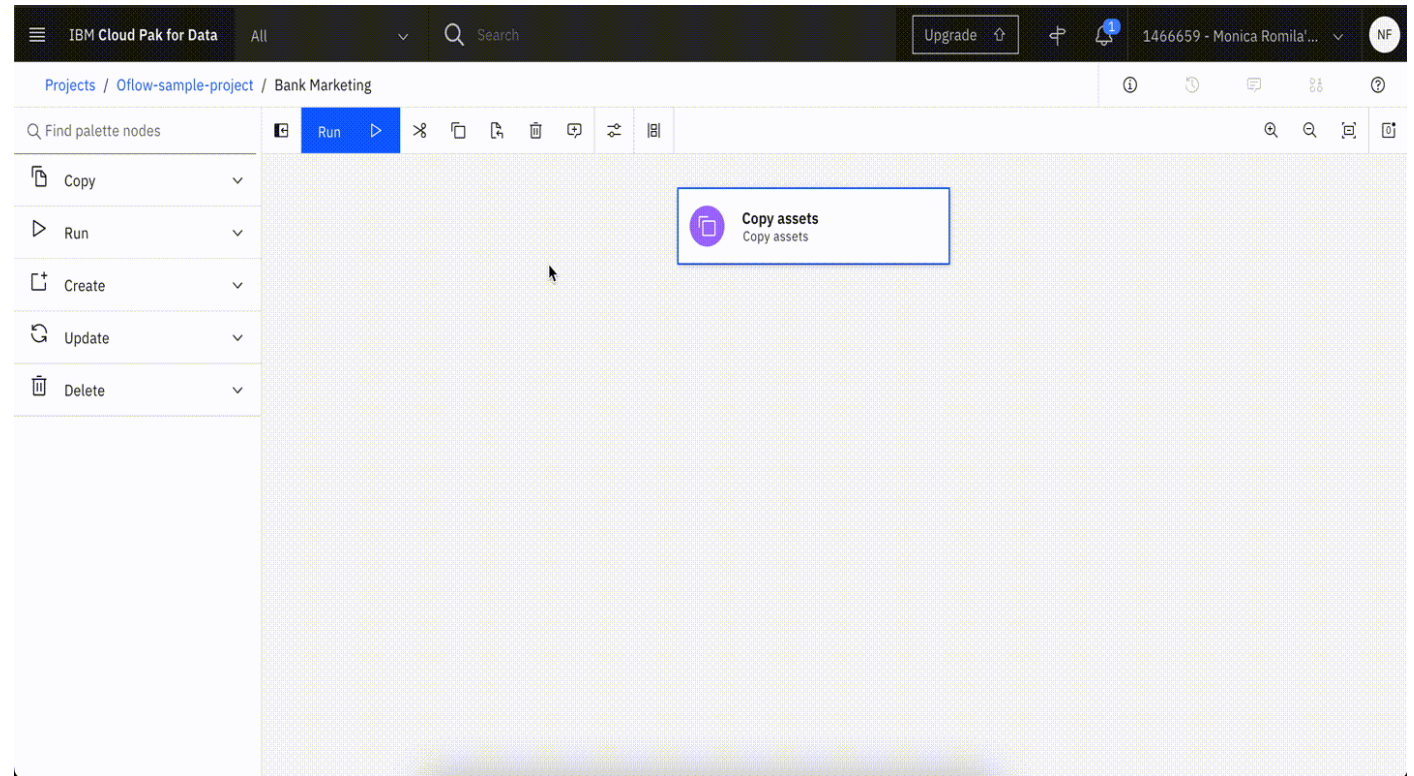
Watson Studio Pipelines

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Watson Studio Pipelines Beta and CPD Release

Watson Studio Pipelines allows users to create repeatable and scheduled flows that automate notebook, data refinery, and machine learning pipeline. It is [built off of Kubeflow pipelines on Tekton runtime](#) and is fully integrated into the Watson Studio platform, allowing users to combine tools including:

- Notebooks
- [Data refinery](#) flows
- [AutoAI](#) experiments
- Web service / online deployments
- Batch deployments
- Import and export of Project / Space assets
- Scheduled Jobs
- DataStage Flows
- Pipeline Terminations
- Wait for any task



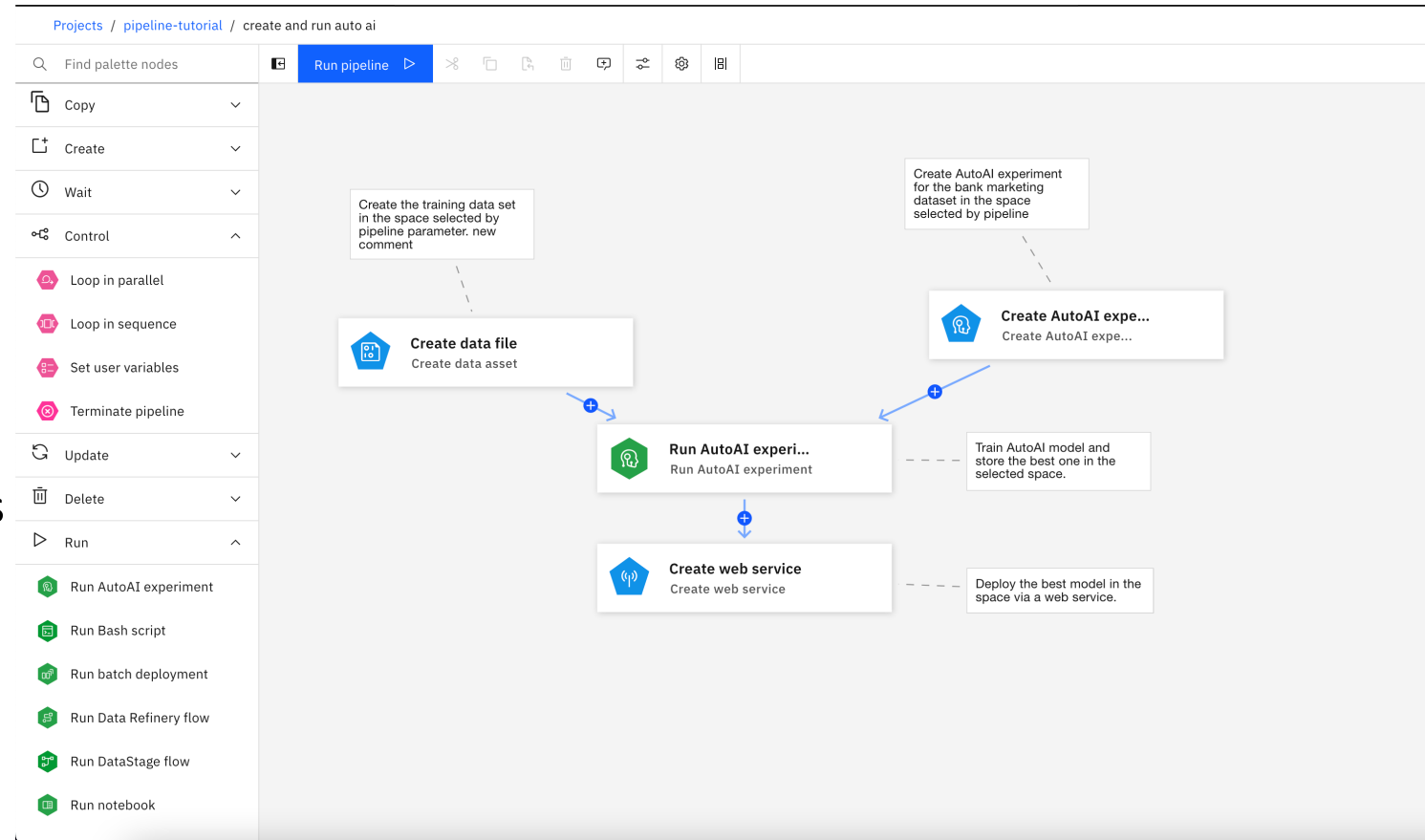
Watson Studio Pipelines Alpha features

Watson Studio Pipelines additional alpha features including:

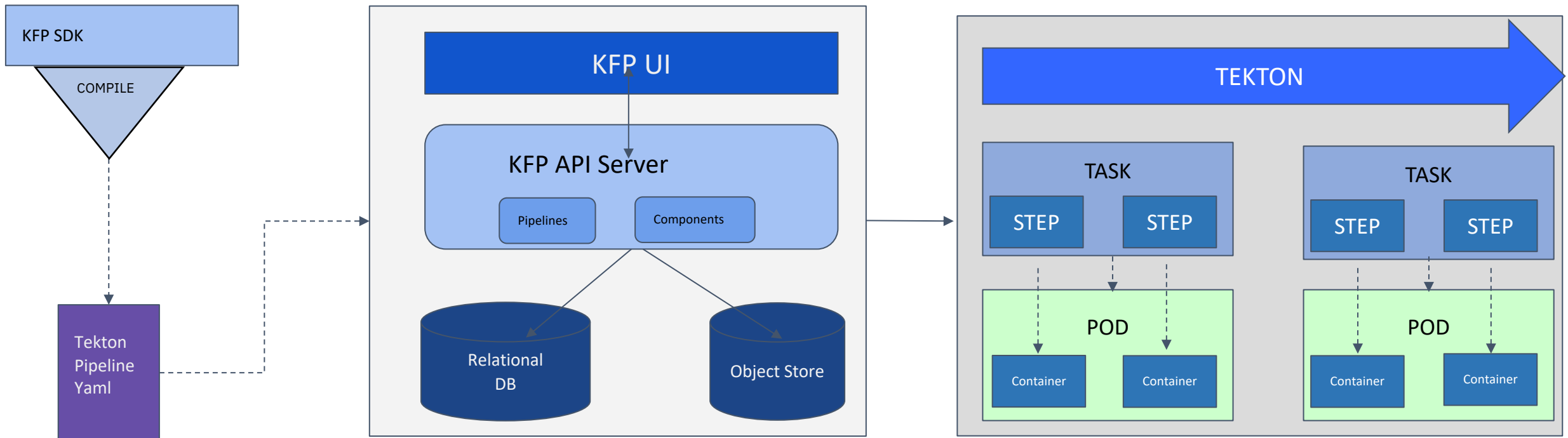
- Pipeline loops (both sequential and parallel)
- User bash script
- Wait for files
- Global User variables
- Conditions

Upcoming **Watson Studio Pipelines** features

- User Python script
- User custom components



Pipelines – Integration with Kubeflow Pipelines and Tekton

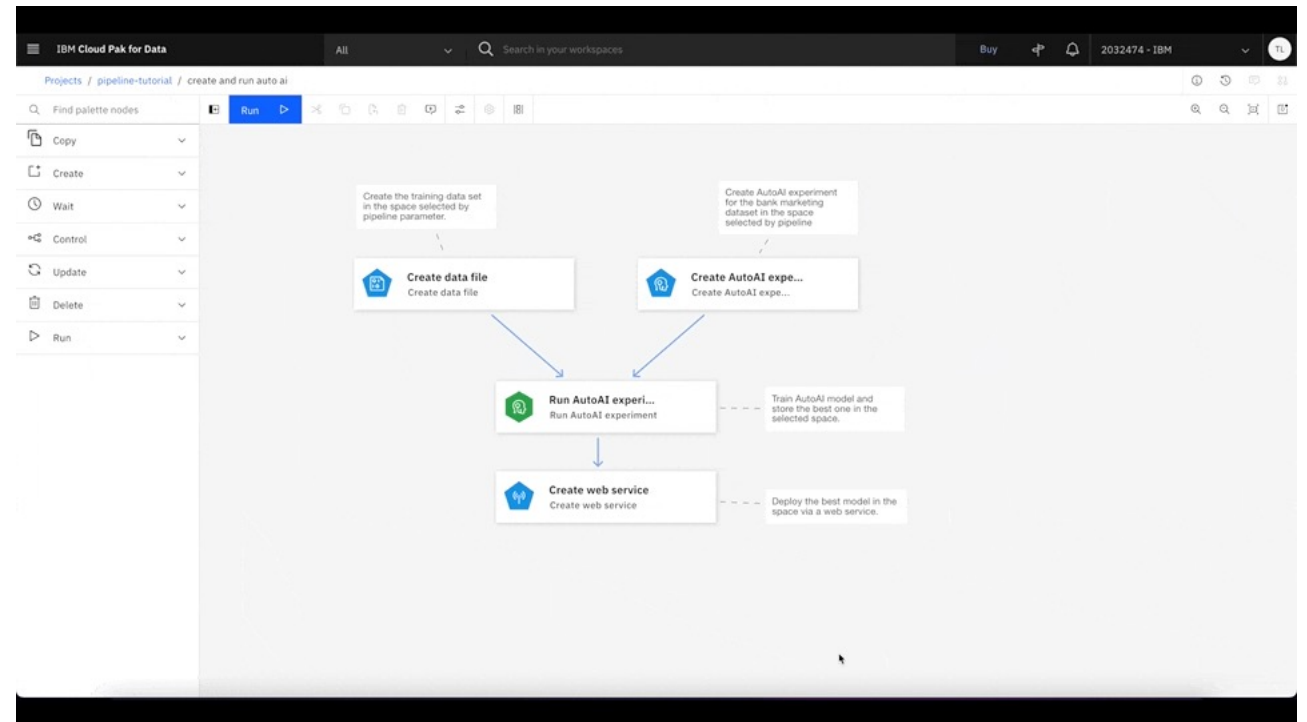


Pluggable Components



Demo – Automate end to end ML life cycles with Watson Studio pipelines

1. Load Golden Bank Dataset into the Cloud Object Storage for AutoAI.
2. Create a binary classification AutoAI experiment to determine whether the likelihood of a mortgage approval
3. Run the AutoAI experiment to find the best Hyperparameters for the binary classification model.
4. Publish and deploy the best trained model to Watson Machine Learning Deployment Space
5. Test the new model is working as a web service



Hands on – Automate workflows with Watson Studio pipelines from scratch

1. Build automation pipelines from scratch using the pre-defined Watson Studio Pipeline components.
2. Creates a new Watson Studio deployment space for dataset and model deployment.
3. Move project dataset to the new deployment space for model deployment consumption.

