

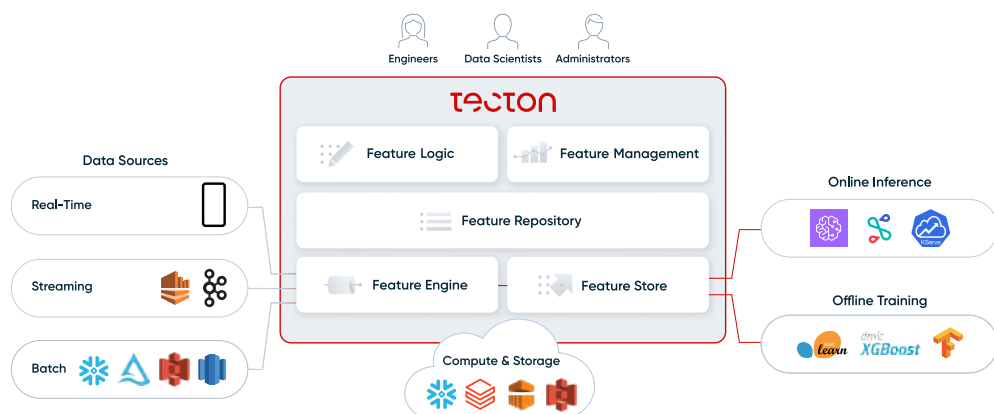
# Choosing the Right Feature Store: Feast or Tecton?

## OVERVIEW

### TACTON

#### Tecton is a managed Feature Platform

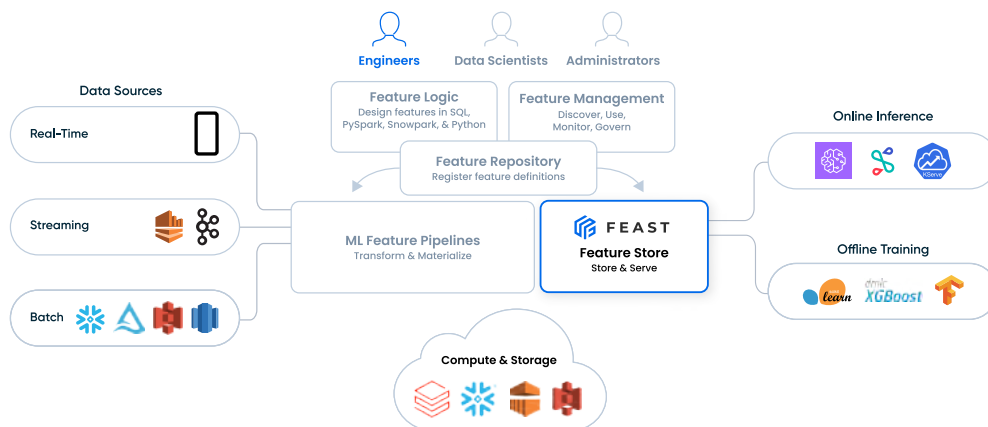
Design, Build, Centralize, Serve, and Manage Features for Production ML





### FEAST

#### Feast is a self managed Feature Store



Store and Serve Features for Production ML



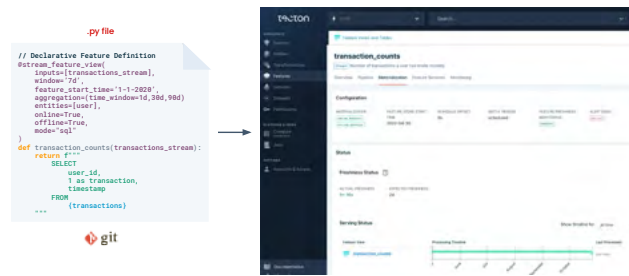
## FUNCTIONALITY DIFFERENCES

		
<b>Store and serve features</b>		
Generate training data	✓	✓
Serve features online	✓	✓
Ingest from self-managed pipelines	✓	✓
Ingest from Tecton-managed pipelines	✓	✓
<b>Automate pipelines</b>		
Tecton-managed batch, streaming, and real-time pipelines	✓	
<b>Manage features</b>		
Centralize definitions in common	✓	
Discover, share and re-use	✓	
Monitor data quality and operational service levels	✓	

## OTHER IMPORTANT CONSIDERATIONS

	
<b>Fully-Managed SaaS</b>	<b>Open Source Software</b>
Fastest way to get started	Self-configured and deployed
24x7 enterprise support	Self-supported
Plugs into leading data and ML platforms	Highly customizable
Available on AWS today / GCP and Azure soon	Available on-prem or any cloud
<b>Mission-critical scale and reliability</b>	<b>Variable scale and reliability</b>
Serving latency: <10ms	Serving latency: self-managed
Scale: >100,000 requests / second	Scale: self-managed
Production SLAs	
Discover, share and re-use	
Monitor data quality and operational service levels	

## CREATING FEATURES



### Declare a managed feature in Tecton

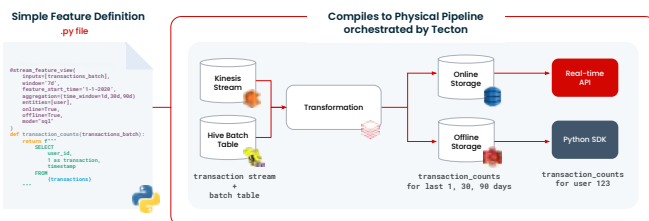
In contrast, when you create a feature in Tecton, **you're actually defining the feature transformation itself**. Tecton will manage the data pipeline for you and store the materialized data in online and offline stores, as well as run the backfill for you.



### Register a feature in Feat

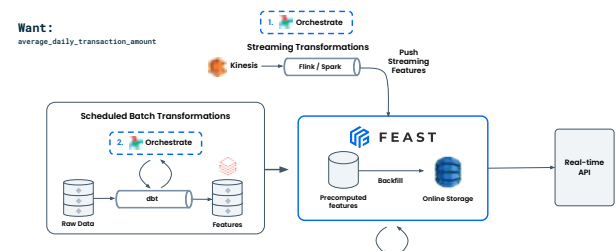
Feat primarily helps in serving features for online inference and offline training, but **not** in transforming feature values (Feat takes transformed values as input). This is why **creating a feature in Feat consists of registering a pre-processed feature, along with its metadata**.

## DATA PIPELINES



### Tecton creates production-ready data pipelines from simple declarative feature definitions

Because Tecton handles the feature transformations for you, it removes a lot of the complexity. There's no need to create pipelines, set up monitoring, or run Airflow jobs yourself—**Tecton will create these pipelines for you in the background, and handle monitoring and alerting as soon as you create the feature** (as described in the previous step).

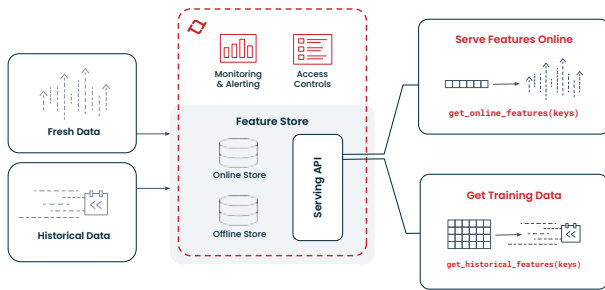


### Feat decouples ML from data infrastructure

As mentioned above, Feat takes transformed values as input. This means you'll have to **manage your own data pipelines**. The typical steps include:

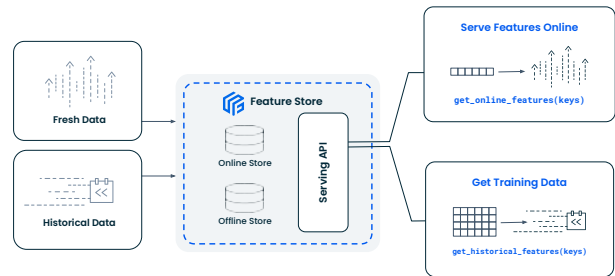
- Creating a streaming pipeline (e.g., with Spark)
- Creating a batch pipeline (e.g., with DBT)
- Setting up monitoring to make sure your features are properly sent to Feat and watch out for train / serve skew
- Setting up a backfill job with Airflow

## SERVING FEATURES



### Serving features with Tecton

Similar to Feast, Tecton allows you to serve features online and create training datasets. Tecton has the same feature retrieval APIs as Feast. **The main difference is that Tecton manages the online store for you, which includes a layer of monitoring and alerting** (for example, if feature values stop coming through and your feature is getting stale, you'll receive an alert that your upstream data source might be down).



### Serving features with Feast

Both Feast and Tecton allow you to serve features online and create training datasets. They share the same feature retrieval APIs:

- 'get\_offline\_features' to generate a training dataset with point-in-time correct features with labels
- 'get\_online\_features' to retrieve the features you need to make a prediction (for instance, to predict whether a transaction is fraudulent).

## SCALING CONSIDERATIONS

### Tecton is a fully hosted solution

Tecton ensures enterprise scalability and reliability, with SLA guarantees.

### Feast requires custom configuration to power production ML at scale

Common considerations include:

- How to reliably and scalably compute batch and / or streaming features
- How to reliably and scalably backfill features to the offline / online store
- How to efficiently retrieve features in a real-time recommender system
- How to manage online store costs given large data volumes

## RECAP

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### Use **Tecton** if you:

- Want minimal overhead in managing your own feature store
- Need mission-critical reliability, scalability, and/or support
- Want to automate batch, streaming, and real-time features
- Want to collaborate on, share, and re-use features

### Use **FEAST** if you...

- Have the resources and skills to manage your own feature store
- Need a highly customizable solution
- Don't need any help with streaming or real-time data pipelines
- Need to deploy on-prem, on GCP, or on Azure

## LEARN MORE

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For more details, check out our webinar comparing Tecton and Feast  
[resources.tecton.ai/choosing-the-right-feature-store-feast-or-tecton](https://resources.tecton.ai/choosing-the-right-feature-store-feast-or-tecton)

Get a personalized demo of Tecton  
[tecton.ai/product-demo/](https://tecton.ai/product-demo/)