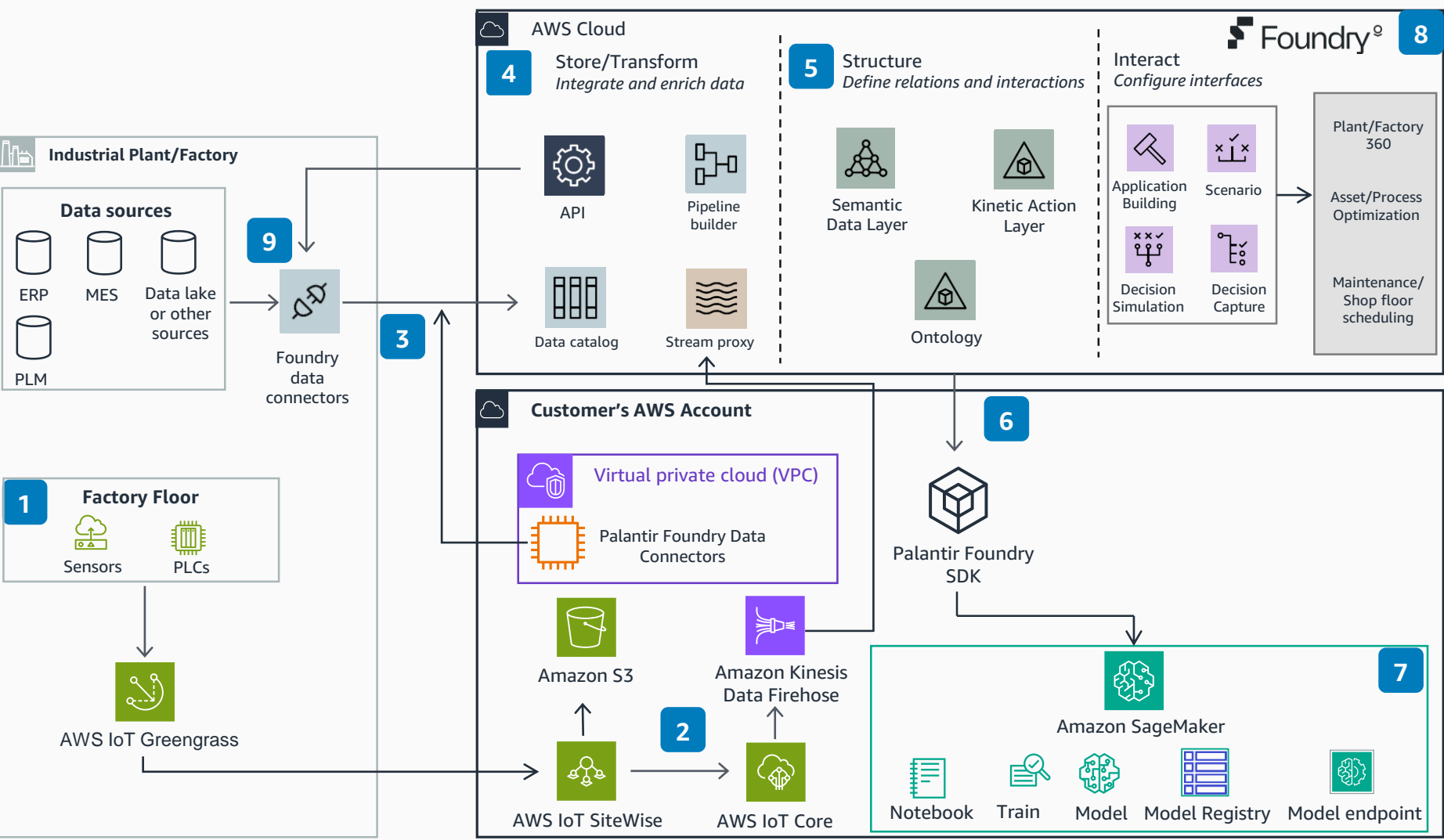


Guidance for Industrial Data Fabric with Palantir Foundry Technology

Palantir Foundry is a software as a service (SaaS) product that helps integrate your data, analytics, and operations. This diagram shows how to build an Industrial Data Fabric (IDF) on AWS with Foundry. Data is integrated and contextualized to set the framework for a unified and scalable analytical application.



- 1** Internet of Things (IoT) data from sensors and programmable logic controllers (PLCs) is ingested using **AWS IoT Greengrass** and sent to **AWS IoT SiteWise**. You can build assets and dashboards in **AWS IoT SiteWise**.
- 2** Create rules in **AWS IoT Core** to stream time series data to Palantir Foundry using **Amazon Kinesis Data Firehose**. Foundry data connectors in the AWS Cloud are used to ingest data from the operational technology (OT) data lake stored in **Amazon Simple Storage Service (Amazon S3)** to Foundry.
- 3** Foundry has data connectors that can ingest data from other data sources such as enterprise resource planning (ERP), a manufacturing execution system (MES), and data lakes.
- 4** Data from the connectors is rapidly integrated with fully automated pipelines and low-code tools.
- 5** The Foundry Ontology harmonizes data from the semantic elements (such as objects, properties, and links), and kinetic elements (such as actions, functions, and dynamic security).
- 6** Install the Foundry software development kit (SDK) in **Amazon SageMaker Notebooks** that offers fully managed Jupyter Notebooks. Configure Foundry API keys to access Foundry datasets and Ontology objects.
- 7** Use datasets from Foundry to train and build machine learning (ML) models in **Amazon SageMaker**. Models hosted in AWS can be imported or invoked remotely in Foundry workflows.
- 8** Build or customize manufacturing applications supporting everything from shop floor scheduling to a global operations center. Full-featured web applications provide you with real-time visibility, decision-making tools, and the ability to resolve operational decisions.
- 9** Operational decisions and results can be written back to the source system, ensuring consistency across Product Lifecycle Management (PLM), ERP, MES, and other key systems.