

Course Title:

Palantir Foundry Apps & Concepts – End-to-End Training

Duration:

5 Days (40 Hours), 8 Hours per Day OR 2 Weeks (4 Hours per Day)

Day 1: Introduction & Core Concepts (8 hours)

1. Introduction to Palantir Foundry

- Foundry platform overview and key capabilities
- Core components: Ontology, Datasets, Applications, APIs
- Foundry use cases in data integration, analytics, and operations

2. Foundry Data Architecture

- Data lifecycle in Foundry
- Concepts: Sources, Code Repositories, Datasets, Contour, and Workshop
- Data governance, security, and lineage in Foundry

Hands-On Lab:

- Navigate Foundry platform
- Explore sample datasets and lineage graph

3. Working with Ontologies

- Ontology Manager overview
- Objects, relationships, and actions
- Building business-relevant data models
- Ontology vs. traditional data models

Hands-On Lab:

- Create and configure Ontology objects and relationships
- Define actions and test Ontology queries

4. Data Apps & Operational Use Cases

- What are Data Apps?

- Applications vs. datasets vs. ontology-driven workflows
- Common use cases (dashboards, operational apps, APIs)

Hands-On Lab:

- Explore pre-built Foundry applications
- Identify links between ontology, datasets, and apps

Day 2: Data Ingestion, Transformation & Workshop (8 hours)**1. Data Ingestion & Integration**

- Connecting external sources (cloud, databases, APIs)
- Using Marketplace and Data Connection tools
- Automating ingestion pipelines

Hands-On Lab:

- Import data from an external source
- Configure ingestion schedules and permissions

2. Data Transformation in Contour & Code Workbooks

- Introduction to Contour pipelines
- Data transformation with Spark, SQL, and Python
- Versioning, publishing, and testing transformations

Hands-On Lab:

- Build a pipeline to clean, enrich, and publish data
- Validate output and lineage tracking

3. Workshop Concepts

- Workshop for data wrangling and analysis
- Creating datasets, logic blocks, and transformations
- Integrating Workshop outputs into Ontology and Apps

Hands-On Lab:

- Use Workshop to analyze imported data
- Publish results as an operational dataset

Day 3: Building Foundry Data Apps (8 hours)

1. Data Apps Deep Dive

- Architecture of a Foundry Data App
- Components: Pages, Cards, Widgets, and Data Sources
- Access control and user management in apps

Hands-On Lab:

- Create a simple Foundry Data App page connected to Ontology

2. Advanced App Features

- Interactive visualizations and dashboards
- Using Ontology actions in apps
- Integrating forms, filters, and workflows

Hands-On Lab:

- Add filters and action buttons to the app
- Create dynamic views using Ontology objects

3. Collaboration & Publishing

- Sharing Data Apps with teams
- Managing versions, approvals, and deployment
- Troubleshooting app performance and errors

Hands-On Lab:

- Deploy app to a test workspace
- Configure user roles and permissions

Day 4: APIs, Automation, and Integration (8 hours)

1. Foundry APIs Overview

- Using Foundry REST APIs to access data and apps
- Authentication, tokens, and permission models
- API examples for datasets, ontology, and actions

Hands-On Lab:

- Retrieve and update dataset records via API
- Trigger Ontology actions using REST API

2. Automation and Scheduling

- Automated workflows using pipelines
- Triggers for data refresh and app updates
- Notifications and alerting in Foundry

Hands-On Lab:

- Automate dataset refresh and app republish
- Configure email or webhook alerts

3. Integration with External Tools

- Connecting Foundry with BI tools, CRMs, or operational systems
- Webhooks and external service integration
- Example: Consuming Foundry data in PowerBI or Tableau

Hands-On Lab:

- Build a simple external integration using Foundry APIs

Day 5: Governance, Monitoring & Capstone Project (8 hours)

1. Governance, Security & Monitoring

- Access control for datasets, ontology, and apps
- Auditing changes and tracking lineage
- Monitoring app usage, dataset health, and performance

Hands-On Lab:

- Configure access policies for ontology and apps
- Review audit logs and dataset health

2. Capstone Project

Objective: Build an end-to-end solution on Foundry that:

- Ingests and transforms raw data
- Publishes clean datasets into Ontology
- Exposes Ontology objects and actions in a Data App

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- Includes an external REST API integration

Activities:

- Design data flow and ontology model
- Implement transformation pipeline
- Create and publish a fully functional Data App
- Integrate via API and secure it with permissions

Presentation:

- Teams present solutions, demonstrate app features, and review lessons learned.
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Deliverables / Training Materials

- Slide deck covering all concepts
- Lab guide with step-by-step instructions
- Sample datasets for exercises
- Reference Foundry API documentation and Postman collections
- Capstone project template with scoring guide