Introduction to Workshop

Building Interactive Operational Applications in Palantir Foundry

Low-Code Application Builder
Workshop enables users to design interactive, high-quality applications for operational use without deep coding expertise, accelerating app creation in Foundry.

Purpose and Vision
Empowers teams to build applications that connect directly to the Object Data Layer, leveraging Foundry's rich ontology to ensure data-driven workflows.

Unified Experience
Workshop's unified design system guarantees consistent visual quality and interactivity across all components and applications.

Core Principles of Workshop

The Foundational Pillars of Application Creation

Object Data
Workshop leverages the Object Data Layer as its foundation, ensuring every application component interacts directly with live, linked, and contextualized datasets.

Consistent Design
A unified design system guarantees uniformity across all components, resulting in intuitive and visually cohesive user experiences.

Interactivity and Complexity
Applications built with Workshop combine visual sophistication and functional depth, enabling dynamic, user-driven interactions comparable to custom-built React apps.

Common Use Cases in Workshop

Empowering Operational Efficiency and Situational Awareness

Inbox, Alerts, and Task Management
Design applications that streamline triage, prioritization, and completion of operational tasks — such as managing flight delays, alerts, or warranty claims.

Common Operational Pictures (COPs)
Build real-time, shared situational dashboards combining maps, charts, and linked data for organization-wide awareness and coordination.

Custom Interactive Applications
Enable teams to create dynamic, low-code solutions tailored to specific workflows — from metrics monitoring to resource management.

Getting Started with Workshop

Preparing Your Environment and First Module

Purpose of the Tutorial
Introduces new Workshop builders to key components such as modules, widgets, filters, and actions while walking through a practical example.

Example Scenario: Flight Alert Inbox
The tutorial focuses on building a Flight Alert Inbox application that identifies and prioritizes potential flight delays and cancellations in real-time.

Prerequisites and Setup
Requires access to Foundry's Object Data Layer and example ontology resources. New modules inherit project-level permissions by default.

Part I: Initial Setup

Creating and Naming Your Workshop Module

- **Creating a New Module:** Access Projects & Files in Foundry's workspace, then select 'New > Workshop Module' to initialize a module under your desired project or folder.

- **Inherited Permissions:** Modules automatically inherit permissions from the parent project or folder, ensuring consistent access control and governance.

- **Naming the Module:** Rename the default module name (e.g., 'New module (timestamp)') to something meaningful, such as 'Flight Inbox Tutorial,' to enhance clarity and traceability.

Part II: Configure Your Initial View

Setting Up the Object Table Widget

- **Adding the Object Table Widget:** Insert an Object Table from the widget selector to display structured data sourced from Foundry's Object Data Layer.
- **Defining the Object Set:** Use the Object set dropdown to create or link a new object set variable, such as [Example Data] Flight Alert, to populate the table.
- **Customizing Columns and Sorting:** Add all object properties, adjust column order, and define default sorting (e.g., by Flight Date) for clearer data presentation.

Part III: Configure Filtering

Enhancing Interactivity with the Filter List Widget

- **Adding the Filter List Widget:** Place a Filter List widget in your layout and connect it to the same object set (e.g., [Example Data] Flight Alert) to enable user-driven filtering.
- **Creating Filters:** Configure filters for key properties like Status, Priority, and Flight Date. Allow users to add or remove filters dynamically for flexible exploration.
- **Linking Filters to Data:** Connect the Filter List's output to the Object Table's input, ensuring that any filter updates instantly refine the table's displayed data.

Part IV: Object View & Collapsible Panels

Adding Detailed Context to Selected Data

- **Adding an Object View Widget:** Create a new section beside the Object Table to display details of the selected object using the Object View widget.
- **Enabling Collapsibility:** Activate collapsible section headers to allow users to expand or hide details, optimizing workspace efficiency.
- **Linking the Active Object:** Bind the Object View widget to the ‘Object Table 1 Active Object’ variable to synchronize selections and context.

Part V: Enable Writeback with Actions

Creating Interactive Buttons for Data Updates

Adding the Button Group Widget
Insert a Button Group widget to introduce interactive controls, such as a 'Resolve Alert' action for users to act on selected data.

Configuring Button Actions
Assign each button an associated Action type, such as [Example Data] De-escalate Flight Alert, to trigger data writeback directly to Foundry.

Parameter Mapping and Visibility
Map Action parameters to object variables (e.g., Object Table 1 Action object) and hide system-level inputs to streamline user experience.

Part VI: Polish Your Inbox and Add Headers

Enhancing Visual Identity and Usability

- **Adding a Module Header:** Configure the module’s header with icons, colors, and a clear title — for example, an airplane icon with the title 'Flight Alert Inbox.'
- **Customizing Section Headers:** Assign distinct titles and icons to sections like Filters, Table, and Object View to improve navigation and visual clarity.
- **Refining Layout Consistency:** Apply Workshop’s unified design options such as consistent spacing, color themes, and iconography to deliver a professional user experience.

Example Applications in Workshop

Templates and Use Cases to Jumpstart Development

Inbox Applications
Preconfigured templates for alert or task management, allowing users to triage and resolve items efficiently.

Map Applications
Visualize geospatial data interactively to reveal insights through geographic patterns and relationships.

Metrics Dashboards
Combine charts and KPIs into dynamic dashboards for performance monitoring and strategic decision-making.

Workshop Design Hub

A Marketplace for Inspiration and Best Practices

- **Purpose of the Design Hub:** Provides a curated collection of six high-quality Workshop application examples to guide and inspire builders.
- **Learning by Reverse Engineering:** Each module comes with notional data and full interactivity, allowing builders to explore, duplicate, and adapt successful designs.
- **Practical Usage:** Modules are read-only by default; duplicating them ensures safe experimentation while preserving original templates.

Example Workshop Applications

Diverse Use Cases to Explore and Adapt

- **Alert Inbox:** Design action-oriented inboxes for managing alerts and tasks efficiently using filters, object tables, and action buttons.
- **Metrics Dashboard:** Create dynamic dashboards for monitoring performance metrics with drill-down capability and visual storytelling.
- **Common Operating Picture (COP):** Visualize complex data on maps to contextualize operations geographically for improved situational awareness.
- **Guided Creation Form & Rental App:** Implement guided workflows or exploratory applications like rental browsers with rich filters and structured navigation.

Best Practices & Recommendations

Ensuring Sustainable and High-Quality Workshop Development

Use Read-Only Design Hub Assets
Duplicate modules before modification to avoid overwriting templates and preserve best-practice examples.

Maintain Ontology Integrity
Treat ontology objects and action types as read-only where possible to prevent breaking dependencies during updates.

Consistent Design Standards
Adopt uniform spacing, iconography, and naming conventions to create intuitive, professional-grade applications.

Conclusion

Building Intelligent, Interactive Applications with Workshop

- **Low-Code Power, High Impact:** Workshop enables builders to create operational-grade applications that combine data, design, and interactivity — all within Foundry's secure ecosystem.
- **From Data to Decisions:** By connecting directly to the Object Data Layer, every application becomes a live reflection of real-time operations and organizational intelligence.
- **Next Steps:** Start building your first module or explore the Design Hub for inspiration. Learn more at Palantir's Learning Portal.

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