Automation Metro Ticket Management

Flow Designer

Purpose

In today's fast-paced urban environments, a reliable metro infrastructure is critical for enabling daily commuting and operational efficiency. Traditionally, metro organizations handled ticketing through manual counters or physical tokens, which often resulted in long queues, lack of transparency, and increased human error.

To overcome these challenges, this project leverages ServiceNow to provide a centralized and standardized platform for managing metro ticket bookings. Automating metro ticket management in ServiceNow enhances operational efficiency by streamlining workflows, reducing manual interventions. By utilizing ServiceNow's Service Catalog and Flow Designer, the system ensures that ticket requests are processed efficiently from submission to fulfilment.

Overview of Automated Flow

- **Flow Name:** Metro Project

- **Application Scope:** Global

- **Flow Status:** Active/Published

- **Trigger Type:** Service Catalog

- **Flow Objective:** To automate the complete lifecycle of a metro ticket request from user submission to digital fulfilment.

Flow Architecture

The flow consists of the following logical stages:

1. **Catalog Request Submission**: Commuter submits the "Book A Metro Ticket" request via the Service Portal.

2. **Capture Catalog Variables**: The system retrieves user inputs such as Source, Destination, and Passenger count.

3. **Create Metro Database Record**: A new record is generated in the custom u_metro_s_details table for tracking.

4. **Acknowledgment & Ticket Generation**: Automatic alerts and digital tickets are prepared for the commuter.

5. **Flow Termination**: The process concludes once the digital ticket is rendered and logged.
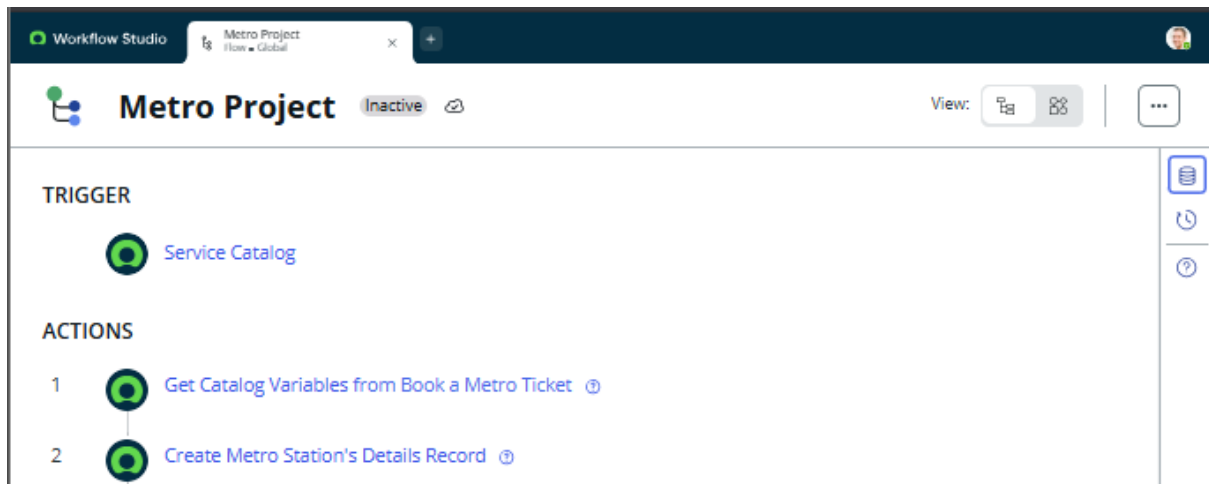
Figure 1: Flow designer Metro Project

Trigger Configuration

The flow is triggered when a **Book A Metro Ticket** catalog item is submitted by a user. This ensures automation starts immediately after the user submits the request.

- **Trigger Event**: Catalog Item → Book A Metro Ticket

Benefits of Automation

By implementing this Flow Designer logic, the system delivers the following outcomes:

- **Eliminates Manual Processing**: Reduces the workload on station staff by automating ticket issuance.

- **Ensures Faster Fulfilment**: Digital tickets are generated instantly upon submission.

- **Improves Transparency**: Every transaction is logged in the centralized database for real-time tracking.

- **Reduces Errors**: Minimizes human errors in fare calculation and record keeping.

- **Audit Trail**: Provides a complete, audit-ready record of all metro bookings.

Conclusion

The Flow Designer automation enables an end-to-end automated metro ticket lifecycle by combining catalog triggers, variable capturing, and notification logic to deliver a robust, scalable, and efficient backend solution. This is further enhanced by a Catalog Client Script that auto-populates fare values, providing dynamic automation and real-time accuracy for commuters. By digitizing transit operations, the system ensures a seamless, user-friendly experience that aligns with ITSM best practices.