Metro Ticket Generating System

In ServiceNow

Interface Design

Introduction

This document describes the design and configuration of the **Book a Metro Ticket** Service Catalog item in ServiceNow. It explains how the catalog item is structured, the specific variables utilized, the user interaction model, and how it supports a standardized and automated digital ticketing process.

Catalog Item Overview

The following details define the core configuration of the metro ticketing interface:

- **Catalog Item Name**: Book a Metro Ticket
- **Catalog**: Service Catalog
- **Category**: Metro Services (Global)
- **Status**: Active
- **Owner**: System Administrator

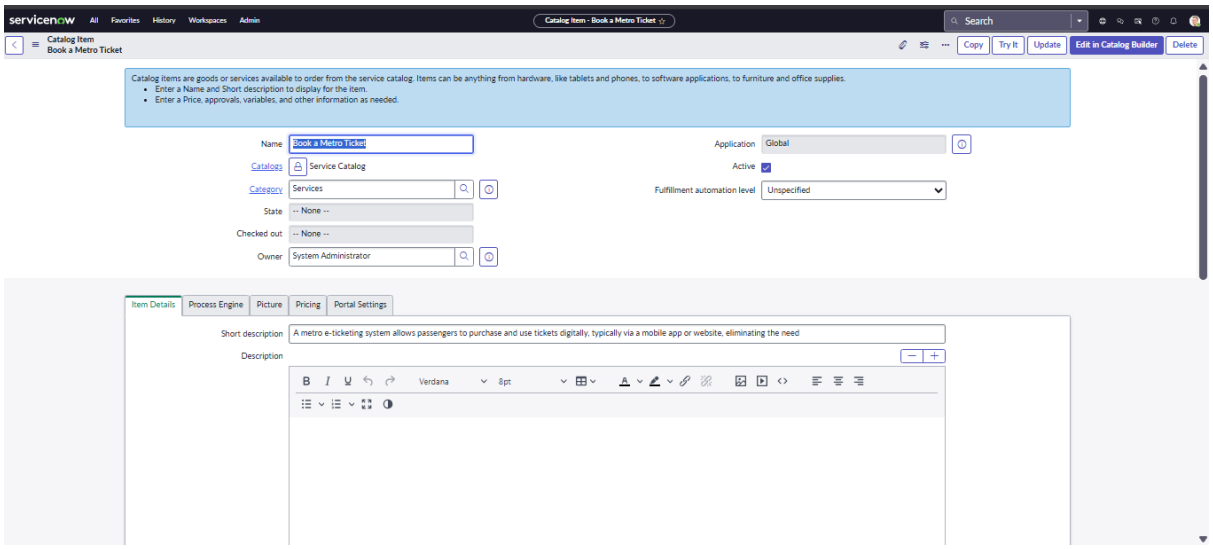

Figure 1: Core Configuration of the "Book a Metro Ticket" Catalog Item

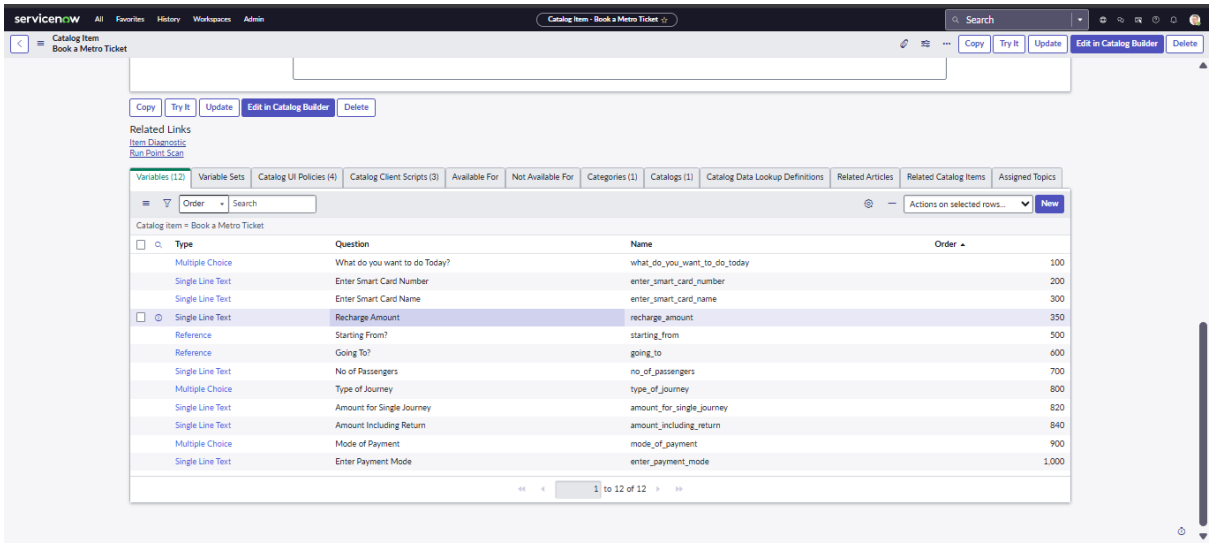

Figure 2: Structured Variables for Commuter Intake

A comprehensive list of the 12 variables used to capture travel data, such as source and destination stations, passenger count, and journey type. These variables support both card recharges and QR ticket bookings.

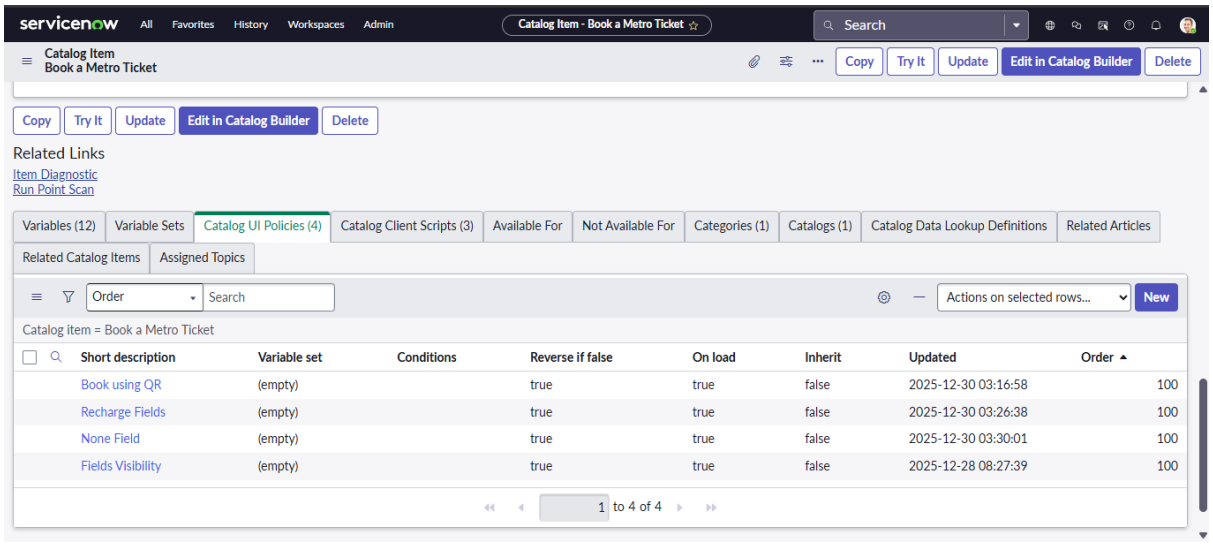

Figure 3: Catalog UI Policies for Dynamic Visibility

These four policies, including "Recharge Fields" and "Book using QR," ensure a focused user experience by hiding irrelevant fields and reducing form clutter during the submission process.

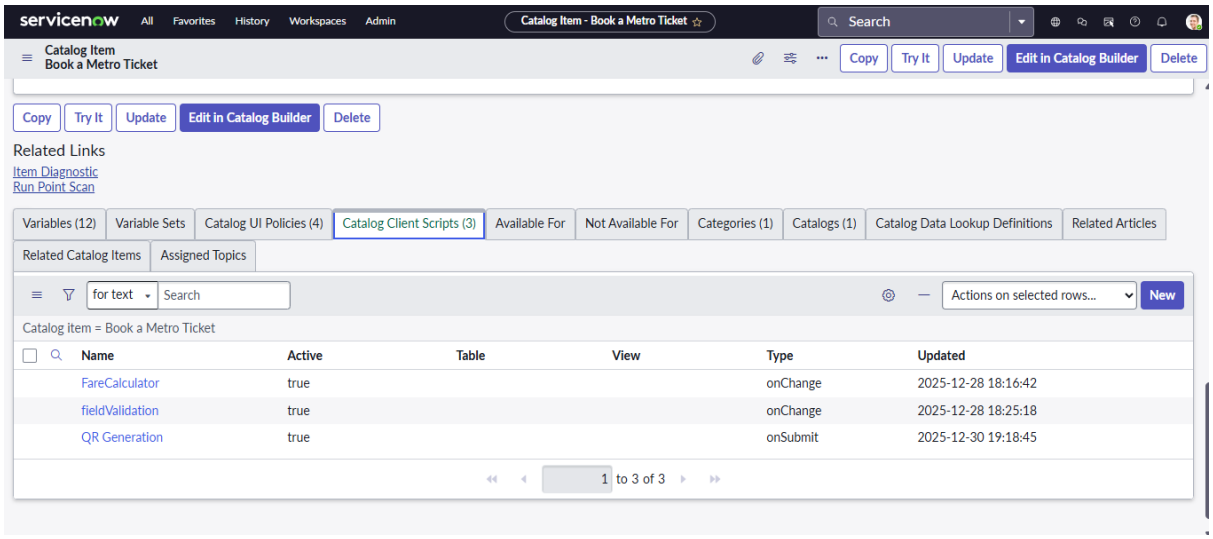

Figure 4: Catalog Client Scripts for Real-Time Automation

Detailed view of the scripts responsible for front-end automation, specifically the **FareCalculator** for real-time pricing updates and **QR Generation** for instant ticket fulfillment upon submission.

Description

The **Book a Metro Ticket** catalog item is designed as the primary portal for commuters to request transit services. Users can select journey types, such as single or return trips, and specify their source and destination stations. The item leverages background scripts and pricing configurations to provide real-time fare updates. Upon submission, the interface triggers an automated backend process that generates a unique QR code for immediate use, ensuring a seamless transition from the digital request to physical transit entry.

User Experience Considerations

To ensure a high level of commuter satisfaction and operational efficiency, the following UX principles were applied:

- **Clean and Structured Form Layout**: Fields are organized to guide the user naturally from station selection to payment.
- **Minimal Input Required**: Users only provide essential travel data, with the system auto-calculating secondary values like fares.

- **Dynamic Field Display**: UI Policies reduce clutter by hiding irrelevant fields such as Smart Card details when a QR ticket is selected ensuring a focused submission process.
- **Real-Time Visual Feedback**: The interface provides immediate updates, such as displaying the auto-calculated "Amount for Single Journey" as soon as stations or passenger counts are selected, ensuring transparency before the user clicks "Order Now".

Conclusion

The **Book a Metro Ticket** catalog item provides a simple, efficient, and standardized interface for modern urban transit. Through the use of structured variables, conditional logic, and dynamic pricing configurations, the item supports fully automated backend processing. This design integrates seamlessly with the metro database and fulfilment workflows, delivering a robust digital solution that reduces station congestion and enhances the overall passenger journey.