

Metro Ticket Booking Automation – ServiceNow

Testing and Validation

Purpose

The testing and validation phase is carried out to confirm that the **Metro Ticket Booking Automation system** functions correctly and meets the defined requirements. This phase ensures that the Service Catalog item, Flow Designer automation, data persistence, and notification mechanisms work seamlessly together.

Testing focuses on validating the complete workflow, starting from ticket booking submission by the user to successful record creation in the metro database. The goal is to ensure system accuracy, stability, and a smooth user experience without manual intervention.

Test Environment

- **Platform:** ServiceNow
- **Modules Utilized:**
 - Service Catalog
 - Flow Designer
 - Custom Metro Database Table
- **User Roles Involved:**
 - Passenger (Requester)
 - System Administrator

Test Scenarios Executed

The following scenarios were tested to validate system functionality:

- Submission of metro ticket booking requests
- Capture of smart card and journey-related details
- Automatic triggering of Flow Designer workflows
- Creation and validation of metro ticket records in the database.

Testing Execution Details

Scenario 1: Metro Ticket Booking Request Submission

- The user selects “**Book A Metro Ticket Item**” from the Service Catalog.
- Required booking details are entered, including:
 - Smart Card Number
 - Smart Card Holder Name
 - Source Station
 - Destination Station
 - Passenger Count
 - Journey Type
 - Payment Mode
- The request is submitted successfully without validation errors.

Figure 1: Book A Metro Ticket catalog item form

Scenario 2: Flow Designer Workflow Trigger

- Upon catalog submission, the Flow Designer workflow is triggered automatically using the **Catalog Item Requested** event.
- The flow successfully retrieves all submitted catalog variables for further processing.

Scenario 3: Metro Database Record Creation

- The automated flow creates a new entry in the **custom metro database table (u_metro_database)**.
- The following fields are populated accurately:
 - Smart Card Number
 - Card Holder Name
 - Recharge or Fare Amount
 - Starting Station
 - Destination Station
 - Number of Passengers
 - Payment Mode
 - User Information
 - Record Creation Date

The screenshot shows a software application window titled "Metro Databases". The top navigation bar includes "All", "Favorites", "History", "Workspaces", and "Admin". On the right, there are buttons for "Search", "Actions on selected rows...", and "New". The main area displays a table with the following columns: "Mode Of Payment", "Recharge Amount", "Smart Card Name", "Smart Card Number", and "User Details". Under "Mode Of Payment", there is a dropdown menu set to "BHIM UPI". Under "Recharge Amount", there is a search input field containing "1,200". Under "Smart Card Name", there is a search input field containing "debit card". Under "Smart Card Number", there is a search input field containing "123wqe". Under "User Details", there is a search input field containing "(empty)". At the bottom of the table, there is a pagination bar showing "1 to 1 of 1".

Scenario 4: Flow Execution Verification

- The workflow is tested using the **Test Run** feature in Flow Designer.
- Flow execution completes successfully without any errors.
- All configured actions run as expected, including:
 - Retrieving catalog variables
 - Creating metro database recorders.

The screenshot shows the 'EXECUTION DETAILS' section for a flow named 'Metro Project'. At the top, there are buttons for 'Test Run - Completed' (highlighted), 'Open flow', and 'Open context record'. Below this, the flow's state is 'Completed', it started at 2026-01-03 06:30:11, and it took 40ms. The 'Run as' user is 'System Administrator'. The 'FLOW STATISTICS' table shows one action step: 'Get Catalog Variables from Book A Metro Ticket' was a Core Action completed at 2026-01-03 06:30:11, taking 17ms. Another step, 'Create Record', is listed as a Core Action with a status of 'Completed' and a duration of 19ms. The 'TRIGGER' section shows a 'Catalog Item Requested' trigger. The 'ACTIONS' section lists the two steps mentioned above. The 'ERROR HANDLER' section is empty. On the left, there are links for 'Show Action Details' and 'Open flow logs'.

Summary

The testing results confirm that the Metro Ticket Booking Automation system operates reliably across all tested scenarios. Ticket booking submissions, automated workflows, and database updates function correctly, ensuring a consistent and error-free booking process. The system is validated to be ready for deployment and real-time usage.