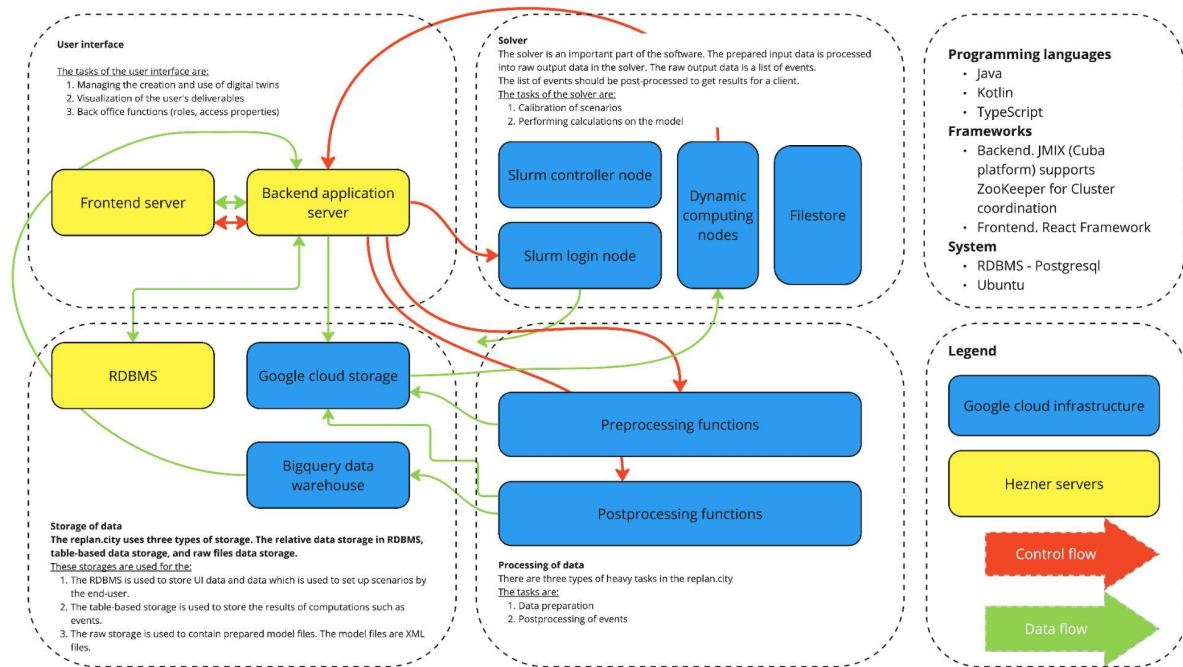


Title: Introducing Replan.city: Web-Based Platform for MATSim Scenario Development, Maintenance, and Analysis

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Abstract:

In the last decade our team collected a lot of experience with MATSim scenarios in commercial context. We were using community best practices and developed our own software workarounds. This cumulative experience has led us to create Replan.city: a web-based platform designed to automate most MATSim scenario handling tasks.



Pic.1 - Replan.city architecture

The current release of Replan.city has the following functionality:

- Scenario Creation: One-click generation from Open Data.

- Working with own scenarios: Upload custom runners and scenarios to Replan.city.
- Editing Capabilities: Modifications to Config, Network, Transit Schedule, DRT, Carsharing, tariffs, and tolls.
- Cloud Integration: Cloud-based scenario runs with automated resource management.
- Event Management: Event-handling, data models, and functionalities.
- GIS Analytics: Tools for transit accessibility, traffic volumes, OD-relations, zone-based analysis, plans' analysis, dynamic layers, and PT and Car spider diagrams.
- Dashboard: Powerful and editable tools for result interpretation and sharing.
- Customization: Integrate own analytical handlers, create custom GIS layers, use dashboards, advanced editors for scenarios, and API integrations.

In our MUM2023 presentation we will perform the live demonstration of Replan.city on a MATSim Open Scenario. We will also present special university subscriptions for MATSim user meeting attendees.

Replan.city offers a platform that targets researchers, engineers, planners, policymakers, and students, minimizing routine operational procedures and allowing them to focus on solvers and case studies.