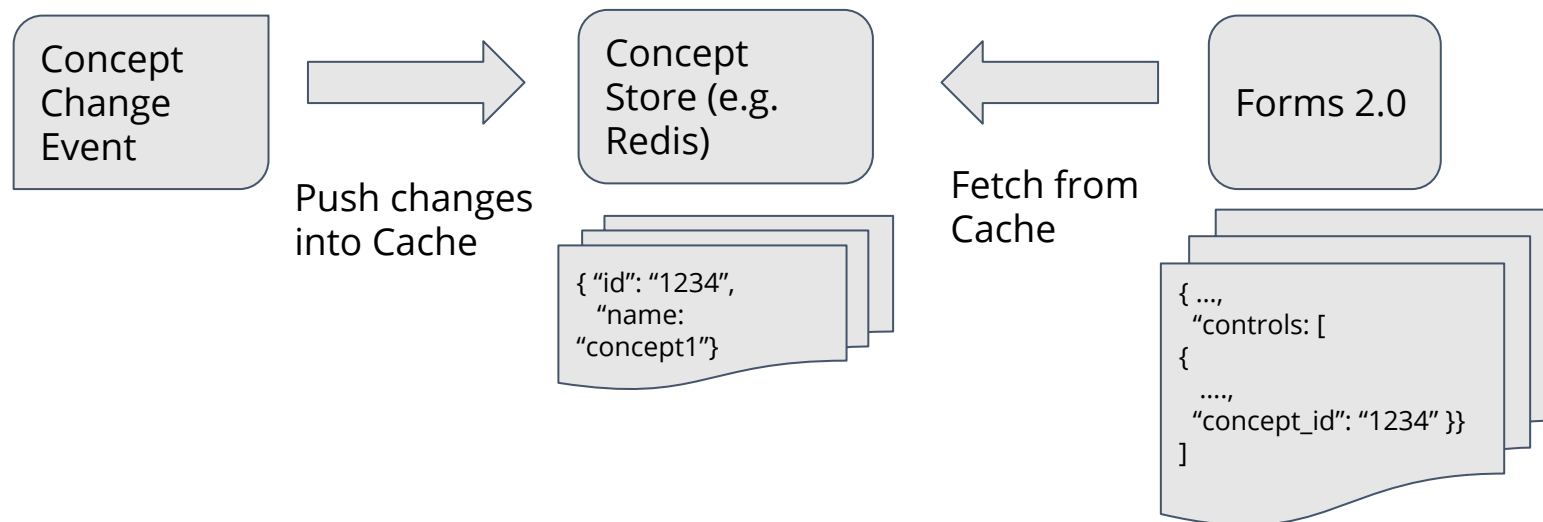


# Problem: Concept changes not in sync with a version of the form

- 1 Concept changes (data type, min/max values, name)
- 2 Snapshot of concept information in the JSON file

## Solution:

- Form depends *only* on '**concept\_id**' - **UUID** and does not store all the concept details in JSON
- Concepts are held in a cache/store that is **updated on-change of concepts in OpenMRS**
- On form load, concept details will be fetched from cache (fallback to fetch from OpenMRS directly through API)



# Problem: Form name modification leads to too many changes

- 1 Form name used as an identifier in saving observations (path), name of the JSON file, to match translations and in Groovy scripts
- 2 Translation of form name is not possible

## Solution:

- Use form-id which is a UUID stored in OpenMRS to identify a form - a unique NAME + VERSION combination
- File name would be based on this UUID
- Obs path in forms 2.0 - stored in the database would use this to identify path (for e.g. "<form-uuid>/1-0/2-0" instead of "Bahmni^FormA.v1/1-0/2-0")
- Forms 2.0 JSON - additional "operations" - enumerated list of "actions/calculations" that the Groovy script will take as additional parameter along with "observations". For e.g. "CALCULATE\_BMI" would be an operation that a form would have. Initially this would be a hard-coded string but can be moved later to the database if required and shown as a selectable dropdown on the UI
- Groovy script no longer hard-codes form-name and uses the "operations" list to decide on what needs to be calculated
- Form name translation would be part of the translations JSON file. Or additionally, this can be cached to make it more performant, otherwise we'll have to open the JSON file just for looking up one translation. The cache would be updated whenever new translations are saved in a published form.