Database Environment Migration

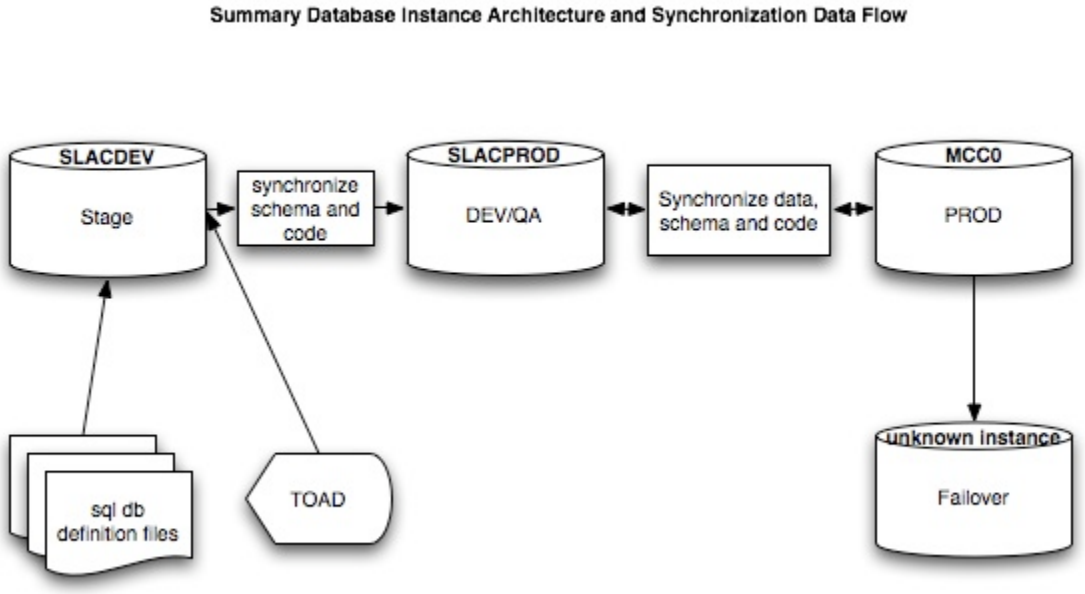
This page notes issues and planning for the project to migrate LCLS control system critical sub-schema from SLACPROD and other instances, to within the LCLS controls network.

Outline Architecture Data Flow

The following are two diagrams outlining the architecture and data flow predicted for the control system relational database system.

Summary database instance data flow

The first is a total summary just showing the data flow between db instances: stage -> dev/QA -> prod -> failover. This is to emphasize that edits are made in "stage", and the one way data flow from stage -> dev/QA and two way flow from dev/QA to prod.

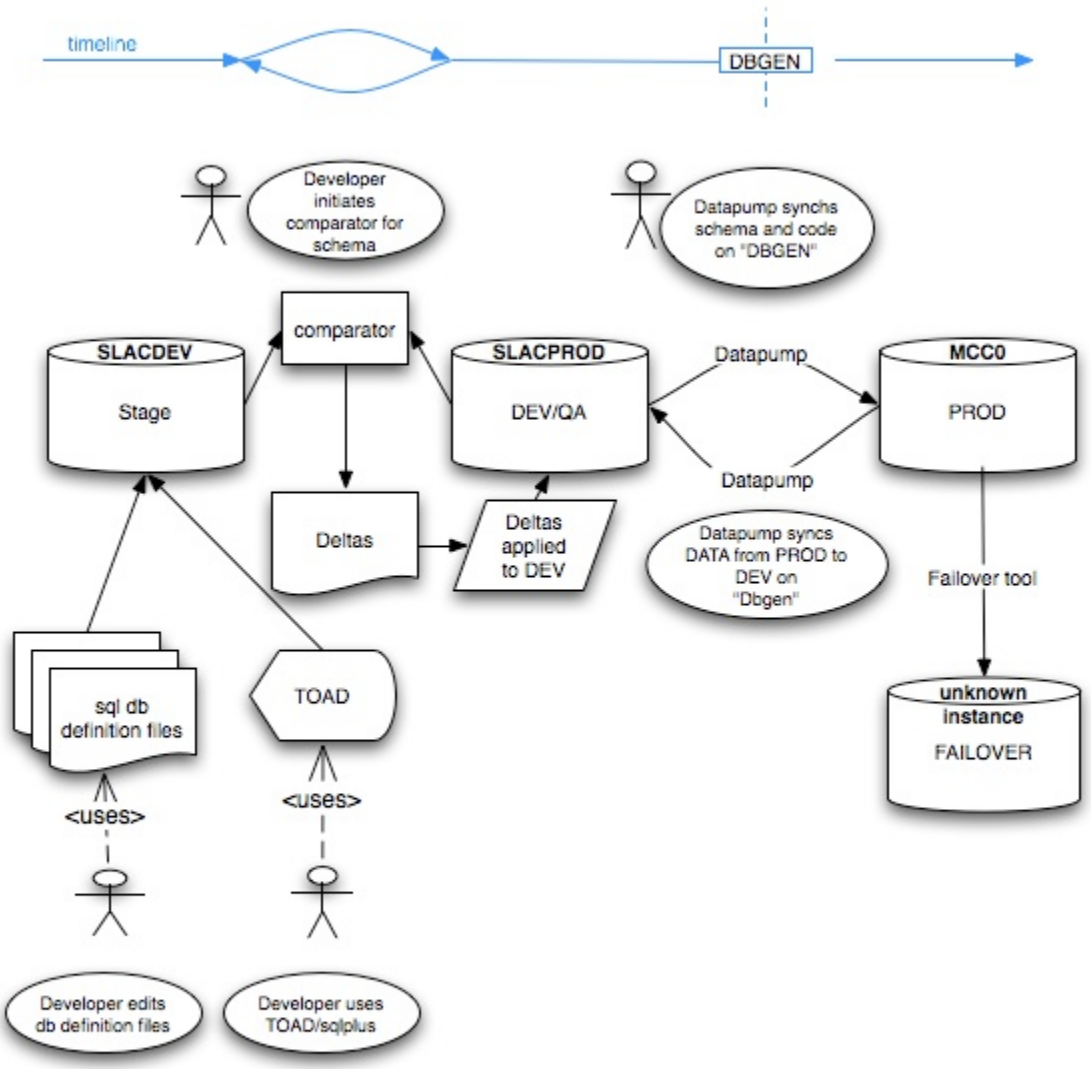


Use Cases and Process Data Flow

A work up the Use Cases which implement schema, code and data flow between the databases instances. Shows that:

1. stage -> QA is a repeated process
2. That stage -> QA is managed by a tool that find and records deltas
3. QA -> prod is done at only definite pre-agreed "dbgen" times.
4. QA -> prod is done by datapump
5. QA -> prod is of schema and code only (not data)
6. QA <- prod is of data
7. Failover (when it's done) will be done in the background (not well represented in my diagram)

Data Flow Use Case Process Summary



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