

PI-13 Mojaloop Core

Maintenance & Release Team



PI-13 Core Team

Miguel de Barros

Sam Kummary

Shashi Hirugade

Steven Oderayi

Valentin Genev

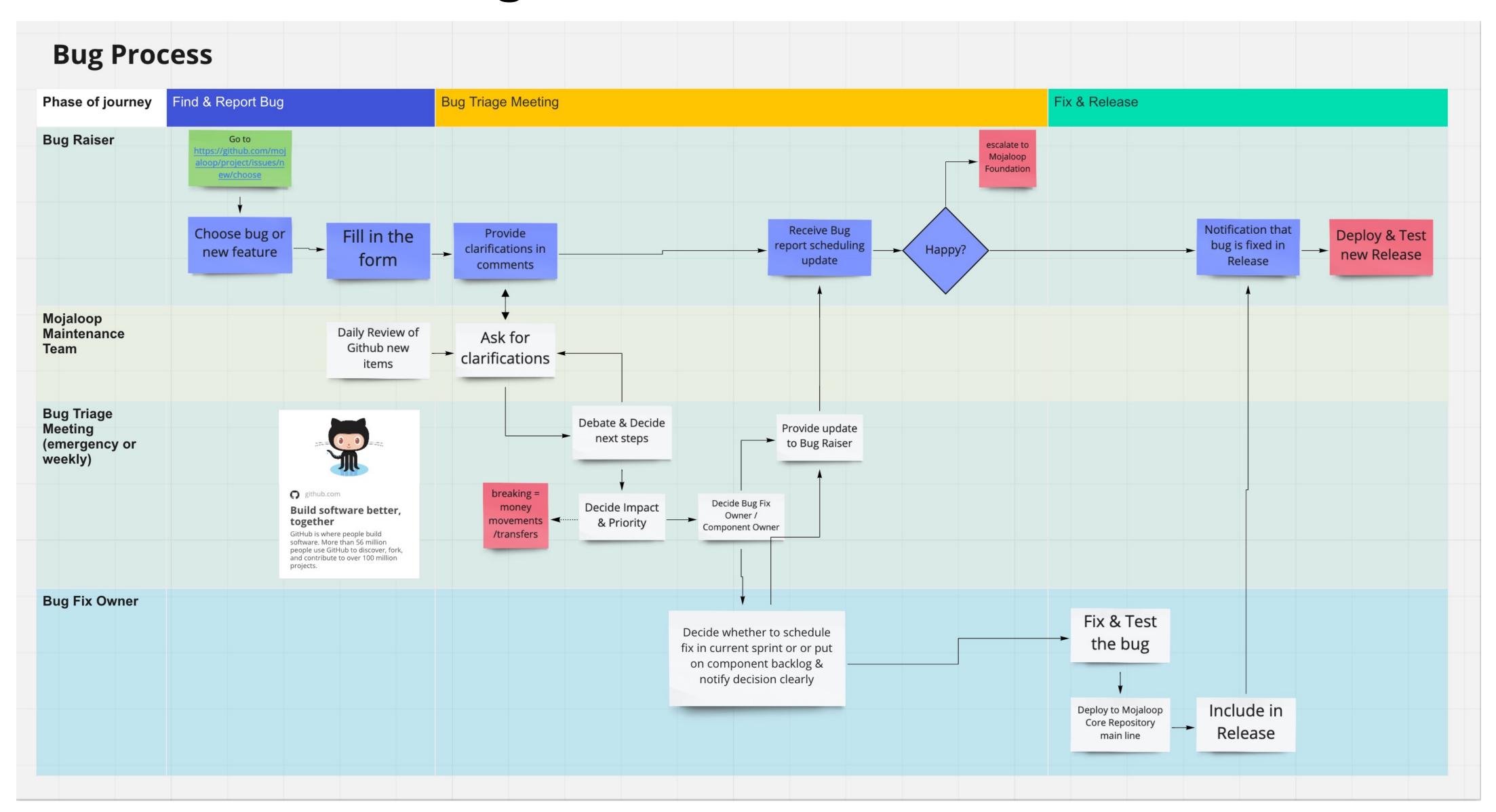
Vijay Guthi

Overview



- 1. Mojaloop maintenance
- 2. Mojaloop Helm releases
- 3. Making notifications more reliable
- 4. Settlements enhancements

Maintenance & Bug Fixes



Maintenance & Bug Fixes



Total of ~25 bugs fixed during PI-13. Some representative issues below:

- 1. Customize extensionList elements in PUT /quotes when using ml-simulator #2116
- 2. Core handler services that have a dependency on central-services-database are not loading all tables on startup #1888
- 3. ALS GET /health returns a 200 OK when status is DOWN #2014
- 4. Inconsistent output of Oracle simulator with oracle/participants/{Type}/{ID}?partySubIdOrType={SubId} #1925
- 5. POST /quotes with no FSPIOP-Destination returns a bad error in async callback #1981
- 6. Central-Ledger Timeout handler using incorrect config #1977
- 7. GET /parties/Type/ID/SubID does not return partySubIdOrType in the body #2102

Helm Release v12.0.0



Latest Release: https://github.com/mojaloop/helm/releases/tag/v12.0.0

1. Maintenance

1.1. Moving to SemVer as the standard is now adopted.

2. New Features

- 2.1. Native Helm Tests are available through the Mojaloop Testing Toolkit (TTK)
- 2.2. Continuous Gross Settlement feature is now supported along with Interchange Fees
- 2.3. The following are the improvements for TTK
 - 2.3.1. Log view access via EFK using UI
 - 2.3.2. New functions custom.sleep and custom.setRequestTimeout functions in Javascript scripting in test cases
 - 2.3.3. Improvements in inbound scripting
 - 2.3.4. Improvements related to push notifications
 - 2.3.5. New mobile simulator page added for demonstration purpose

3. Bug Fixes

- 3.1. Core handler services that have a dependency on central-services-database are not loading all tables on startup #1888
- 3.2. knex seed fails on duplicate key #1444
- 3.3. Central Ledger database seeding fails on startup #1853
- 3.4. Implement FSPIOP headers validation in multiple services #1854
- 3.5. Fix the /documentation & /swagger.json endpoints for account-lookup-service #1861
- 3.6. bulkQuotes endpoint failing in 11.9.0 SDK version #1884
- 3.7. GET /Transfers is failing #1886
- 3.8. Inconsistent Transfer Timeout error messages being sent by Central-Ledger #1877
- 3.9. PUT /authorizations/{transactionId} is not validating FSPIOP Headers #1887
- 3.10. Setting up bulk transfers environment #1878
- 3.11. GET/POST /participants/{type}/{id}/{subId} and /parties/{type}/{id}/{subId} not working in ALS #1906
- 3.12. TTK is not being deployed with published mojaloop helm #1957
- 3.13. Mojaloop Helm release cannot be deployed more than once in a single namespace #1963
- 3.14. Docker Hub rate limiting PULL requests #1968
- 3.15. Inconsistent output of Oracle simulator with oracle/participants/{Type}/{ID}?partySubIdOrType={SubId} #1925
- 3.16. ALS GET /health returns a 200 OK when status is DOWN #2014

Helm Release v12.1.0

Work in Progress - main branch

Target release: 2-3 weeks post PI14 Community Meeting



1. Maintenance

1.1. Upgraded ElasticSearch, FluentD, Kabana & APM Charts to latest stable version and migrated dependency helm repositories due to deprecation.

2. New Features

- 2.1. Expose PISP env vars for central-ledger and account-lookup-service #2101
- 2.1. Settlement Enhancements Separation of CGS and Rules #2056, #2057
- 2.2. Settlement Enhancements Default Settlement Models #2123

3. Updated Testing Toolkit

- 3.1. Improved Mobile Simulator #2020
- 3.2. mTLS support <u>#2098</u>
- 3.3. Improved Collection Manager and Environment Manager components in "Test Runner" page #1755

3. Bug Fixes

- 3.1. ElasticSearch unstable after a period of time #1962
- 3.2. ElasticSearch out of disk space #2135
- 3.3. Finance portal backend: use central settlement for window close PR#432
- 3.4. Added missing 'event_*' config to ALS Helm chart to ensure that Tracing works as expected by default PR#426
- 3.5. GET /parties/Type/ID/SubID does not return partySubIdOrType in the body #2102 #2102
- 3.6. Quoting service does not handle the partySubIdOrType in party #2103

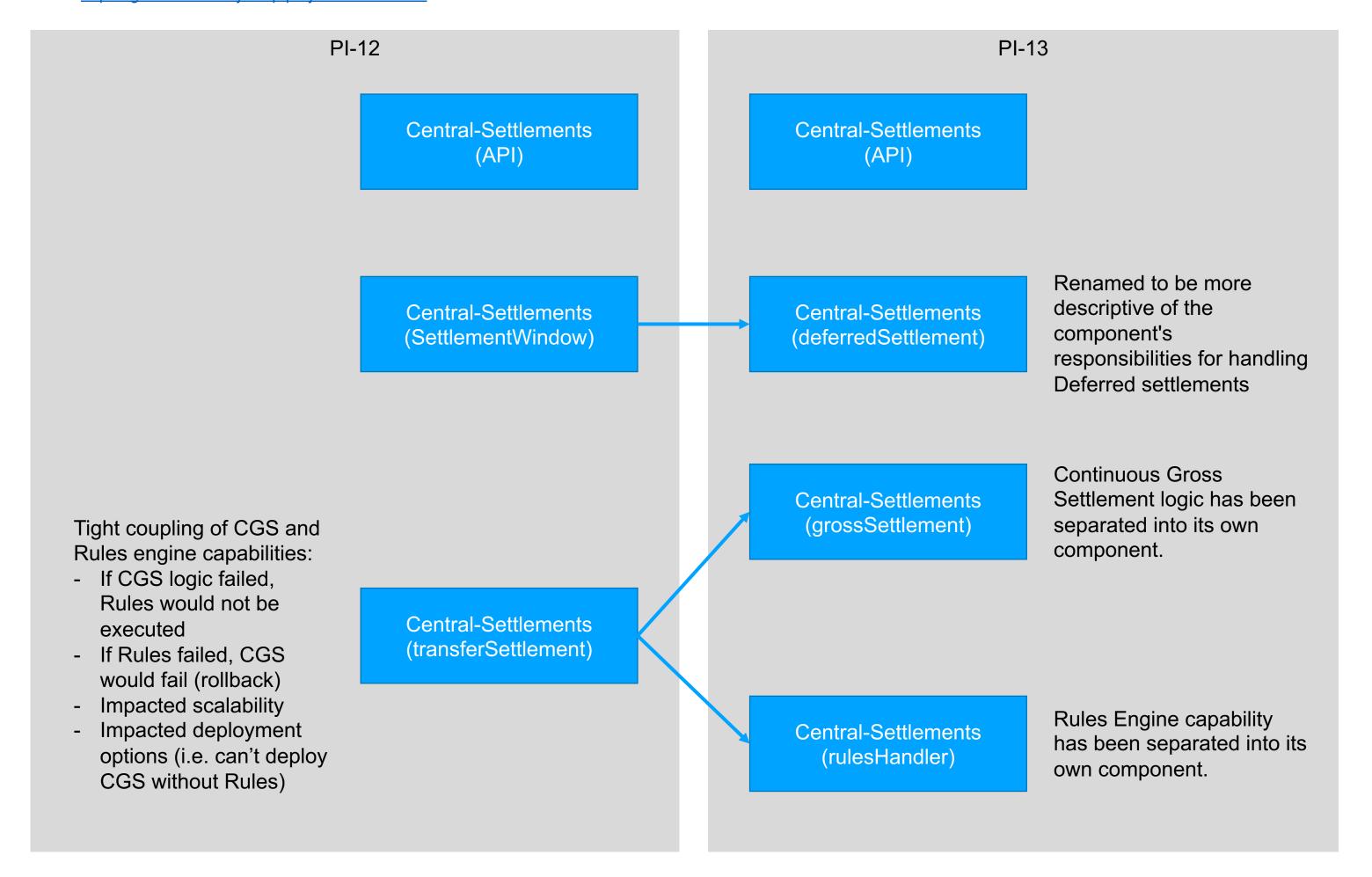
MORE TO COME

Settlement Enhancements

- mojaloop
- 1. Documentation for Continuous Gross Settlement (CGS) and Interchange Fees (pending release)
- 2. Support for "default" Settlement Models (in-progress)

 https://github.com/mojaloop/project/issues/2123
- 3. Separation of tight coupling between CGS and Rules (pending release)

https://github.com/mojaloop/project/issues/2056 https://github.com/mojaloop/project/issues/2057

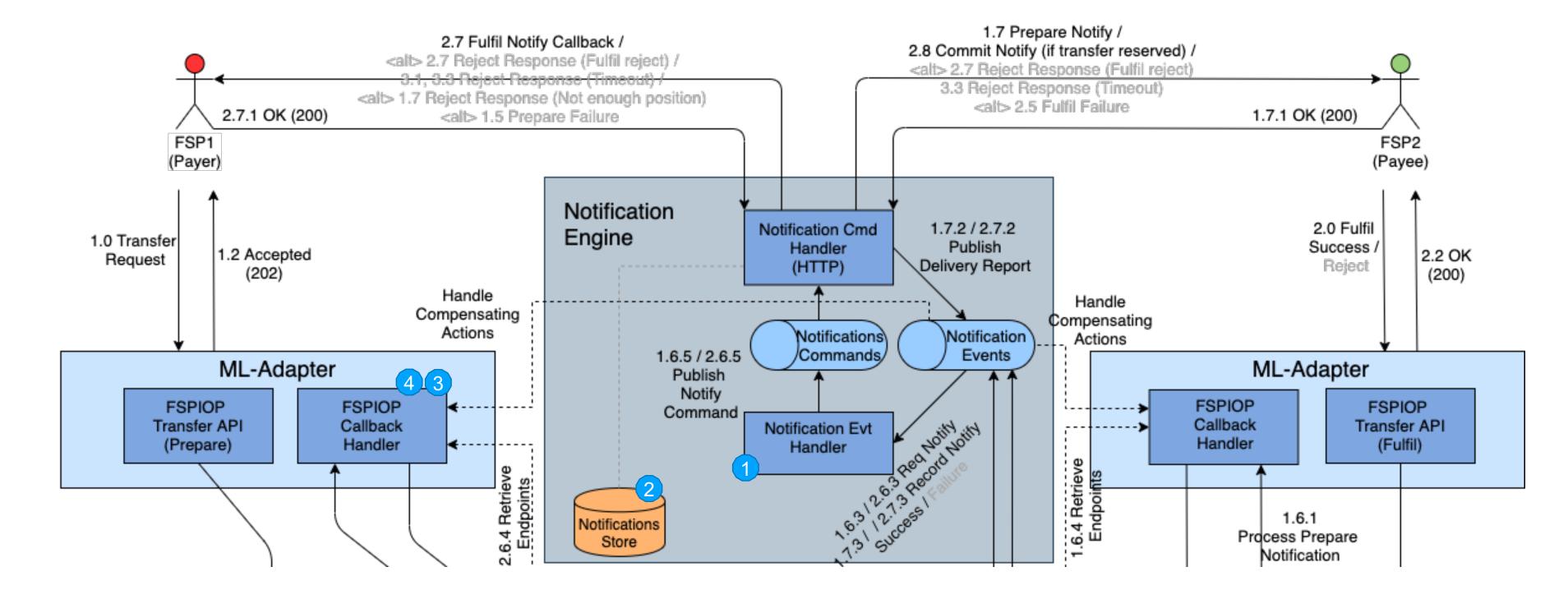


Reliable Notifications Design (v2)

Realignment to Reference Architecture

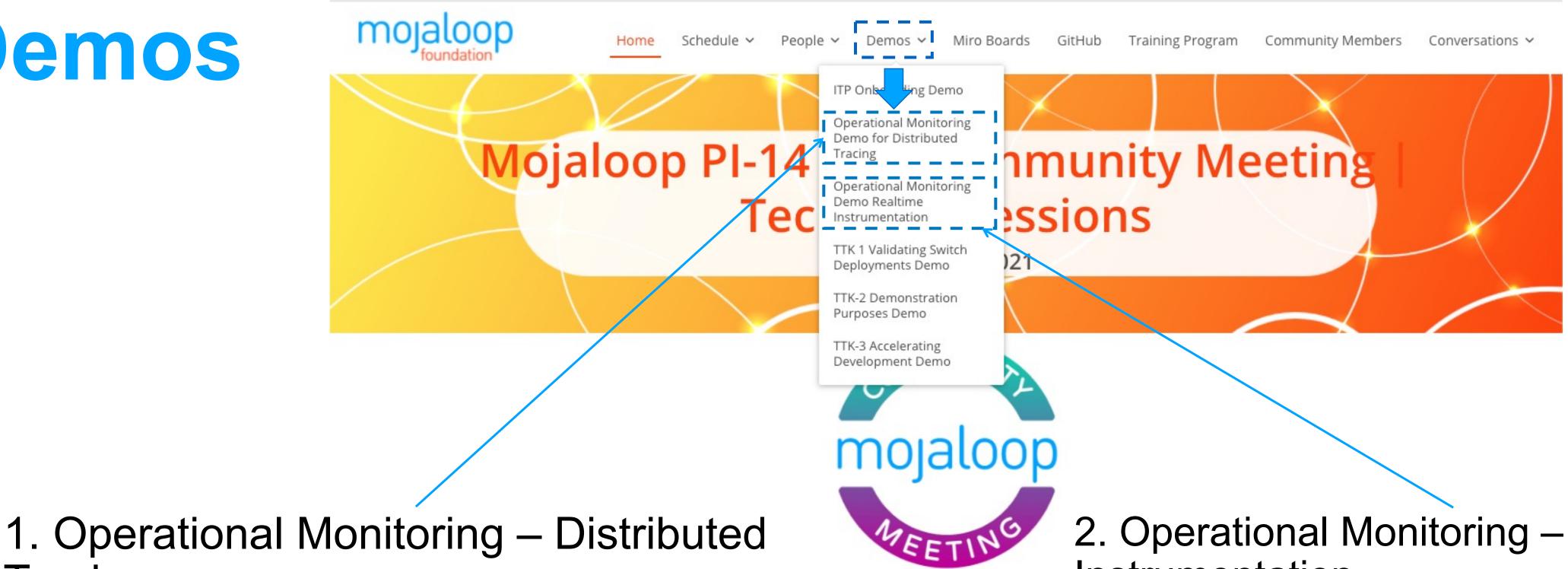
#	Reliable Notification Design Changes from v1 to v2	Reasoning
1	Notification Evt Handler moved from Central-Services to Notification Engine	The Notification Engine is responsible for managing the the Notification aggregate/entity based on the Reference Architecture's single responsibility principle. That means that it must be able to store and report on any Notifications that it has processed.
2	Notification Store added to Notification Engine	This was also introduced due to point (1) and to ensure that all failures scenarios are recoverable, as Notifications are now processed by a state engine backed by a fully persistent or cached datastore.
3	Notification formatting and transformations are handled by the FSPIOP Callback Handler	ML-API-Adapter in the Reference Architecture is responsible for managing incoming and outgoing FSPIOP requests and notifications. This provides the flexibility to support many different API Specifications (such as ISO 20022).
4	Compensating actions are now handled by the FSPIOP Callback Handler	In the previous version, it was an optional capability that more than likely would require an additional Central-Service component. In v2 based on the Reference Architecture, the FSPIOP Callback Handler is responsible for handling FSPIOP transformations (3), and similarly would be responsible for processing any FSPIOP specific compensating actions as a result of the Notification Report.

Feature Design Story: https://github.com/mojaloop/project/issues/1869
Documentation Pull Request: https://github.com/mojaloop/documentation/pull/288
DA Discussion (minutes and video recording): https://community.mojaloop.io/t/da-meeting-minutes-2021-03-31-13-00-utc/322





Demos



- 2. Operational Monitoring Realtime Instrumentation
 - Promfana (Prometheus + Grafana) overview
 - Instrumented Metrics Demo
 - Dashboards
 - Mojaloop
 - Kubernetes

 - MySQL

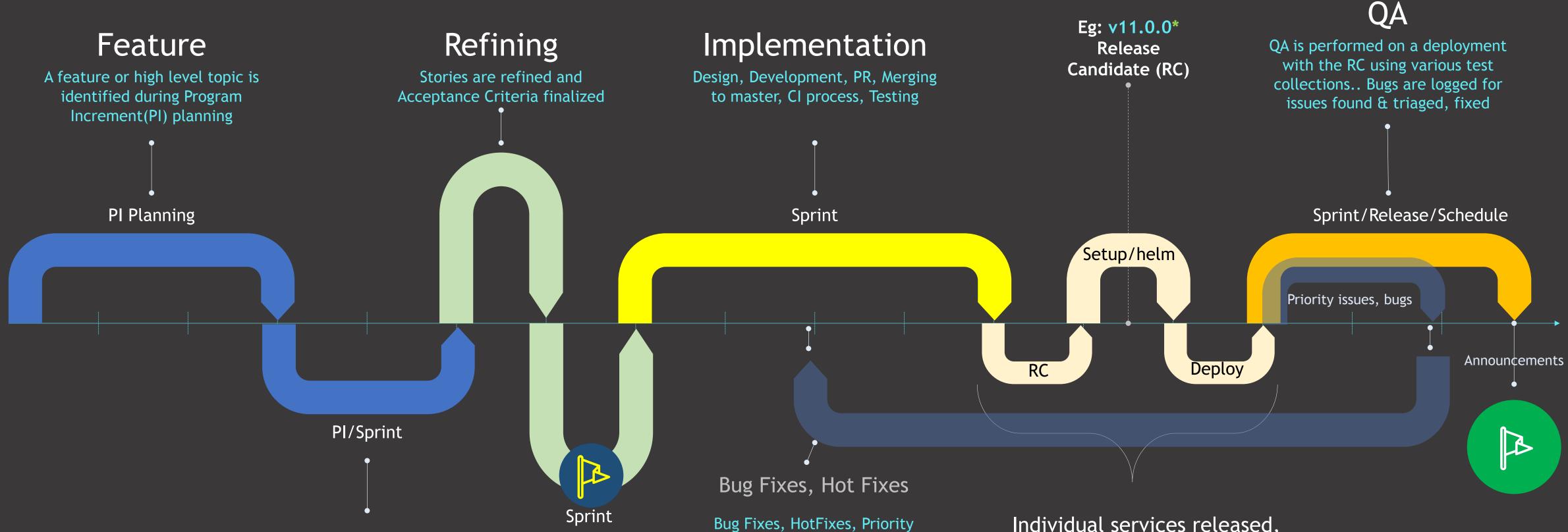
- Tracing
 - Event Framework overview
 - Tracing demo
 - **End-to-end Trace**
 - Linking Trace to Audits
 - Identifying Errors through Tracing, and viewing Error logs

mojaloop



Questions

ML OSS: (Helm) Release Mechanism



Epics, Stories

Based on Objectives of a PI, Epics and Stories based on features are accepted at PI/Sprint level

Sprint Planning

Stories are prioritized and added to specific Sprint Milestones

Note: This depicts a single iteration that happens multiple times over the course of a PI

Features added mid-sprint

Individual services released, deployed

A release is made on GitHub & package/image pushed to npmjs or dockerhub. It is then deployed on Dev environment (on AWS). This happens multiple times in a Sprint

Release to Community

If there are no high-priority bugs, and all criteria for a public release are met, this is released too Community and announcements are made

^{*} SemVer x.y.z. Moved to pure Semver starting PI-11 (11.x.x)