

Fuji – Test/QA/Documentation

In

- ~~Improved unit tests across services (improvements should be driven by specific WG dev teams)~~
- Improve blackbox test structure including reorganization of the tests and better test case documentation
- New test framework (e.g. Robot or Cucumber) to support additional types of functional/blackbox and system integration tests e.g. Device Service or system level latency tests
- ~~Blackbox tests for new Application Services microservices~~ **Moved to Appl Services WG**
- ~~Blackbox test for Device Services – Virtual, Modbus, MQTT, BACNet, OPC UA. Initially develop common set of tests that can be used against all Device Services.~~ **Moved to DS WG**
- Automated performance testing
 - API Load testing (measure response time) and metrics (CPU, memory) collection for all EdgeX microservices (this work was started during the Edinburgh iteration)
 - EdgeX microservice startup times
- ~~Test coverage analysis e.g. using tools such as [Codecov.io](https://codecov.io)~~ **moved to Dev Ops**

Out

- Automated Performance Testing
 - Automated system level latency and throughout testing (e.g. device read to export or device read to analytics to device actuation) - STRETCH GOAL
 - The ability to create summary reports/dashboards of key EdgeX performance indicators with alerts if thresholds have been exceeded
 - Blackbox and performance test runs against other container technologies supported (e.g. snaps)
 - Automated performance testing - baseline performance of service binaries no container
- Configuration testing
 - Existing testing uses a single static configuration
 - Need to identify and add additional testing configurations to automated blackbox testing
- Static code analysis
 - Using tools such as SonarQube or Coverity to identify badly written code, memory leaks and security vulnerabilities – STRETCH GOAL
- Documentation
 - Replacement of RAML API documentation with Swagger – STRETCH GOAL
- Tracing
 - During testing, configuration
 - Candidate tools/technology based on OpenTracing standard: Zipkin, Jaeger