CTA - SST Software Quality Plan

Vito Conforti @ INAF OAS Bologna SST Software meeting OA Brera <u>19 - 20 Feb 2024</u>

Summary

- CTA SST Quality Assurance plan for the software status
- Related Quality Plan (ASTRI-MA Software & CTA ACADA)
- CTA SST Software Version Control
- CTA SST Document Management System
- CTA SST Next steps

CTA - SST Q. A. plan for the software status

- SST-PRO-PLA-018 Issue 1aD prepared for the <u>SW PDR</u>
 - derived from ASTRI MA & CTA ACADA
 - shared within the SST collaboration
 - scope: SST software
- Document
 - management of product and process assessments;
 - Documentation
 - Standard, Practices, Conventions, Metrics
 - Reviews, Validation and Verification processes

Related Quality plan

- CTA ACADA Quality Plan
 - CTA-PLA-ACA-303000-0002 Issue 3 rev a 2023-08-28
 - Scope: ACADA (not CTA)
 - Very completed doc (too much?)
- ASTRI MA Software Quality Plan
 - ASTRI-INAF-PLA-3400-001 Issue 1.0 29/01/2021 (isse 2.0 include CR)
 - Scope: ASTRI Mini-Array Software (SCADA, DPS, ...)
 - Not so much details about metrics

Related Quality plan

- Commonalities between ASTRI MA and CTA ACADA
 - Iterative incremental development model
 - Something similar to Agile (mini-releases)
 - Tools
 - Gitlab for software version control
 - SonarQube for static code analysis
 - test infrastructure (test cluster & containers)
- What differs?
 - CI pipeline (ACADA -> Jenkins | ASTRI -> Gitlab CI)

CTA - SST Software Version Control

GitLab @ INAF for internal to the SST consortium processes

- https://www.ict.inaf.it/gitlab/cta-sst
- two sub-groups (camera / structure)?
- contact <u>me</u> to get access



GitLab @ CTAO for final release

not yet available under ctao-computing group

CTA - SST Document Management System

Redmine @ INAF

https://redmine.iasfbo.inaf.it/projects/cta-sst

Document Management System

https://redmine.iasfbo.inaf.it/projects/cta-sst/dmsf

Redmine @ CTAO

https://redmine.cta-observatory.org/projects/cta_sst

it seems out of date. To discuss if it will be used in the future (maybe only for official releases)



CTA - SST Next steps

- Development environment
 - need to be compliant with CTAO (Alma Linux 9 & ACS)
 - waiting / collaboration with ACADA team
- Hardware 4 tests?
 - make an assessment about kind of tests (unit and integration tests) and any needed Hardware
 - for integration with ACADA, ACADA test cluster may be used for preliminary testing
 - for integration with hardware devices (camera / structure) need to be assessed
- Static Code Analysis with Sonar
 - I assume INAF ASTRI would be fine. Only test reports would be provided to the customer (CTAO)
- Contribute to the review and make a list of expected artifacts to deliver (including integration tests such as LST1 - ACADA)

