Maturity Review Certification of Federated ML Application At Edge Blueprint

haihui wang

The AI Edge Federated Machine Learning is requesting maturity review.

This page references the requirements in BP Graduation Review Processes and Criteria specifically the table cell for Incubation -> (Mature) on the second row from the bottom of the page.

- Validation lab check
  - Multiple Jenkins jobs exist for deploying AI Edge to multiple Lab and for federated ML installation and various testing. The jobs listed below are the primary CD jobs. Additional job logs can be viewed on Nexus, but these listed here are the relevant ones for Akraino maturity review.
  - WeBank
    - https://nexus.akraino.org/content/sites/logs/webank/job/
  - Fate of R5
    - https://nexus.akraino.org/content/sites/logs/fate/job/Fate_test/15/
- Release inclusion check
  - participate in Akraino Release 4
  - Release 4 Planning
  - was included in Akraino Release 5
  - Release 5 Planning
- SW quality/functional check
  - The validation tests are done in the bare-metal server, and they also can be done in the VMs.
  - Fate has passed the blueprint validation tests in WeBank and Fate, the results of lynis, vuls and kube-hunter check are:
    - https://nexus.akraino.org/content/sites/logs/webank/job/FL_SCAN/lynis_fixed2/
    - https://nexus.akraino.org/content/sites/logs/fate/fml/5/
- Hardware definition check
  - The software/hardware information for the primary validation lab is available in the installation guide: Federated ML application at edge R4 Installation Document
  - The second validation lab had installed the AIEdge and passed the test check, the hardware information is shown in R5 Federated ML application at edge Installation Document
- Upstream dependency check
  - The upstream dependencies are enumerated in the software prerequisites session on the wiki: R5 Federated ML application at edge Installation Document
- Documentation check
  - Documentation has already been created for Akraino Release R5 Federated ML application at edge Documentation
- Community Health and Stability check
  - Meetings are held weekly and minutes are published with a list of attendees https://wiki.akraino.org/display/AK/The+AI+Edge+Blueprint+Family+Meetings
  - Meeting content includes welcoming new participants and providing introduction to the projects as well as discussing ongoing progress
  - Contributions come from Baidu, Arm, WeBank, Huawei and Futurewei