Core Review Certification of IEC Type 4 AR/VR Oriented Edge Stack

To be updated. Bart Dong

The IEC Type 4 AR/VR Oriented Edge Stack is requesting maturity review for Akraino release 4.

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

- **Validation lab check:**
  
The IEC Type 4 AR/VR Oriented Edge Stack project contributors have deployed and validated the BP with a community member validation lab and LF CD lab with the exact HW and SW configuration for which the maturity review is being requested. All validation labs are connected with Akraino LF CI Logs on the LF CI servers. The logs are pushed from each validation lab's CD testing, and the logs verifies the validation lab check.
  
  - Multiple Jenkins jobs exist for deploying IEC Type 4 AR/VR to multiple clusters and for 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
  
  - Tencent: https://nexus.akraino.org/content/sites/logs/tencent/MR/iec-type4/
  
  - UNH: https://nexus.akraino.org/content/sites/logs/parserlabs/r4/jobs/iec-type4/
  
  - Inwinstack: https://nexus.akraino.org/content/sites/logs/inwinstack/R3/logs/iec-type4/

- **Release inclusion check:**

  IEC Type 4 AR/VR Oriented Edge Stack successfully participated in Akraino release R2, R3 and R4's incubation stage.

  - Release 2 Planning
  - Release 3 Planning
  - Release 4 Planning
  - IEC Type 4 AR/VR is included in Akraino Release 4

- **SW quality/functional check:**

  - IEC Type 4 AR/VR has passed the Akraino Validation Framework Validation feature project (Akraino Blueprint Validation Framework) (after TSC approval).
  
  - IEC Type 4 AR/VR has passed the security scanning include Lynis and Vuls: https://nexus.akraino.org/content/sites/logs/tencent/MR/iec-type4/

- **HW definition check:**

  - Wearable Glass (Optional)
  
  - Teacher Client-Side — Personal Computer with Camera
  
  - Student Client-Side — Personal Computer with Camera
  
  - Server Side — 8 Core 16G Virtual Machine on ARM or x86 Platform

- **Upstream dependencies check:**

  - Teacher Side: Windows 10 with a Web Browser that supports WebSockets.
  
  - Student Side: Windows 10 with a Web Browser that supports WebSockets.
  
  - Server Side: CentOS 7.8 and CentOS 7.9
  
  - Virtual Classroom Application: Version: Master Branch of https://github.com/qiuxin/openvidu-vr
  
  - Tars Framework: Version: v2.4.13
  
  - IEC: Version: v3.0
  
  - Jenkins: Version: 2.263.3

- **Documentation check:**

  - Documentation is created for Akraino Release 2, 3, and 4, and some minor updates have been made but we are not aware of any significant documentation issues.
  
  - TARS APIs described in Release 4 Architecture Document#APIs

- **Community Health and Stability check:**

  - Meetings are held weekly and minutes are published with a list of attendees: https://wiki.akraino.org/display/AK/IEC+Type+4+Meetings
  
  - Meeting content includes welcoming new participants and providing introduction to the projects as well as discussing ongoing progress
  
  - Contributions from Inwinstack, Arm, Tencent, PSU, Orange, IBM, HTC, support ARM and x86