

## Release 7 Planning

Release 7 target date is Jan. 30, 2023

## Blue Prints Participating in Release 7

Internal Target date to meet Rel 7 Criteria is TBD

(To be updated)

[illegible]

|    |                                                                                                                                               |    |            |                                                                                                                                                           |                                                                                 |                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                          |          |  |  |
|----|-----------------------------------------------------------------------------------------------------------------------------------------------|----|------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|----------|--|--|
| 13 | The AI Edge: Intelligent Vehicle-Infrastructure Cooperation System(I-VICS)<br><br>Yu, Liya                                                    |    |            |                                                                                                                                                           |                                                                                 |                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                          |          |  |  |
| 14 | 5G MEC/Slice System to Support Cloud Gaming, HD Video and Live Broadcasting Blueprint<br><br>Feng Yang                                        |    |            |                                                                                                                                                           |                                                                                 |                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                          |          |  |  |
| 15 | IEC Type 3: Android cloud native applications on Arm servers in edge for Integrated Edge Cloud (IEC) Blueprint FamilyRajeev Gadgil Davy Zhang |    |            |                                                                                                                                                           |                                                                                 |                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                          |          |  |  |
| 16 | IEC Type 5: SmartNIC for Integrated Edge Cloud (IEC) Blueprint Family<br><br>Leo Li jin peng                                                  | No | Mature     | <a href="https://nexus.akraino.org/content/sites/logs/socnoc/job/IEC_TYPES/R7/">https://nexus.akraino.org/content/sites/logs/socnoc/job/IEC_TYPES/R7/</a> | Release 7 Documentation for IEC Type 5                                          | No API changes from R6, per e-mail from Pengjin at SOCNOC 05 Jan 2023                               | <b>Vuls</b><br><br><a href="https://nexus.akraino.org/content/sites/logs/socnoc/job/IEC_TYPE5/R7/vuls/">https://nexus.akraino.org/content/sites/logs/socnoc/job/IEC_TYPE5/R7/vuls/</a><br><br><b>lynis</b><br><br><a href="https://nexus.akraino.org/content/sites/logs/socnoc/job/IEC_TYPE5/R7/lynis/">https://nexus.akraino.org/content/sites/logs/socnoc/job/IEC_TYPE5/R7/lynis/</a><br><br><b>Kube-Hunter</b><br><br><b>Not Applicable</b>                                                                                                                                                                  | Approved                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Approved                                 | Approved |  |  |
| 17 | Enterprise Applications on Lightweight 5G Telco Edge<br><br>Gaurav Agrawal                                                                    |    |            |                                                                                                                                                           |                                                                                 |                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                          |          |  |  |
| 18 | Public Cloud Edge Interface (PCEI) Blueprint<br><br>Oleg Berzin                                                                               | No | Incubation | <a href="https://nexus.akraino.org/content/sites/logs/cmti/job/pcei-daily/">https://nexus.akraino.org/content/sites/logs/cmti/job/pcei-daily/</a>         | <a href="https://wiki.akraino.org/x/LoMcB">https://wiki.akraino.org/x/LoMcB</a> | Sent e-mail to Oleg 02 Feb 2023 to confirm no API changes from R7<br><br>Oleg confirmed 02 Feb 2023 | <a href="https://nexus.akraino.org/content/sites/logs/pcei/job/results">https://nexus.akraino.org/content/sites/logs/pcei/job/results</a><br><br>09 Feb 2023<br><br>Updated results:<br><br><a href="https://nexus.akraino.org/content/sites/logs/pcei/job/v2/results">https://nexus.akraino.org/content/sites/logs/pcei/job/v2/results</a><br><br>15 Feb 2023<br><br>Updated results (wrong file submitted on Feb 9. Please see below for Lynis fixes):<br><br><a href="https://nexus.akraino.org/content/sites/logs/pcei/job/v3/results">https://nexus.akraino.org/content/sites/logs/pcei/job/v3/results</a> | <b>22 Feb 2023</b><br><br><b>Performing test ID AUTH-9328 (Default umask values): FAILED</b><br><br><b>Note: The exception is granted for cases that can't be fixed due to software or hardware issues. Umask issue fits to a fixable configuration issue. More justifications for the exception have to be provided.</b><br><br><b>Result: sysctl key kernel.dmesg_restrict: FAILED</b><br><br><b>15 Feb 2023 The version of the submitted Lynis logs is identical.</b><br><br><b>Lynis:</b><br><br><b>Performing test ID AUTH-9328 (Default umask values): FAILED</b><br><br><b>09 Feb 2023 NOTE: changing the UNMASK value from default 022 to 027 resulted in the Lynis test suite erroring out. Requested Exception</b><br><br><b>Result: sysctl key net.ipv4.conf.default.accept_source_route: FAILED</b><br><br><b>09 Feb 2023 FIXED</b><br><br><b>Performing test ID HRDN-7220 (Check if one or more compilers are installed): FAILED</b><br><br><b>09 Feb 2023 FIXED</b><br><br><b>15 Feb 2023 Submitted correct logs for Lynis</b><br><br><b>Vuls: Accepted</b><br><br><b>Kube-hunter: No issue found but there is a missing pod.log</b> | Approved<br><br>06/07/2023<br><br>Jim Xu |          |  |  |

|    |                                                                                                                                                                   |    |            |                                                                                                                                                                                                |                                                        |                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |          |                 |             |          |  |  |
|----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------|------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-----------------|-------------|----------|--|--|
| 19 | <div>The AI Edge: Federated ML application at edge</div> <div>zifan wu</div> <div>haihui wang</div> <div>No plan for this release</div>                           |    |            |                                                                                                                                                                                                |                                                        |                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |          |                 |             |          |  |  |
| 20 | <div>KubeEdge Edge Service Blueprint</div> <div>Yin Ding</div>                                                                                                    |    |            |                                                                                                                                                                                                |                                                        |                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |          |                 |             |          |  |  |
| 21 | <div>Private LTE/5G ICN Blueprint</div> <div>Prem Sankar G</div> <div>Has been merged with PCEI blueprint</div>                                                   |    |            |                                                                                                                                                                                                |                                                        |                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |          |                 |             |          |  |  |
| 22 | <div>Rural Edge blueprint for Tami COVID-19 Blueprint Family</div> <div>Surojit Banerjee</div>                                                                    |    |            |                                                                                                                                                                                                |                                                        |                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |          |                 |             |          |  |  |
| 23 | <div>Smart Cities</div> <div>Olivier Bernard Cindy Xing<br/>Alexander Su (alexander@nexcom.com)</div> <div>Jason Wen</div> <div>Jack Liu</div>                    |    |            | Mature                                                                                                                                                                                         |                                                        |                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |          |                 |             |          |  |  |
| 24 | <div>MEC-based Stable Topology Prediction for Vehicular Networks</div> <div>Asif Mehmood</div> <div>(not for release 7)</div>                                     |    |            |                                                                                                                                                                                                |                                                        |                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |          |                 |             |          |  |  |
| 25 | <div>IEC Type 2 for Integrated Edge Cloud (IEC) Blueprint Family</div> <div>Vinothini Raju</div> <div>ashvin kumar Trevor Tao Muhammad Hamza</div>                |    |            |                                                                                                                                                                                                |                                                        |                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |          |                 |             |          |  |  |
| 26 | <div>IoT Workloads at the Smart Device Edge - Predictive Maintenance (with a Thermal Imaging Camera, vibration sensors, etc.)</div> <div>V S Aaron Williams</div> |    |            |                                                                                                                                                                                                |                                                        |                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |          |                 |             |          |  |  |
| 27 | <div>Federated Multi-Access Edge Cloud Platform</div> <div>Deepak Vij</div>                                                                                       |    |            |                                                                                                                                                                                                |                                                        |                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |          |                 |             |          |  |  |
| 28 | <div>Smart Data Transaction</div> <div>Colin Peters</div>                                                                                                         | No | Incubation | <div><a href="https://nexus.akraino.org/content/sites/fujitsu/job/sdt/r7/">https://nexus.akraino.org/content/sites/fujitsu/job/sdt/r7/</a></div> <div>See test documentation for details</div> | <div>Smart Data Transaction for CPS R7 Datasheet</div> | <div>No API changes from R6, per e-mail from Colin Peters, 19 Dec 2022</div> | <div>Vuls</div> <div><a href="https://nexus.akraino.org/content/sites/logs/fujitsu/job/sdt/r7/sdt-vuls/2/">https://nexus.akraino.org/content/sites/logs/fujitsu/job/sdt/r7/sdt-vuls/2/</a></div> <div>Lynis</div> <div><a href="https://nexus.akraino.org/content/sites/logs/fujitsu/job/sdt/r7/lynis/3/">https://nexus.akraino.org/content/sites/logs/fujitsu/job/sdt/r7/lynis/3/</a></div> <div>Kube-Hunter</div> <div><a href="https://nexus.akraino.org/content/sites/logs/fujitsu/job/sdt/r7/sdt-blual/1/">https://nexus.akraino.org/content/sites/logs/fujitsu/job/sdt/r7/sdt-blual/1/</a></div> | Approved | Approved (1/18) | 19 Jan 2023 | Approved |  |  |

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| 29 | <div>Robot basic architecture based on SSES</div> <div>Fukano Haruhisa</div>                           |  | No  | Incubation | <div><a href="https://nexus.akraino.org/content/sites/logs/fujitsu/job/robot-family/R7/sses-lynis/">https://nexus.akraino.org/content/sites/logs/fujitsu/job/robot-family/R7/sses-lynis/</a></div> <div><a href="https://nexus.akraino.org/content/sites/logs/fujitsu/job/robot-family/R7/sses-vuls/">https://nexus.akraino.org/content/sites/logs/fujitsu/job/robot-family/R7/sses-vuls/</a></div> | <div>One pager for release7 - Akraino - Akraino Confluence</div> | <div>No API changes from R6, per e-mail from Reo Inoue 01 Dec 2022</div>                                                                                                | <div><b>Lynis</b><br/><a href="https://nexus.akraino.org/content/sites/logs/fujitsu/job/robot-family/R7/2/sses-lynis/PDH/lynis_PDH_after.log">https://nexus.akraino.org/content/sites/logs/fujitsu/job/robot-family/R7/2/sses-lynis/PDH/lynis_PDH_after.log</a><br/><a href="https://nexus.akraino.org/content/sites/logs/fujitsu/job/robot-family/R7/sses-lynis/Robot/lynis_Robot_after.log">https://nexus.akraino.org/content/sites/logs/fujitsu/job/robot-family/R7/sses-lynis/Robot/lynis_Robot_after.log</a><br/><a href="https://nexus.akraino.org/content/sites/logs/fujitsu/job/robot-family/R7/sses-lynis/cloud/lynis_after.log">https://nexus.akraino.org/content/sites/logs/fujitsu/job/robot-family/R7/sses-lynis/cloud/lynis_after.log</a></div> <div><b>Vuls</b><br/><a href="https://nexus.akraino.org/content/sites/logs/fujitsu/job/robot-family/R7/sses-vuls/">https://nexus.akraino.org/content/sites/logs/fujitsu/job/robot-family/R7/sses-vuls/</a></div>                                           | Approved | Approved (no changes from R6) |              |  |  |  |  |
| 30 | <div>Edge Service Enabling Platform</div> <div>Colin Peters</div> <div>Not planned for release 7</div> |  |     |            |                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                  |                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |          |                               |              |  |  |  |  |
| 31 | <div>CFN (Computing Force Network) Ubiquitous Computing Force Scheduling hanyu ding</div>              |  | Yes | Incubation | <div><a href="https://nexus.akraino.org/content/sites/logs/cmcc/job/r7/r7_cd.log">https://nexus.akraino.org/content/sites/logs/cmcc/job/r7/r7_cd.log</a></div>                                                                                                                                                                                                                                      | <div>One pager for R7 - Akraino - Akraino Confluence</div>       | <div>API info form uploaded 30 Jan 2023. Scheduled for review at API subcommittee meeting 03 Feb 2023</div> <div>Approved at API subcommittee meeting 03 Feb 2023</div> | <div><b>Kube-hunter:</b><br/><a href="https://nexus.akraino.org/content/sites/logs/cmcc/job/r7/kube-hunter-scan.log">https://nexus.akraino.org/content/sites/logs/cmcc/job/r7/kube-hunter-scan.log</a></div> <div><b>Vuls:</b><br/><a href="https://nexus.akraino.org/content/sites/logs/cmcc/job/r7/vuls.log">https://nexus.akraino.org/content/sites/logs/cmcc/job/r7/vuls.log</a></div> <div><b>Lynis</b><br/><a href="https://nexus.akraino.org/content/sites/logs/cmcc/job/r7/lynis-after.log">https://nexus.akraino.org/content/sites/logs/cmcc/job/r7/lynis-after.log</a></div> <div>10 Mar 2023</div> <div>updated</div> <div><a href="https://nexus.akraino.org/content/sites/logs/cmcc/job/r7/lynis0310.log">https://nexus.akraino.org/content/sites/logs/cmcc/job/r7/lynis0310.log</a></div> <div>17 Mar 2023</div> <div>updated</div> <div><a href="https://nexus.akraino.org/content/sites/logs/cmcc/job/r7/lynis0317.log">https://nexus.akraino.org/content/sites/logs/cmcc/job/r7/lynis0317.log</a></div> | Approved | approved                      | Jan. 30.2023 |  |  |  |  |

## For details, refer to the following requirements

## Classes of release 7 Blueprints and the requirements to be included in Release 7

The requirements for the blueprints to be included in release 7 are as follows:

Depending upon the situation, the PTLs are suggested to meet the following criteria -

### Class 1: The Blueprints moving from Release 6 to Release 7

If the blueprint is already part of release 6 and you want this to be included in release 7, please follow the following steps:

- Did you make any improvements in release 7 - e.g. you fixed bugs or added additional features?
  - If Yes:
    - Does it impact the APIs or Documentation?
      - If yes,
        - Please update the documentation and send the email to respective sub-committee chairs.
        - For APIs, please see API Subcommittee Guidelines below
      - Run the security scans and upload the link in the table below next to your blueprint
      - Upload the latest CI/CD logs
      - Send an email to [tsc@lists.akraino.org](mailto:tsc@lists.akraino.org) to notify the TSC
      - Put yourself on the TSC agenda and request for the approval
  - If No:
    - No additional formalities are required
    - Send an email to [tsc@lists.akraino.org](mailto:tsc@lists.akraino.org) to notify the TSC
    - Put yourself on the TSC agenda and request for the approval

## Class 2: The Blueprints moving from Release 4/5 to Release 7

If the blueprint is already part of release 4/5 and not release 6 and you want this to be included in release 7, please follow the following steps:

Note that in release 5, a new requirement was introduced to expose all the API consumed and offered by your blueprint.

- Please update the documentation to include new API section.
- Follow the guidelines to submit API information as per the requirements specified in the API sub-committee
- send the email to respective documentation and API sub-committee lists.
  - If you require assistance with documentation, please reach out the respective subcommittee to be included on their agenda and discuss with them otherwise you are done
  - For APIs, please see API Subcommittee Guidelines below
- Run the security scans and upload the link in the table below next to your blueprint
- Upload the latest CI/CD logs
- Send an email to [tsc@lists.akraino.org](mailto:tsc@lists.akraino.org) to notify the TSC
- Put yourself on the TSC agenda and request for the approval

## Class 3: The Blueprints moving from Release 3 or earlier to Release 7

If the blueprint is already part of release 1 or 2 and not release 4 or 5 or 6 and you want this to be included in release 7, please follow the following steps described under Class 4 below.

## Class 4: New Blueprints being introduced for the first time in Release 7

Please follow the requirements specified in release 6 with the following exceptions:

1. The sub-committee presentations are optional starting from release 7 and for your benefit only. If you require assistance on any of the areas such as documentation, Security scans or CI/CD logs, please schedule a meeting with appropriate subcommittee.
2. For APIs, please see API Subcommittee Guidelines below
3. Once you meet the requirements of respective subcommittee, please send them an email to notify them. Except for APIs, as noted in 2, if they require any clarification, they will either invite you to meet with them or they will approve your blueprint via email.
4. Send an email to [tsc@lists.akraino.org](mailto:tsc@lists.akraino.org) to notify the TSC
5. Put yourself on the TSC agenda and request for the approval

## API Subcommittee Guidelines

Please follow step-by-step instructions on the [API Subcommittee API reporting wiki page](#). If after submitting your API info form (or an updated form, if you are in Class 1 and the form has changed since Release 4) and notifying the subcommittee by e-mail they have questions, then schedule a time when either subcommittee members may attend your weekly BP meeting or you can attend the API subcommittee weekly meeting in order to discuss and resolve the questions. When meeting, please be prepared with architecture and data flow diagrams so the API subcommittee can understand and confirm 1) APIs consumed and offered by your BP, 2) upstream project APIs, and 3) customer-facing demo APIs. This information will be used to update the Akraino website [API Map](#), which makes your BP visible and searchable to customers and entities outside of Akraino, so completeness and accuracy is important.

## Release 7 Requirements

1. High Level Overall Requirements
2. CI, Blueprint Validation Lab Sub-Committee Requirements
  - a. Present [Pod Topology](#) document.
  - b. [Peering](#) w/LF Jenkins - **(Note: peering is an optional requirement)**
  - c. [Push logs](#) through Nexus. **(Note: This is mandatory for Incubation self-certified and Maturity)**
  - d. [Usage of topics for release](#)
    - i. Releases >= 1.0 (e.g. 1.xyz, 2.xyz etc) are reserved for BP that have been approved as Core by the TSC (considered 'GA' quality).
    - ii. Releases <1.0 (e.g. 0.xyz etc) are reserved for projects that have not reached the Akraino Core level (i.e. anything that is in Incubation ('alpha' quality) and Mature ('beta' quality).
- e. Enforcement of Static Code Analysis through SonarCloud (SaaS), [WIP](#) LF Release Engineering & Security Subcommittee. **(Note: This is an optional requirement for Incubation self certified and mandatory for Maturity)**

3. Security Sub-Committee Requirements, please fill in [Release 4 Blueprint Scanning Status](#). Instructions can be found at: [Steps To Implement Security Scan Requirements](#)
4. Blueprint Validation Framework Feature Project Requirements [See TSC meeting](#).
5. Projects going for Maturity Review please refer to Maturity Criteria defined by Process subcommittee [BP Graduation Review Processes and Criteria](#) (**Note this is not required for self certification, only required for maturity review**)
6. Documentation Sub-Committee Requirements  
**User Documents:**

The following documentation with the following sections called out should be on the wiki with links to rest of the sections as applicable. We prefer that the entire doc is on the wiki but we do not require it.

[Architecture](#) - Blue print Overview and overall architecture

[Release Notes](#) – Summary and What is released

[Installation Doc](#) – Introduction and deployment architecture

[Test Document](#) – Introduction and Overall Test Architecture

#### **Developer Documents:**

We are also recommending that Blueprints include via ReadtheDocs, with each Blue Print given their own repo, but we do not require it

7. API Sub-Committee Requirements (**Note: See this link for requirements: [Blueprint Projects API Reporting Requirements](#)**)
8. Community Sub-Committee Requirements (**Note: no mandatory requirements for Incubation self-certified or Maturity**)
9. Process Sub-Committee Requirements (**Note: See the Process Sub Committee page defining the TSC approved Maturity review process and requirements for those requesting inclusion in R3 at Mature level [BP Graduation Review Processes and Criteria](#)**)
10. Upstream Sub-Committee Requirements (**Note: no mandatory requirements for Incubation self-certified or Maturity**). Here is the R6 release Upstream BP review status [Release 6 Upstream Review Status](#), [Release Upstream Compliance](#). Also please refer to the page for the R6 requirement as well.