Meeting of the **T**echnical **S**teering **C**ommittee of the Akraino Edge Stack Project

August 2, 2018
6:30 a.m. PT/9:30 a.m. ET

Antitrust Policy Statement

- Meetings of the Akraino Edge Stack Project involve participation by industry competitors, and it is the intention of the Project to conduct all of its activities in accordance with applicable antitrust and competition laws. It is therefore extremely important that attendees adhere to meeting agendas, and be aware of and not participate in any activities that are prohibited under applicable U.S. state, federal or foreign antitrust and competition laws. Examples of types of actions that are prohibited at Akraino Edge Stak Project meetings and in connection with Akraino Edge Stack Project activities are described in the The Linux Foundation Antitrust Policy. If you have questions about these matters, please contact your company counsel or Andrew Updegrove, of the firm of Gesmer Updegrove LLP, which provides legal counsel to The Linux Foundation.
- Linux Foundation Antitrust Policy: https://www.linuxfoundation.org/antitrust-policy.

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Agenda

- Roll Call, Minute Approval & Current Membership Review
- Approval of July 26, 2018 Minutes
- Future Meetings
  - Rotating Meeting Proposal
- Developer Summit – August 23 & 24
  - Agenda Review
  - Sponsorship Opportunities
- TSC Chair Election Process
- Workgroups: Set-up
  - Blue Prints (multiple)
  - TSC Processes & Procedures
- Discussion: Scope
- Discussion: Submission of Blue Prints

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TSC Voting Member Director: Roll Call

Member Company	Voting Member Name	Contact Information
Arm	Tina Tsou	tina.tsou@arm.com
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Huawei	Zho Nan	n.zhou@huawei.com
Intel	Jenny Koerv	jenny.koerv@intel.com
inwinSTACK	Thor Chin	thor.c@inwinstack.com
Juniper Networks	Sukhdev Kapur	sukdev@juniper.net
Nokia	Tapio Tallgren	tapio.tallgren@nokia.com
NTT	Takeshi Kawahara	kuwahara.takeshi@lab.ntt.co.jp
Radisys	Prakash Siva	psiva@radisys.com
Red Hat	Frank Zdarsky	fzdarsky@redhat.com
Wind River	Jim Einarsson	Jim.einarsson@windriver.com

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Current Membership

Plan for Future Meetings

- Rotating Meeting Proposal
  - Week 1: 6:30 a.m. PDT
  - Week 2: 5:00 p.m. PDT
  - Week 3: 6:30 a.m. PDT
  - Week 4: 5:00 p.m. PDT

  - If quorum is not met during a meeting, the vote will be held electronically and will commence after the close of the meeting it was brought to for TSC consideration.

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August Developer Summit

- August 23 (8a.m. – 5 p.m.) & August 24 (8a.m. – Noon)
- AT&T Campus, Middleton, NJ
- Web-site with Registration page in progress: look for early next week
- Looking for lunch and/or dinner sponsors
  - Please contact afisher@linuxfoundation.org

- Proposed Agenda Items:
  - Welcome, Community Update, TSC Intro
  - AT&T Seed Code Overview, Use cases and Architecture
  - Under Cloud Platform Overview
  - NEV-SDK Seed Code Overview

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August Developer Summit

- Edge Use Cases: Verizon, Huawei, Microsoft
- Vendor/Supplier Talks: Ericsson, HPE, Dell, Canonical
- Arkraino Cross Community Collaboration:
  - Mobile EdgeX,
  - Open Stack Edge Working Group,
  - Open Network Foundation,
  - OPNFV CI/CD,
  - EdgeX Foundry
- Break-out Sessions:
  - Governance, Community Development, Participation Guidelines, Areas of Collaboration
  - Akraino 1.0 Release Definition, SKUs definition, Use Cases
  - CI/CD, Testing & Certification
  - Akraino Platform Automation & Management (Under Cloud Platform/Sages)
  - Architecture gaps, Regional Controllers, ONAP, k8s

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TSC Chair Election

- **TSC Chair**
  - serves as a voting member of the Governing Board
  - acts as a liaison between the Governing Board and technical leadership of the Project.
  - Please note: there is a considerable time commitment for the TSC Chair position.

- **Proposed Election Process**
  - Open nomination period following today's meeting via email. Nominees should submit a brief bio and statement of intent to: afisher@linuxfoundation.
  - Close the nomination period on Thursday, August 9th, 5 p.m. PT
  - On Friday, August 10th, we will distribute collected bios and statement of interest and open the voting period. Voting instructions will be included in this distribution.
  - We will close the voting period on Thursday, August 16th, 5 p.m. PT and announce the results.

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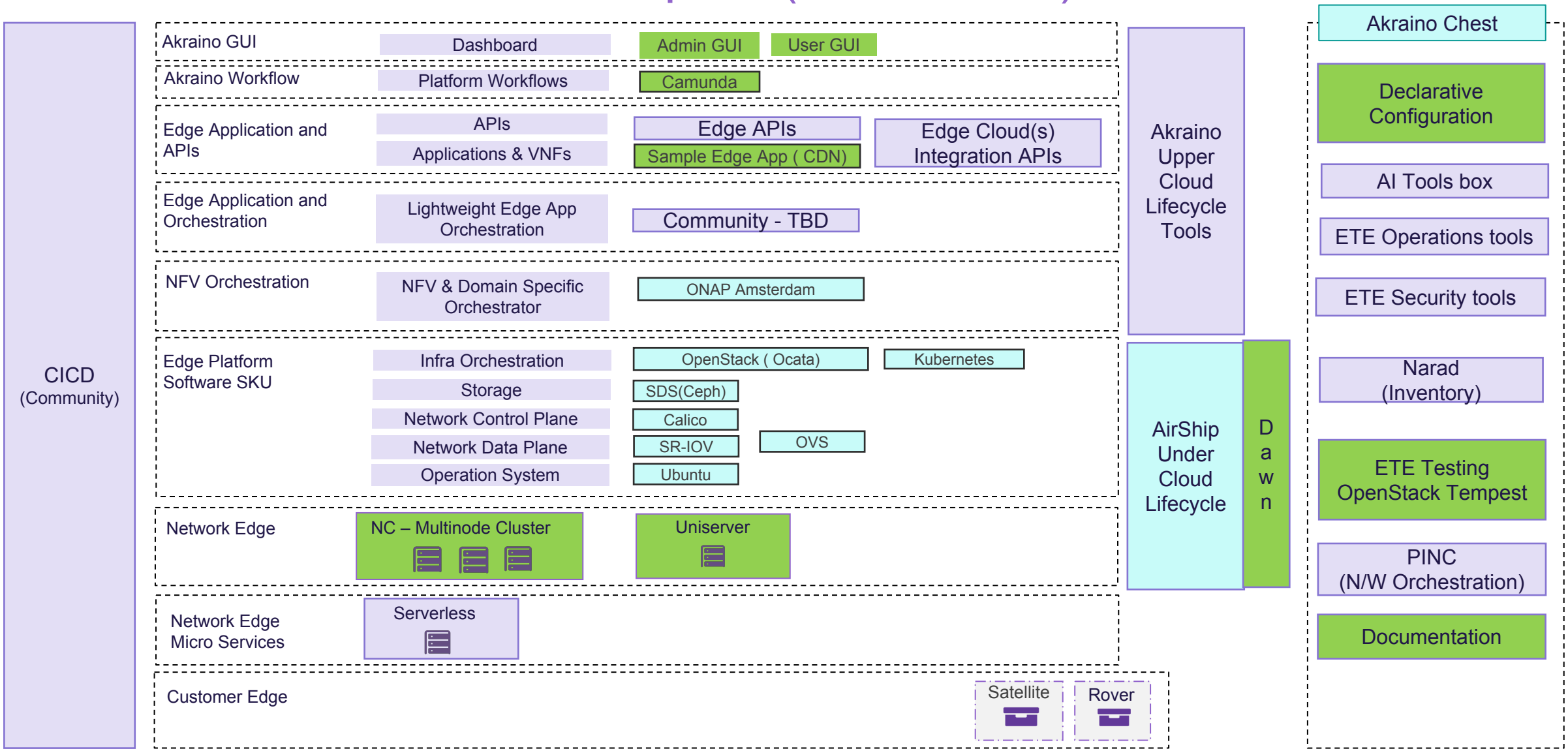
Akraino Network Cloud Blueprint (Seed Code)



Source: AT&T

Work Groups

- Blue Prints:
  - Mail Lists:

- TSC Procedures & Policies
  - Mail List:

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Discussion on Scope

1. Community Target/Vision - Focus on the important blueprints and pull a release together by this year to create a community momentum.
2. Blueprint summiteers are expected to provide at least minimum resources to develop and maintain the blueprints until community mass is achieved.
3. Akraino is best to host horizontal items which span across multiple opensource and does not have a home in the upstream communities (verticals), e.g., Resiliency, ETE APIs, security, etc.,
4. Support multiple blueprints but not too many. Setup criteria to accept the blueprint to Akraino and into an Akraino release.
5. Workstreams to collaborate with upstream communities to develop missing features to enable edge.

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Discussion: Submission of Blue Prints

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Akraino TSC

Addendum

Akraino Executive Summary

Zero Touch Edge Cloud Automation

Akraino is an Edge project targeted to

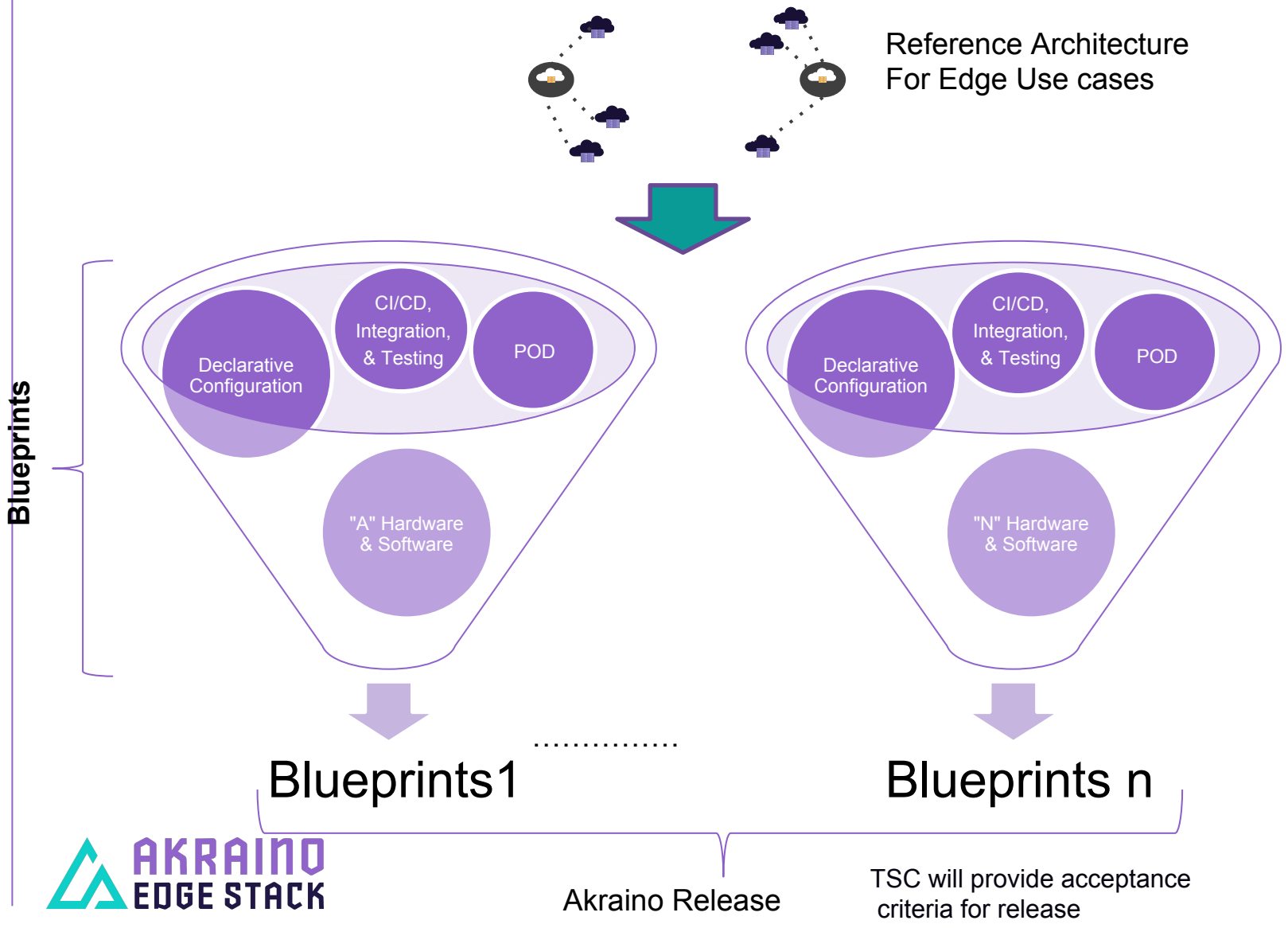
- Address Telco, Enterprise and Industrial IoT use cases

Akraino Scope:

- Develop Edge Middleware, SDKs, applications and create an app/VNF ecosystem
- Develop Edge API and framework for interoperability with 3rd party Edge providers & hybrid cloud models
- Collaborate with upstream community (CI/CD & upstream process support)
- Create Blueprints (integrated stack) to address Edge use cases:

1. (Telco/Hosted) Edge: eg include ONAP, OpenStack, Airship, etc (eg large/medium POD)
2. (Telco/hosted) Remote edge: Stack scale from single node to Enterprise use cases (eg IOT)
3. (OTT/Enterprise/Telecom) Stack for remote edge locations (1000s) with disaggregated hardware

Akraino Blueprints & release



Blueprints – Approved and tested declarative configuration based on use cases, set of Hardware & Software, Point of delivery (POD).

Reference Architecture – Defines Akraino building blocks

Declarative Configuration – Hides lower layer complexity to user

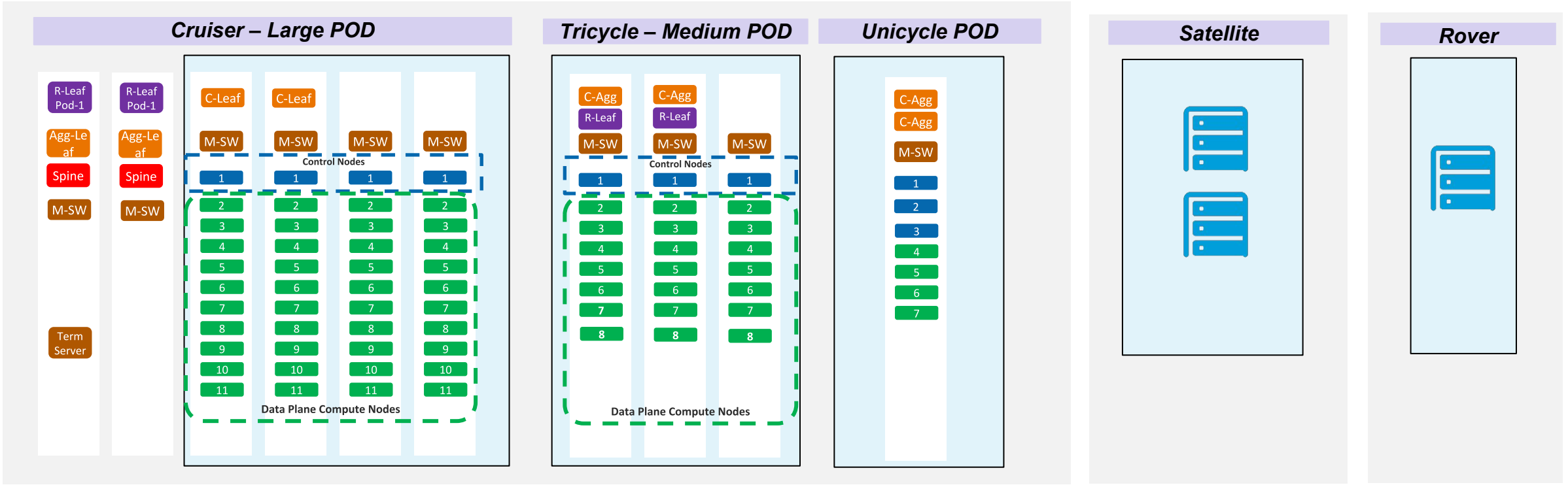
CI/CD, Integration & Testing Tools – Drive product quality

Akraino release – End Product

Edge Point of Delivery (POD)

Hosted @ Telco or Provider (e.g., Network Cloud)

Customer's Premises



Characteristics

Use Cases (e.g.,)

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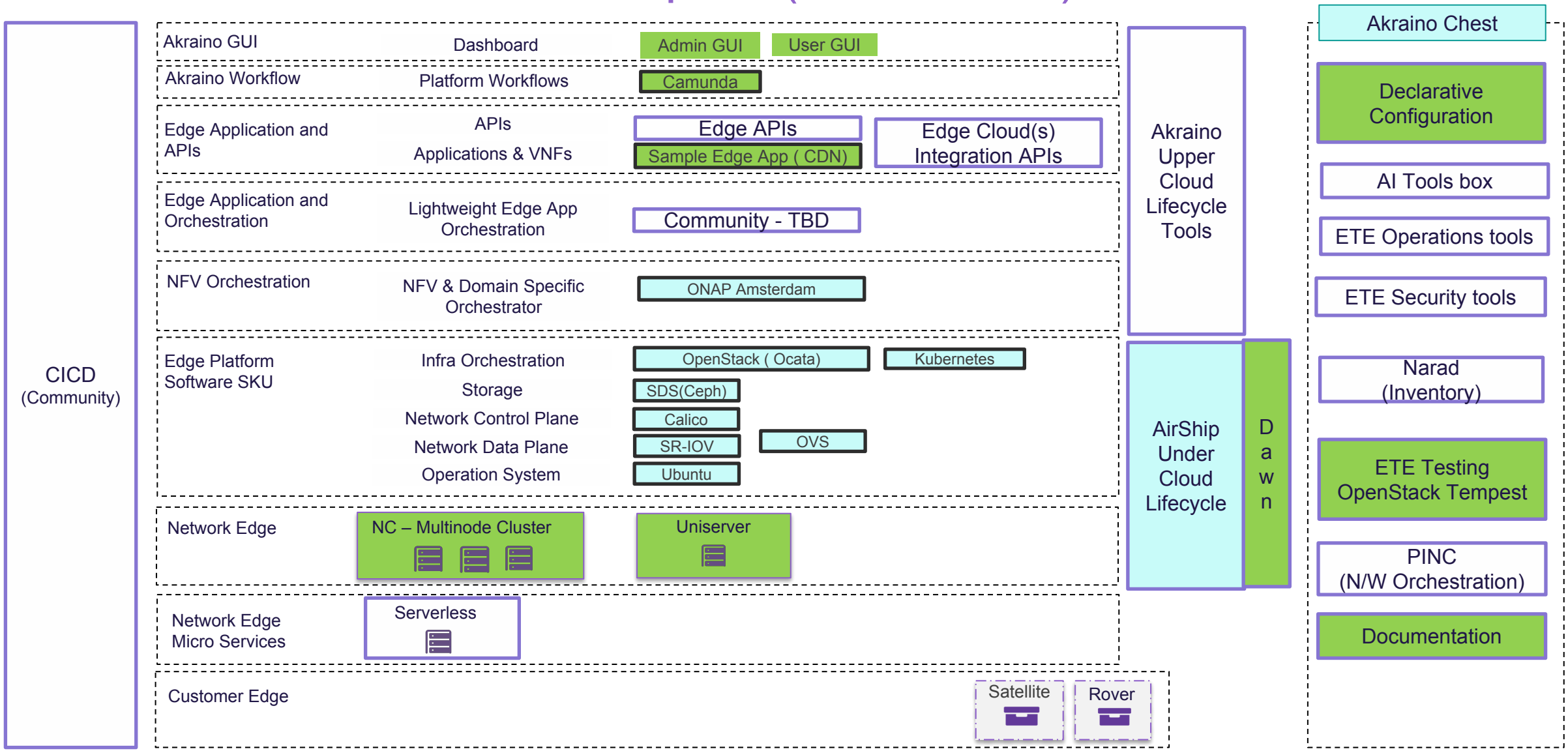
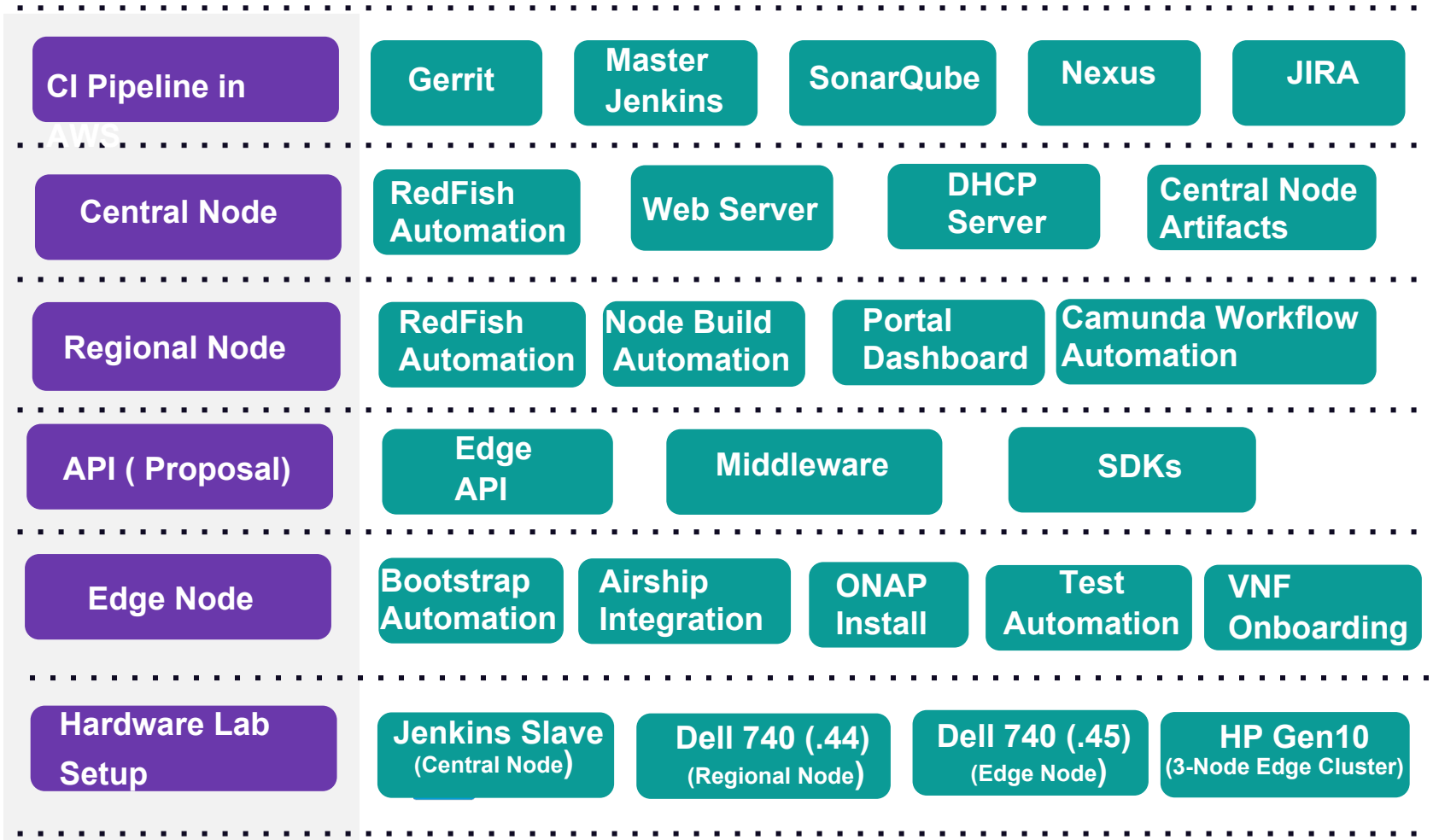
Akraino Network Cloud Blueprint (Seed Code)



Source: AT&T

What are our efforts?



- *Allows to mimic CI Pipeline in LF*

- *Jenkins Slave to mimic Central Node*
- *Support Regional Node Build automation*

- *OS Bootstrap to App Install*
- *Portal driven orchestration*

- *Integration with Edge Applications*
- *Cross platform interoperability*

- *End-to-End Stack Integration*
- *Fully Automated*

- *End-to-End Emulation of Akraino Edge Automation*

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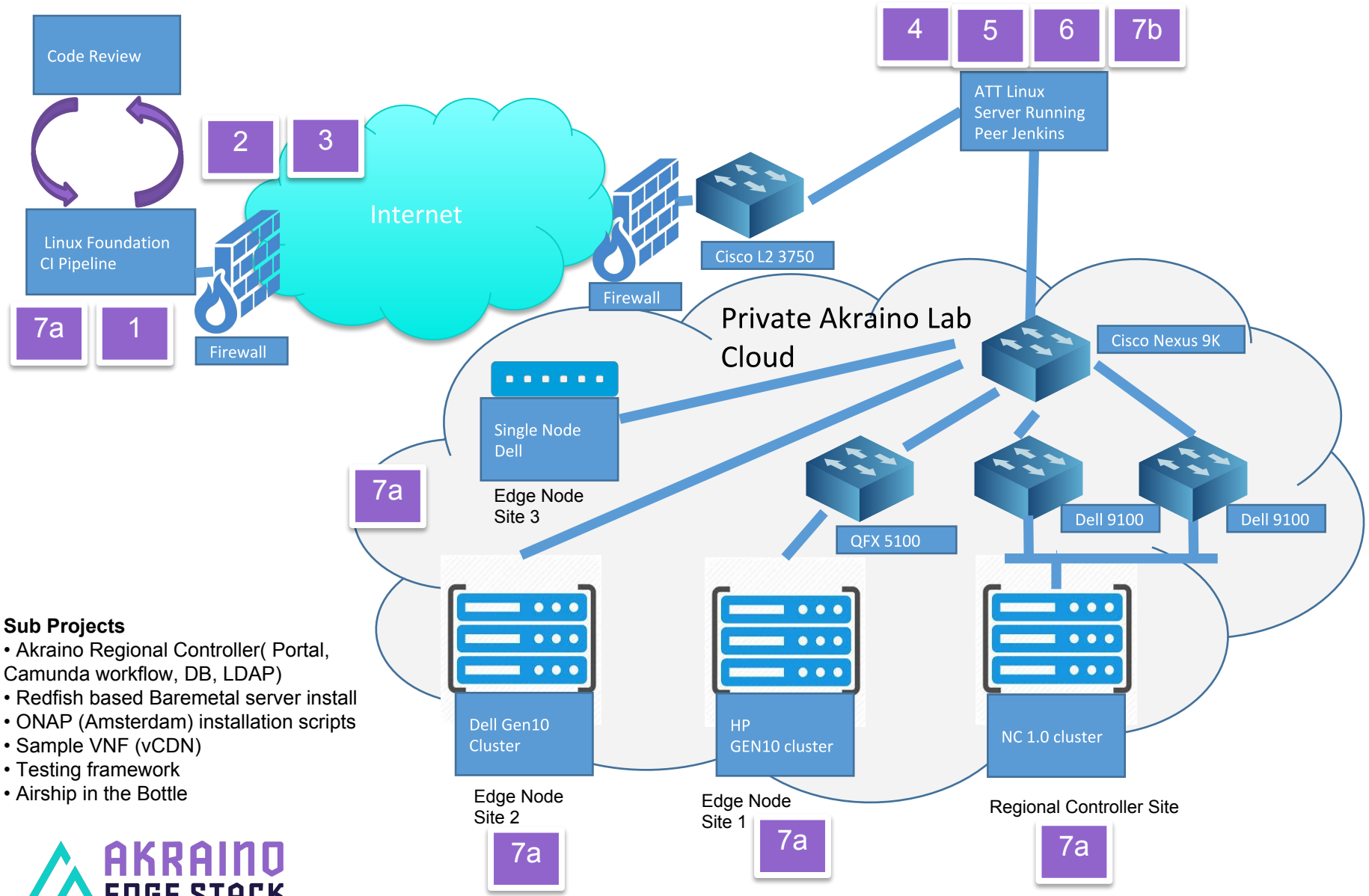
CICD Integration with AT&T Akraino Lab



Sub Projects

- Akraino Regional Controller(Portal, Camunda workflow, DB, LDAP)
- Redfish based Baremetal server install
- ONAP (Amsterdam) installation scripts
- Sample VNF (vCDN)
- Testing framework
- Airship in the Bottle

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Tasks List

1. Commit made to LF Gerrit by the relevant developer. Reviewers will be assigned in Gerrit to approve the changes

2. Git pull is performed on the latest code commit by the Jenkins residing in the Linux Foundation.

3. LF Jenkins will also resolve dependencies and do Sanity testing and push code to LF Nexus

4. LF Jenkins notifies peer Jenkins about new code in LF Nexus.

5. Peer Jenkins Job pulls approved code from repo based on trigger from LF Jenkins

6. Peer Jenkins deploys code in the CD cluster. (Based on criteria such a frequency, type of bug, and scope of test)

7a. Verifier will approve for code merge in LF Gerrit, if check in step 6 is successful (OR)

7b. Peer Jenkins can upload logs and (Success/Fail) status to LF Jenkins

For More Information, Please
Visit www.akraino.org