

# General overview of Akraino



[Introduction - Akraino](#)

[Akraino Goals and Key Principles](#)

[Introduction to Blueprint](#)

[Introduction to Point of Delivery \(POD\)](#)

## Blueprint Projects R1

| Blueprint                                            | Architecture Document                                                           | Link to Further Documentation                                      |
|------------------------------------------------------|---------------------------------------------------------------------------------|--------------------------------------------------------------------|
| Integrated Edge Cloud(IEC) Type 1 & 2                | <a href="#">IEC Architecture Document</a>                                       | <a href="#">IEC Release 1 Documentation</a>                        |
| Network Cloud Rover                                  | <a href="#">Network Cloud Architecture</a>                                      | <a href="#">NC Family Documentation - Release 1</a>                |
| Network Cloud Unicycle with SR-IOV                   | <a href="#">Network Cloud Architecture</a>                                      | <a href="#">NC Family Documentation - Release 1</a>                |
| Edge Lightweight and IOT<br>(IOT Gateway and SD-WAN) | <a href="#">ELIOT Architecture Document</a>                                     | <a href="#">ELIOT Release 1 Documentation</a>                      |
| Network Cloud Unicycle with OVS-DPDK                 | <a href="#">Network Cloud Architecture</a>                                      | <a href="#">NC Family Documentation - Release 1</a>                |
| Radio Edge Cloud (REC)                               | <a href="#">REC Architecture Document</a>                                       | <a href="#">Radio Edge Cloud Documentation</a>                     |
| StarlingX Far Edge Distributed Cloud                 | <a href="#">StarlingX Far Edge Distributed Cloud Architecture Documentation</a> | <a href="#">StarlingX Far Edge Distributed Cloud#Documentation</a> |
| KNI Provider Access Edge (PAE) Blueprint             | <a href="#">KNI PAE Architecture document</a>                                   | <a href="#">KNI Blueprint User Documentation</a>                   |

## Blueprint Projects R2

| Blueprint                                             | Architecture Document            | Link to Further Documentation                               | Link to CI/CD logs                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Link to Blueprint Datasheet                              |
|-------------------------------------------------------|----------------------------------|-------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------|
| <a href="#">NC with Tungsten Fabric Documentation</a> | <a href="#">Architecture</a>     | <a href="#">NC with Tungsten Fabric Documentation</a>       | <a href="https://nexus.akraino.org/content/sites/logs/juniper/job/NC-Tungsten_Fabric/27/">https://nexus.akraino.org/content/sites/logs/juniper/job/NC-Tungsten_Fabric/27/</a><br><a href="https://nexus.akraino.org/content/sites/logs/juniper/job/NC-Tungsten_Fabric/27/logs/airship-in-a-bottle.output.log">https://nexus.akraino.org/content/sites/logs/juniper/job/NC-Tungsten_Fabric/27/logs/airship-in-a-bottle.output.log</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | <a href="#">NetworkCloud-TF blueprint Datasheet</a>      |
| <a href="#">ELIOT IoT Gateway</a>                     | <a href="#">Architecture</a>     | <a href="#">ELIOT IoT Gateway Blueprint Documentation</a>   | <a href="https://nexus.akraino.org/content/sites/logs/huawei/blueprints/iotgateway/job/eliot-deploy-iotgateway-minimal-os-virtual-daily-master/65/">https://nexus.akraino.org/content/sites/logs/huawei/blueprints/iotgateway/job/eliot-deploy-iotgateway-minimal-os-virtual-daily-master/65/</a><br><a href="https://nexus.akraino.org/content/sites/logs/huawei/blueprints/iotgateway/job/eliot-deploy-kubeedge-ubuntu-virtual-daily-master/12/">https://nexus.akraino.org/content/sites/logs/huawei/blueprints/iotgateway/job/eliot-deploy-kubeedge-ubuntu-virtual-daily-master/12/</a><br><a href="https://nexus.akraino.org/content/sites/logs/huawei/blueprints/iotgateway/job/eliot-iotgateway-deploy-k8s-virtual-daily-master/221/">https://nexus.akraino.org/content/sites/logs/huawei/blueprints/iotgateway/job/eliot-iotgateway-deploy-k8s-virtual-daily-master/221/</a><br><a href="https://nexus.akraino.org/content/sites/logs/huawei/blu-val/job/eliot-deploy-virtual-daily-master-validation/13/">https://nexus.akraino.org/content/sites/logs/huawei/blu-val/job/eliot-deploy-virtual-daily-master-validation/13/</a> | <a href="#">ELIOT Release 2 - IOT Gateway Data Sheet</a> |
| <a href="#">Integrated Cloud Native (ICN)</a>         | <a href="#">ICN Architecture</a> | <a href="#">Integrated Cloud Native (ICN) Documentation</a> | <a href="#">ICN Master Baremetal Deployment Verifier</a><br><a href="#">ICN Master Baremetal Deployment for Hardware verification</a><br><a href="#">ICN Master Baremetal Deployment Virtlet nested K8s Verifier</a><br><a href="#">ICN Master Virtual Deployment Verifier</a><br><a href="#">ICN Master Virtual Deployment Virtlet nested K8s Verifier</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | <a href="#">ICN R2 Datasheet</a>                         |

|                                                                          |                                      |                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                   |
|--------------------------------------------------------------------------|--------------------------------------|-----------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------|
| ELIOT SD-WAN/WAN Edge/ uCPE                                              | Architecture                         | ELIOT SD-WAN/WAN Edge/ uCPE Blueprint Documentation | <a href="https://nexus.akraino.org/content/sites/logs/huawei/blueprints/uCPE/job/eliot-uCPE-deploy-k8s-centos-virtual-daily-master/172/">https://nexus.akraino.org/content/sites/logs/huawei/blueprints/uCPE/job/eliot-uCPE-deploy-k8s-centos-virtual-daily-master/172/</a><br><a href="https://nexus.akraino.org/content/sites/logs/huawei/blu-val/job/eliot-deploy-virtual-daily-master-validation/13/">https://nexus.akraino.org/content/sites/logs/huawei/blu-val/job/eliot-deploy-virtual-daily-master-validation/13/</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | ELIOT Release 2 - uCPE Data Sheet                 |
| SDN Enabled Broadband Access (SEBA) for Telco Appliance Blueprint Family | SEBA Blueprint Architecture Document | SEBA Blueprint Documentation                        | <a href="https://nexus.akraino.org/content/sites/logs/att/job/Install_SEBA_on_OpenEdge1/35/">https://nexus.akraino.org/content/sites/logs/att/job/Install_SEBA_on_OpenEdge1/35/</a><br><a href="https://nexus.akraino.org/content/sites/logs/att/job/Install_SEBA_Charts_on_OpenEdge1/39/">https://nexus.akraino.org/content/sites/logs/att/job/Install_SEBA_Charts_on_OpenEdge1/39/</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | SEBA blueprint R2 datasheet                       |
| KNI Blueprint Family                                                     | KNI PAE Architecture document        | KNI PAE documentation                               | <a href="https://nexus.akraino.org/content/sites/logs/redhat-kni/192.168.112.199/kni-deploy-baremetal/">https://nexus.akraino.org/content/sites/logs/redhat-kni/192.168.112.199/kni-deploy-baremetal/</a><br><a href="https://nexus.akraino.org/content/sites/logs/redhat-kni/kni-edge-installer-libvirt/45/">https://nexus.akraino.org/content/sites/logs/redhat-kni/kni-edge-installer-libvirt/45/</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | KNI PAE blueprint R2 datasheet                    |
| Radio Edge Cloud (REC)                                                   | REC Architecture Document            | Radio Edge Cloud Documentation                      | <a href="https://nexus.akraino.org/content/sites/logs/att/job/Install_REC_on_OpenEdge1/378/console.log.gz">https://nexus.akraino.org/content/sites/logs/att/job/Install_REC_on_OpenEdge1/378/console.log.gz</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | REC_Akraino R2 blueprint Datasheet.docx           |
| Network Cloud Rover                                                      | Network Cloud Architecture           | NC Family Documentation - Release 2                 | <a href="https://nexus.akraino.org/content/sites/logs/att/job/MT_nightly_master_A_regional_node/441/">https://nexus.akraino.org/content/sites/logs/att/job/MT_nightly_master_A_regional_node/441/</a><br><a href="https://nexus.akraino.org/content/sites/logs/att/job/MT_nightly_master_B_rover_dell/441/">https://nexus.akraino.org/content/sites/logs/att/job/MT_nightly_master_B_rover_dell/441/</a><br><a href="https://nexus.akraino.org/content/sites/logs/att/job/MT_nightly_master_E_sample_vnf/295/">https://nexus.akraino.org/content/sites/logs/att/job/MT_nightly_master_E_sample_vnf/295/</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Network Cloud Rover and Unicycle R2.docx          |
| Network Cloud with SR-IOV                                                | Network Cloud Architecture           | NC Family Documentation - Release 2                 | <a href="https://nexus.akraino.org/content/sites/logs/att/job/MT_nightly_master_G_unicycle_dell/229/">https://nexus.akraino.org/content/sites/logs/att/job/MT_nightly_master_G_unicycle_dell/229/</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Network Cloud Rover and Unicycle R2.docx          |
| Network Cloud with OVS-DPDK                                              | Network Cloud Architecture           | NC Family Documentation - Release 2                 | <a href="https://nexus.akraino.org/content/sites/logs/ericsson/job/RC+Unicycle_OVS_DPDK_Deployment/22/">https://nexus.akraino.org/content/sites/logs/ericsson/job/RC+Unicycle_OVS_DPDK_Deployment/22/</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Network Cloud Unicycle OVS-DPDK R2 Datasheet.docx |
| IEC Type1&2                                                              | IEC Type1&2 Architecture             | IEC Type1&2 Documentation                           | <a href="https://nexus.akraino.org/content/sites/logs/arm-china/jenkins092/iec-type1-deploy-compass-virtual-ubuntu1604-daily-master/">https://nexus.akraino.org/content/sites/logs/arm-china/jenkins092/iec-type1-deploy-compass-virtual-ubuntu1604-daily-master/</a><br><a href="https://nexus.akraino.org/content/sites/logs/arm-china/jenkins092/iec-type1-install-seba_on_arm-compass-virtual-ubuntu1604-daily-master/">https://nexus.akraino.org/content/sites/logs/arm-china/jenkins092/iec-type1-install-seba_on_arm-compass-virtual-ubuntu1604-daily-master/</a><br><a href="https://nexus.akraino.org/content/sites/logs/arm-china/jenkins092/iec-type1-destroy-compass-virtual-ubuntu1604-daily-master/">https://nexus.akraino.org/content/sites/logs/arm-china/jenkins092/iec-type1-destroy-compass-virtual-ubuntu1604-daily-master/</a><br><a href="https://nexus.akraino.org/content/sites/logs/production/vex-yul-akraino-jenkins-prod-1/iec-deploy-compass-virtual-ubuntu1604-daily-master/">https://nexus.akraino.org/content/sites/logs/production/vex-yul-akraino-jenkins-prod-1/iec-deploy-compass-virtual-ubuntu1604-daily-master/</a><br><a href="https://nexus.akraino.org/content/sites/logs/production/vex-yul-akraino-jenkins-prod-1/iec-install-seba_on_arm-compass-virtual-ubuntu1604-daily-master/">https://nexus.akraino.org/content/sites/logs/production/vex-yul-akraino-jenkins-prod-1/iec-install-seba_on_arm-compass-virtual-ubuntu1604-daily-master/</a><br><a href="https://nexus.akraino.org/content/sites/logs/production/vex-yul-akraino-jenkins-prod-1/iec-destroy-compass-virtual-ubuntu1604-daily-master/">https://nexus.akraino.org/content/sites/logs/production/vex-yul-akraino-jenkins-prod-1/iec-destroy-compass-virtual-ubuntu1604-daily-master/</a><br><a href="https://nexus.akraino.org/content/sites/logs/arm-china/jenkins092/iec-type2-deploy-compass-virtual-ubuntu1604-daily-master/">https://nexus.akraino.org/content/sites/logs/arm-china/jenkins092/iec-type2-deploy-compass-virtual-ubuntu1604-daily-master/</a><br><a href="https://nexus.akraino.org/content/sites/logs/arm-china/jenkins092/iec-type2-install-seba_on_arm-compass-virtual-ubuntu1604-daily-master/">https://nexus.akraino.org/content/sites/logs/arm-china/jenkins092/iec-type2-install-seba_on_arm-compass-virtual-ubuntu1604-daily-master/</a><br><a href="https://nexus.akraino.org/content/sites/logs/arm-china/jenkins092/iec-type2-destroy-compass-virtual-ubuntu1604-daily-master/">https://nexus.akraino.org/content/sites/logs/arm-china/jenkins092/iec-type2-destroy-compass-virtual-ubuntu1604-daily-master/</a> | IEC Type1 R2 datasheet<br>IEC Type2 R2 datasheet  |
| Connected Vehicle                                                        | Connected Vehicle Architecture       | Connected Vehicle Document Release 2                | <a href="https://nexus.akraino.org/content/sites/logs/tencent/job/connectedVehicle/TestCompileCode/">https://nexus.akraino.org/content/sites/logs/tencent/job/connectedVehicle/TestCompileCode/</a><br><a href="https://nexus.akraino.org/content/sites/logs/tencent/job/connectedVehicle/TestConnectVehicleService/">https://nexus.akraino.org/content/sites/logs/tencent/job/connectedVehicle/TestConnectVehicleService/</a><br><a href="https://nexus.akraino.org/content/sites/logs/tencent/job/CD_Install_Tars/">https://nexus.akraino.org/content/sites/logs/tencent/job/CD_Install_Tars/</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Release2-CVB datasheet.docx                       |
| IEC Type4                                                                | IEC Type4 Architecture               | IEC Type4 Document Release 2                        | <a href="https://nexus.akraino.org/content/sites/logs/tencent/job/iectype4/iec_deploy/">https://nexus.akraino.org/content/sites/logs/tencent/job/iectype4/iec_deploy/</a><br><a href="https://nexus.akraino.org/content/sites/logs/tencent/job/iectype4/Develop_Tars/">https://nexus.akraino.org/content/sites/logs/tencent/job/iectype4/Develop_Tars/</a><br><a href="https://nexus.akraino.org/content/sites/logs/tencent/job/iectype4/CompileTarsCode/">https://nexus.akraino.org/content/sites/logs/tencent/job/iectype4/CompileTarsCode/</a><br><a href="https://nexus.akraino.org/content/sites/logs/tencent/job/iectype4/VR_Classroom_Deployment/">https://nexus.akraino.org/content/sites/logs/tencent/job/iectype4/VR_Classroom_Deployment/</a><br><a href="https://nexus.akraino.org/content/sites/logs/tencent/job/iectype4/iec_destroy/">https://nexus.akraino.org/content/sites/logs/tencent/job/iectype4/iec_destroy/</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | IEC Release2-IEC-Type4 datasheet.docx             |

## Feature Projects

| Feature Project             | Architecture Document            | Link to Further Documentation |
|-----------------------------|----------------------------------|-------------------------------|
| Akraino Regional Controller | Starting the Regional Controller | Akraino Regional Controller   |

|                                               |  |  |
|-----------------------------------------------|--|--|
| Akraino Blueprint Validation                  |  |  |
| Akraino Portal                                |  |  |
| API Gateway                                   |  |  |
| Cluster Health & Overload Monitoring Platform |  |  |
| MEC API Framework                             |  |  |
| Support of OvS-DPDK in Airship                |  |  |