2022-06 - Plenary: Daily Summaries for '22 June Developer Event

Topic Leader(s)
• Heather Kirksey & Community Leadership

Topic Description
30 mins
A brief recap of the most important highlights from the day’s session from the perspective of our community leaders. Not recorded.

• 14 Jun 2022
• 15 Jun 2022
• 16 Jun 2022

14 Jun 2022

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<tr>
<th>Project</th>
<th>Link to Topic Page</th>
<th>1-2 Key Highlights</th>
<th>Take-aways</th>
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<tr>
<td>ONAP 9 sessions</td>
<td>2022-06-DD - ONAP: SECCOM retrospectives for log4j (Istanbul Maintenance) and Jakarta releases - LF Networking - LF Networking Confluence</td>
<td>• Lesson Learnt from Log4j Security Alert handled early this year by the ONAP Community&lt;br&gt;• Review of ONAP Jakarta Security requirements/improvements deliverables:&lt;br&gt;  ○ 299 recommended package upgrades - 60% already completed&lt;br&gt;  ○ OpenSSF Badging - 5 projects on their way to “Gold”</td>
<td>• SBOM (“Software Bill of Materials”) can help to identify dependencies early; ONAP Community is taking an action to move forward integrating it as part of our CI/CD pipeline&lt;br&gt;• ODL (Robert Varga) is offering some experience about CycloneDX format of SBOM to be reviewed by the ONAP SECCOM</td>
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<td>2022-06-DD - ONAP: SECCOM Kohn release security goals - LF Networking - LF Networking Confluence</td>
<td>• Review of current Global Requirements/Best Practices/Waivers&lt;br&gt;• Service Mesh POC&lt;br&gt;• SBOM (also discussed in previous session)&lt;br&gt;• Container signing&lt;br&gt;• OpenSSF Badging - 5Y Project Review&lt;br&gt;• Path to remove ‘Unmaintained Code’</td>
<td>• Lots of different wiki pages about ONAP Service Mesh - can we consolidate?&lt;br&gt;• Call for ONAP project participation to “Container Signing” POC?&lt;br&gt;• Check Scancode.onap.eu for License dependency</td>
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<td>ONAP + 5G SBP</td>
<td>2022-06-14 - 5G SBP: ORAN SMO Package - Combining multiple open sources into an E2E package - LF Networking - LF Networking Confluence</td>
<td>• Explain how the SMO package was built and how it grows and could become a 5G superblueprint deployment&lt;br&gt;• Live E2E Flows POC demonstrating a self-contained '5G Super Blueprint' setup that can start and test a reference ORAN SMO package based on ONAP Jakarta release, O-RAN Simulators and more, in alignment with ORAN SC Technical Community</td>
<td>• Enhance more the package with additional integrations&lt;br&gt;  ○ Anuket for Infra management, Emco</td>
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<td>2022-06-DD - ONAP: Day1- ConfigManagement for O-RAN components - LF Networking - LF Networking Confluence</td>
<td>• How to handle different conf (DAY1) for multiple cell sites with multiple elements inside ONAP ? ONAP CDS + CU/DU&lt;br&gt;• Next step: replace CDS-DB by CPS</td>
<td>• Is there anything we could integrate into 5G SBP - ORAN SMO Package</td>
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<td>2022-06-DD - ONAP: CNF Orchestration Scenarios - LF Networking - LF Networking Confluence</td>
<td>• Share latest CNF O capabilities available today (Onboarding, Modeling, CBF/PNF Coordination, Scaling on Demand, Upgrades and Migration, etc.), (Public) Cloud Deployment based on K8s&lt;br&gt;• Use Cases&lt;br&gt;• Future Steps: Integration with other external k8s orchestrators (Nephio?), Service Assurance (Control Loop), k8s Cluster Homing, ASD model integration and more</td>
<td>• Map to Prometheus Metrics&lt;br&gt;• Initiate discussions with Nephio</td>
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<td>2022-06-DD - Virtual: General: ONAP EMCO integration and Demo - LF Networking - LF Networking Confluence</td>
<td>• ONAP/EMCO POC Introduction and Demo by leveraging Plug&amp;Play with ONAP SO, EMCO as blackbox, min. ONAP footprint (SO, A&amp;AI)&lt;br&gt;• Real Demo</td>
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<td>2022-06-DD</td>
<td>ONAP: Intent driven orchestration in ONAP SO - LF Networking - LF Networking Confluence</td>
<td>▪ Brainstorming session about Intent driven orchestration in ONAP SO</td>
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<td>2022-06-16</td>
<td>XGVela: XGVela integration with ONAP - LF Networking - LF Networking Confluence</td>
<td>▪ ONAP/XGVela Integration Demo and more</td>
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| Anuket     | Anuket: RA1 OpenStack Architecture- Moselle release and beyond       | ▪ Review of RA1 Moselle release  
▪ Status on GSMA NG.133 document (based on RA1)  
▪ Discussion on the choice of OpenStack release for next step  
▪ Agreement on the scope of next release (topics to be developed: acceleration, storage, 5G use cases and deployments with inputs from OpenInfra)  
▪ Preparation of the scope of next release (Nile)  
▪ The last OpenInfra summit in Berlin can bring good inputs for RA1  
▪ Discussion about the change of the scope of the project and the control of this change  
▪ Discussion will continue in the Anuket TSC  
▪ Anuket is working on the usage of its name in the artifacts and even would pay in beers for github.com/anuket |
| Virtual: Anuket | Scope of Anuket | ▪ Scope of Anuket specifications was extended since the beginning of CNTT, and that is okay  
▪ Anuket defines both requirements and recommendations from which the recommendations are not mandatory  
▪ Scope of the specifications is related to all the specs, therefore should be discussed in TSC  
▪ We do not have an agreement on how implementable requirements in RM should be  
▪ We do not have a documented scope of Anuket  
▪ The meeting had too low participation to get any conclusions  
▪ We will continue in the TSC  
▪ Anuket: Leftovers of the merger are still with us  
▪ We still have lots of artifacts with OPNFV and CNTT what confuses Anuket's end users  
▪ We collected the things what we would need to update and proposed a next step to change them |
| EMCO       | EMCO: Bring Akraino/CN-SDEWAN into EMCO                              | SDEWAN Overview gave us an excellent overview of how an Edge enhanced SD-WAN addresses special needs for the Edge  
▪ EMCO functionality does not overlap with what ROSA provides. ROSA CLI tool is used to deploy EMCO on ROSA cluster, and EMCO is used to deploy NFs (free5gc), using intent based orchestration. |
| EMCO       | EMCO: Deploying on ROSA Cluster                                      | Overview from the Aarna Networks team on how straightforward it is to deploy multiple clusters on Red Hat OpenShift instances on AWS. A demo was included.  
▪ EMCO functionality does not overlap with what ROSA provides. ROSA CLI tool is used to deploy EMCO on ROSA cluster, and EMCO is used to deploy NFs (free5gc), using intent based orchestration. |
| EMCO       | EMCO: Project Overview and Update                                    | The EMCO Overview Session described the objectives and problem statement review for EMCO and then went into an overview of the essential building blocks and modules. The latest and upcoming features were reviewed.  
▪ EMCO functionality does not overlap with what ROSA provides. ROSA CLI tool is used to deploy EMCO on ROSA cluster, and EMCO is used to deploy NFs (free5gc), using intent based orchestration. |
| EMCO       | EMCO: distribution of Istio CA certificates to target clusters       | An introduction of how EMCO can issue and manage CA certificates to different registered and deployed clusters to automate security (mTLS) between services and clusters.  
▪ Policy-driven closed loop can be implemented by integrating OPA (as PDP) and Workflow Engine (Temporal) or other actors like CDS (as PEP). |
| EMCO       | EMCO: Open Policy Agent Service Assurance in the Telcom Edge        | One of the most attended sessions of the day for EMCO with great interest in this use case.  
▪ EMCO functionality does not overlap with what ROSA provides. ROSA CLI tool is used to deploy EMCO on ROSA cluster, and EMCO is used to deploy NFs (free5gc), using intent based orchestration. |
| EMCO       | EMCO: Cloud Native SASE                                              | An excellent examination of the use case of SASE cloud deployments and how EMCO can set up and manage SASE configurations  
▪ EMCO functionality does not overlap with what ROSA provides. ROSA CLI tool is used to deploy EMCO on ROSA cluster, and EMCO is used to deploy NFs (free5gc), using intent based orchestration. |
| 2022-06-DD | Virtual: General: ONAP EMCO integration and Demo - LF Networking Confluence | See entry in ONAP+5G SBP Project section above  
The Huawei team took the initiative on their own to demo how ONAP can use EMCO in tandem.  
This was the most well attended session for EMCO of the day with many ONAP stakeholders joining to see what this Poc was all about. We have an AR to discuss this further in the SO and CNF taskforce projects, as well as ideas as to how to contribute and jointly advance the PoC. More discussions to follow. |
| OpenDaylight | 2 sessions | 2022-06-14 - ODL: 2022.03 Sulfur Platform overview  
2022-06-16 - ODL: 2022.09 Chlorine lookahead | ▪ We have finally delivered 2022.03 Sulfur, which is a Java 11/17 transitional release  
▪ We are looking to be back on regularly-scheduled checkpoints for 2022.09 Chlorine  
We need to continue reaching out to our stakeholders, as the sessions were lightly-attended. |
### Anuket

**RA2 Kubernetes Architecture - Moselle Release Highlights**
- We did change rooms and occupied Ariane 2 due to the bad wifi in the original Anuket room
- Highlight of Moselle changes in RAs: Kubernetes release update, application requirements, host os requirements, app descriptor...
- Discussion on Anuket and RA2 in general

**RA2 Kubernetes Architecture Release Planning**
- Nile release were just approved this week Tuesday
- M0 and M1 activities can be started already now even if M0 is in August
- Prioritization of backlog items with statistical methods

**Virtual: Thoth Action Plan for Network Intelligence Collaborative Innovation**
- Call for action to form an initiative for the use of AI/ML in telecom

**Anuket: RA2 Collaborations**
- CNCF announced their CNF Conformance program
- CNCF Telecom Survey link: [https://www.surveymonkey.co.uk/r/JRX69D8](https://www.surveymonkey.co.uk/r/JRX69D8)
- Collaboration with RA2 continues

### EMCO

**7 Sessions**

**Virtual: EMCO- Edge Relocation using Temporal workflow**
- Review of the Temporal Workflow Engine added to EMCO
- Use Case of UE consuming a MEC Service, while moving across MEC host service areas, requiring a relocation of the service instance across clusters
- Live Demo

**EMCO: Enhancing the EMCO GUI with RBAC**
- An overview of how the EMCO GUI supports Admin and separate Tenant privilege levels with Role-based Access support.
- A demo was provided to demonstrate how different client logins had different views and different access rights.

**EMCO: Deploying to target clusters (and public clouds) via git**
- Overview of EMCO integration with the GitOps approach to cluster management and resource sync.
  - Provides automated sync with Git Repo, better security, consistency and auditing of history
  - Walked through EMCO support for Fluxv1 and planned v2 support, Azure Arc plug-in support in EMCO 22.03 and how Google Anthos support will be added in 22.06 coming up.

**EMCO BackUp and Restore**
- Any cluster application LCM solution needs a solid Disaster Recovery solution. Aarna Networks has selected Velero solution to integrate with AMCOP commercial product based on EMCO.
- An overview and demo of Phase I manual Backup and Restore was showcased, instantiating a running cluster, creating a Velero Backup, deleting the cluster to simulate a Disaster event, and restoring it for continued operation.

### Future Plans

- Future plans to integrate with free5GC + 5GRAN simulator to showcase a more real world use case scenario.
- This is an EMCO Ecosystem POC repo published from the EMCO wiki.

- Future versions of the EMCO GUI will add additional intra-tenant role access rights for allowing tenant organization to further enable/restrict groups within their tenant view to have appropriate access rights.

- Automated GitOps support provides automated sync with Git Repo, for better security, consistency and auditing of history
  - When clusters register with EMCO, the correct GitOps plugin can be instantiated in the EMCO Rsync framework.
  - 22.06 adds better Google Anthos support and other stability and feature enhancements

- Phase II will add a more complete integration with EMCO GUI, automating and scheduling backups, w/ support for more storage locations other than the AWS example today.
- Phase III will allow deployments of the Velero solution to target clusters and bundle the Velero solution with EMCO installations.
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<th>Session</th>
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<tr>
<td><strong>EMCO:</strong> Orchestration and Demo of LCM of AnyLog using EMCO</td>
<td>Using EMCO, developers can deploy and manage AnyLog instances at the edge from a single point and using the AnyLog Network, manage and view the distributed edge data from a single point. EMCO-UI demonstrated as a viable manner of deploying composite apps in EMCO, in this case AnyLog components.</td>
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| **EMCO:** Orchestration and Service Assurance SGC Functions with EMCO | Showed the orchestration of QCT's SGC functions on multiple k8s clusters, using EMCO. The ability to scale-out SGC and UPF elements into more clusters (via EMCO) as an action automatically taken by the AF component, based on analytics. This was demonstrated.  
EMCO-UI again demonstrated as a viable method of deploying composite apps. Srin shared over the bridge the advantages of using the EMCO ecosystem's KNCC and KNRC when paired with SGC and to automate configuration: [https://gitlab.com/project-emco/ecosystem/k8sappconfig](https://gitlab.com/project-emco/ecosystem/k8sappconfig) |
| **Virtual:** EMCO: Temporal and EMCO lifecycle events | Temporal is the simple, scalable open source way to write and run reliable cloud applications. In EMCO we are introducing support for the Temporal workflow engine starting with the 22.06 release. Temporal workflow engine has recently been added to EMCO in order to trigger actions that execute in a multitude of possible different hook points. With EMCO we can register workflows and define the activities that need to take place. In 22.06 the basic framework will be available, with additional improvements expected in the next release. |

**ONAP**

**2022-06-15 - ONAP: DT**
- Insights from DT about how they are deploying ONAP internally as TNAP using Argocd, replacing AAF/MSB by ServiceMesh + + Demo
- Introduction of Cluster API

**2022-06-DD - ONAP:** Technical Community Coordination - Network Management - LF Networking - LF Networking Confluence
- Liaison statement to 3GPP SA regarding IPR issues
- Feedback from TM Forum / ONAP meeting and multi-SDO initiatives
- Digital Transformation World Catalysts planned in September - ONAP is usually used for POCs
- Useful Link: TCG Generic Network Management

**2022-06-15 - ONAP: CPS**
Project overview with NCMP and CPS Demos - LF Networking - LF Networking Confluence
- Introduction to Network Configuration Model Proxy (NCMP), CPS Temporal, Data Model Inventory (DMI) Plug-In, Template Based Data Model Transformer (TBDMT)
- Latest enhancements and incoming development + Live Demos !!!

**2022-06-DD - ONAP:**
Jakarta Integration Activities - LF Networking - LF Networking Confluence
- Jakarta accomplishments enhancing our ONAP and CI/CD pipelines.
- Next steps with Kohn

**2022-06-DD - ONAP:**
Policy Framework Project Update - LF Networking - LF Networking Confluence
- Jakarta accomplishments including complete documentation of pair-wise testing
- Share next features/improvements including backporting of some non functional requirements on Honolulu /Istanbul releases
- Introduction of “Contract Testing”

**2022-06-DD - ONAP:**
The Path to a Production-Grade ONAP - LF Networking - LF Networking Confluence
- Presentation from Ahmad Khalil(TATA comms) sharing their journey to deploy ONAP and to adopt it by their Ops team
- Ways to monitor and troubleshoot
- DEMOS including Customer & Operation Experiences based on ELK

**2022-06-DD - ONAP:**
The Next 5 Years - LF Networking - LF Networking Confluence
- Accomplishments/Challenges/Opportunities /Discussions about Requirements /Architecture Reviews (redundancy)
- Lots of constructive feedback
- Shift from Platform to component focus
- Build a tiger team to continue discussion with TSC

**2022-06-DD - ONAP:**
EMCO: Temporal and EMCO lifecycle events
- Temporal is the simple, scalable open source way to write and run reliable cloud applications. In EMCO we are introducing support for the Temporal workflow engine starting with the 22.06 release.
- Temporal workflow engine has recently been added to EMCO in order to trigger actions that execute in a multitude of possible different hook points. With EMCO we can register workflows and define the activities that need to take place. In 22.06 the basic framework will be available, with additional improvements expected in the next release.

**2022-06-DD - ONAP:**
Networking Confluence - LF Networking - LF Networking Confluence
- Shows possibilities in creating closed-loop between EMCO, SGC and NWDAF.
- From a legal point of view, the use by ONAP of the terminology or names alone (by referencing 3GPP specifications) is possible and is not subject to Intellectual Property issues.

**2022-06-DD - ONAP:**
Networking Confluence - LF Networking - LF Networking Confluence
- Showed the orchestration of QCT’s SGC functions on multiple k8s clusters, using EMCO. The ability to scale-out SGC and UPF elements into more clusters (via EMCO) as an action automatically taken by the AF component, based on analytics. This was demonstrated.
- EMCO-UI demonstrated as a viable manner of deploying composite apps. Srin shared over the bridge the advantages of using the EMCO ecosystem's KNCC and KNRC when paired with SGC and to automate configuration: [https://gitlab.com/project-emco/ecosystem/k8sappconfig](https://gitlab.com/project-emco/ecosystem/k8sappconfig)
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| 2022-06-15 | Virtual: 5G SBP: Magma for 5G                                           | 5G Super Blueprint                                                                 | • Release 1.7: Magma 5G Stands Alone  
• Roadmap:Whats coming up in 1.8  
• Roadmap:Whats coming up after 1.8 | • Call to Action: Request for input into Magma Roadmap                            |
| 2022-06-DD | ONAP: SDC Project Update                                                 | Project Update - LF Networking - LF Networking Confluence                          | • Latest enhancements + Live Demos !!!                                            |                                                                           |
| 2022-06-DD | ONAP: PCEI Edge to Cloud connectivity and application deployment        | ONAP: PCEI - LF Networking - LF Networking Confluence                              | • Demo of Complex Multi-domain orchestration across Edge and Public Clouds, using ONAP CDS and Terraform plans |                                                                           |
| 2022-06-DD | ONAP: Automation of Intent-based Cloud Leased Line Service               | ONAP: Automation of Intent-based Cloud Leased Line Service - LF Networking - LF Networking Confluence | • An introduction were given on how to offer Intent-Based Networking (IBN) using CCVPN use-case in ONAP  
• A live demonstration (as Proof-of-Concept) of IBN using CCVPN use-case in ONAP was shown  
• A brief history of CCVPN evolution in ONAP was discussed, following by a roadmap of CCVPN use-case for Kohn release  
• A presentation on Support general intent model and general intent interface in ONAP was given | • Insights about CDS executors                                                   |
| 2022-06-15 | Virtual: EMCO: Face recognition application demo using EMCO             | Virtual: EMCO: Face recognition application demo using EMCO                        | Robust face recognition use case deployed at the edge using EMCO.                | EMCO was able to successfully instantiate the app over the K8s clusters without any manual intervention to the clusters.  
EMCO-UI was once again shown as the preferred way of interacting with EMCO for deploying workloads/use cases. |
Discussion of reference granularity of RA-2 feature to conformance tests  
Field trials: Importance of and inclusion of Service providers and hyperscalers | • RA2 traceability: Cross referencing RA2 requirements and RC2 tests is important should continue, Possible issue between release management and RC2 is in the milestone definitions  
• Anuket Assured vs CNF Conformance: CNF suppliers see having both the CNCF CNF Conformance and the Anuket Assured for CNF is wasted effort. In the future we should think about the validity of Anuket Assured workload testing in the light of CNCF CNF Conformance.  
• Field trials: Would drive adoption, If anyone is interested in field trials please notify Scot Steele  
• Discussion: if the single process type requirement in the CNCF CNF Conformance test is a valid one in an RC2 meeting |
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<th>ONAP</th>
<th>3 Sessions</th>
<th>2022-06-02 - ONAP: Enabling 3D-Based Feasibility Check and Service Provisioning including Time-Aware Calendarization for E-Line Services - LF Networking - LF Networking Confluence</th>
<th>Presentation &amp; Demo of TATA Communications Use Cases: Feasibility Check and Scheduling Flow (AAl/SD/SDNC/EXAPI) Developed applications that enables scheduling tasks in a given time, including future time (network auto-discovery, service activation/termination, BoD schedules, etc...)</th>
<th>• E-line orchestration base case started in R3 and running in R9 with full backward compatibility • Developed service templates, resource templates, BPMN processes, standardized inventory model, Plugins for network auto-discovery and service provisioning • Developed time-aware calendarization support (i.e., scheduling in time-domain network auto-discovery, service activation/termination, BoD schedules, etc...)</th>
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<td>ONAP E2E network slicing use case: control loop for ORAN network</td>
<td>Demo of Telecom Italia Use Case based on ONAP Network Slicing/Control Loop, including O-RAN Simulator and emulated O-RAN Network</td>
<td>Can our ONAP Policy component could be used by Nephio?</td>
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<td>2022-06-16 - ONAP: Using Automation Compositions for Control Loops and rApps - LF Networking - LF Networking Confluence</td>
<td>Demo of Automation Composition Management (ACM) - definition, commissioning/decommissioning, parametrization, lifecycle (instantiation, status monitoring/change), scalability/resiliency</td>
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<td>OpenDaylight</td>
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<td>2022-06-16 - ODL: Open discussion on new features and improvements</td>
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<td>2022-06-16 - ODL: Supporting commercial OpenDaylight deployments</td>
<td>Presentation of challenges and good practices behind providing commercial OpenDaylight support with NO FORKs. Everyone who would like to get know how to efficiently provide support for OpenDaylight should watch the video!</td>
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<td>2022-06-16 - ODL: Ecosystem BoF</td>
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