Release 11.2022 Review

Overview:

Release 11.2022 is the first xgvela release delivered in 2022. It started at June 29 and ends at November 29. Within this release, the team has completed delivering 5 major functions (which have 13 features in total) and code related documents, covered functional testing and deployment verification, and updated architecture doc. Besides, the team has made a huge progress on release related procedure establishment.

Projects accomplishment:

Contents	Description
Project	Cloud native OAM
Release accomplishment	

Delivered Functional Features:

- Targeted on NF management PaaS capabilities, re-designed and implemented a group of functions to deal with operation and management in network functions.

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- The major delivered functions include:

  - configuration management

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  - topology management

    > ⚠ XGVELA-34 - Jira project doesn't exist or you don't have permission to view it.

  - performance management

    > ⚠ XGVELA-23 - Jira project doesn't exist or you don't have permission to view it.

  - log management

    > ⚠ XGVELA-31 - Jira project doesn't exist or you don't have permission to view it.

  - alarm management

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  - authentication and authorization (supporting functions)

    > ⚠ XGVELA-21 - Jira project doesn't exist or you don't have permission to view it.

  - subscription interface on observability data (supporting functions)

    > ⚠ XGVELA-22 - Jira project doesn't exist or you don't have permission to view it.

  - Source code can be found at: https://github.com/XGVela/cloud-native-OAM
- Impelmented helms charts for all the above functions. Files can be found at: https://github.com/XGVela/cloud-native-OAM-builder

Delivered Documentations:

- Cloud native OAM design Doc gives a detailed introduction about why we do so and how we do this. It contains cloud native OAM bachgroud, its design principle and microservice architecture, and introduction of each functions. Doc link: https://github.com/XGVela/cloud-native-OAM/blob/main/docs/cloud_native_oam_design.md
- Cloud native installation guide gives deployment environment requirement and detailed step by step instructions on how to deploy cloud native OAM functions. Doc link: https://github.com/XGVela/cloud-native-OAM/blob/main/docs/Installation_guide.md
- Cloud native OAM northbound API guide lists detailed northbound management and operations APIs for upper layer management systems. Doc link: https://github.com/XGVela/cloud-native-OAM/blob/main/docs/API_guide-northbound_interfaces.md
- Updated architecture doc by adding cloud native OAM into Telco PaaS related chapter. Doc link: XGVela Technical Architecture#4.2.3.5TelcoPaaSSolutionProposedbyChinaMobile

	Integration: • Successful integration among cloud native OAM functions, Inspur's container platform and CMCC's container platform on Big Cloud. Both of the container platform are using K8S for orchestration. • Successful integration among cloud native OAM and network function simulator, which is developed to mimic actions of real network functions. **Tests covered:** As there is no CI/CD pipelines, tests on delivered cloud native OAM functions have been completed in private environment. Quality of delivered codes, helm charts and documentations support users to deploy and use cloud native OAM. Auto testing are scheduled in next release. **Demo:** https://zoom.us/rec/play/LkSKyqZ3_Q_HpijS7DttZKHgoBJdV0t9ha-B1t-LznuSS3S_v4NUMk3zbjXY6w4x27peCxcaWmscEfri.33jiIuhCpWTPI4jf?startTime=1666701683000&_x_zm_rtaid=rmclgPH8QGW7hqM8_7DxUQ.1668767083254.d9ff365f8a9205e35cc3cfe0385ef925&_x_zm_rhtaid=647 **Summit presentation:** • LFN DTF in January: https://wiki.lfnetworking.org/display/LN/2022-01-13+-+XGVela%3A+Microservice+UPF+design+experience+and+interactions+with+PaaS+platform • CNCF Telco Days: https://events.linuxfoundation.org/cloud-native-telco-day-europe/program/schedule/
Summary of outstanding accomplishment	• Functional code delivery. Cloud native OAM supports to provide operation and management functions outside NF, which can help to relief NF developers from putting too much effort on fcaps related developement. Besides, as cloud native OAM is the most commonly functions that can be shared among NFs, providing them through PaaS platform indicates NF are using more capabilities on cloud, which is a good trend for telcos to be more cloud native. • Cloud native OAM has been integrated with and verified on two different container environments. This on some degree reflects the portablity of codes.
Delta between planned and actual accomplishment	N/A
Plans for Next Release	• More telco PaaS functional features delivery • Integration among cloud native OAM, CNF (e.g. Free 5GC), other PaaS platform (OKD), and ONAP. • Bug fix and doc optimize • Update cloud native OAM deployment method

Release management accomplishment:

- Completed a list of PaaS capability candidates (Projects), which gives a clearer clue on how to develope Telco PaaS and helps to narrow down the community scope.
- Community run a complete release for the first time. Although the process may not be professional, but it's still a huge accomplishment. For next release, the team will try to get some trainning on release management, and keep optimizing the process.
- Established release processes by writing a guide Release Process and having Release 11.2022 Schedule.
- Established project management processes by writing guide on Project Operations and Procedures and Project Proposals procedures.