**3GPP TSG-SA5 Meeting #144-e *S5-224305rev01***

**e-meeting, 27 June - 1 July 2022**

**Source: Microsoft**

**Title: pCR 28.834 Add use case on LCM: query cloud-native VNF packages**

**Document for: Approval**

**Agenda Item: 6.8.5.1**

# 1 Decision/action requested

***The group is asked to discuss and approve.***

# 2 References

[1] 3GPP TR 28.834-010 “Study on Management of Cloud Native Virtualized Network Functions”.

# 3 Rationale

This contribution proposes to add a use case on query cloud-native VNF packages as part of use cases for LCM of cloud-native VNF using de-facto standards.

# 4 Detailed proposal

It proposes to make the following changes to TR 28.834.

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| **1st Change** |

# 5 Potential use cases and requirements

*Editor's note: this clause will contain the use cases and potential requirements.*

## 5.X Use case# Num: Life cycle management of cloud-native VNFs using de-facto standards

## 5.X.1 Query of the cloud-native VNF packages

### 5.X.1.1 Description

Onboarding of the cloud-native VNF package to the ~~management system of~~ cloud infrastructure needs to have been completed prior to instantiation of the NF. In this operation the cloud-native VNF Package is uploaded and enabled for use; however, it is not yet in use.

From 3GPP management system point of view being able to query the VNF Packages onboarded to a deployment site in the cloud infrastructure ~~management~~ is required.

| Use Case | Evolution/Specification | <<Uses>>Related use |
| --- | --- | --- |
| **Goal**  | Enable query availability of a cloud-native VNF package  |  |
| **Actors and Roles** | An authorized ~~MnS~~ consumer in 3GPP management system requests the status of a cloud-native VNF package.~~Cloud infrastructure management system is responsible for on-boarding or cloud-native VNF packages and their life cycle.~~ A producer in 3GPP management system interacts with the cloud infrastructure ~~management system~~ using the de-facto standard supported by the cloud infrastructure ~~management system~~. |  |
| **Telecom resources** | 3GPP management system, cloud-native VNF, cloud infrastructure ~~management~~ ~~system~~ |  |
| **Assumptions** | The cloud infrastructure ~~management system~~ uses de-facto standards for LCM of cloud-native VNFs. ~~The cloud infrastructure management system is responsible for on-boarding of~~ The cloud-native VNF packages are on-boarded to the cloud infrastructure ~~management system for each deployment site~~. There is a ~~MnS~~ producer in the 3GPP management system that interacts with the cloud infrastructure ~~management system~~ using de-facto standards. |  |
| **Pre-conditions** |  |  |
| **Begins when**  | An authorized consumer in 3GPP management system decides to query the cloud-native VNF packages onboarded in the cloud infrastructure ~~management system~~ (e.g., in a specific deployment site).  |  |
| **Step 1 (M)** | The authorized consumer in 3GPP management system inquires from the ~~MnS~~ producer interacting with the cloud infrastructure ~~management system~~ about the cloud-native VNF packages onboarded. |  |
| **Step 2 (M)** | The ~~MnS~~ producer interacting with the cloud infrastructure ~~management system~~ uses the de-facto standard supported by the cloud infrastructure ~~management~~ to request and receive the onboarded cloud-native VNF packages. |  |
| **Step 3 (M)** | The ~~MnS~~ producer interacting with the cloud infrastructure ~~management system~~ responds to the authorized ~~MnS~~ consumer with the available cloud-native VNF packages. |  |
| **Ends when**  | Ends when all steps identified above are completed or when an exception occurs. |  |
| **Exceptions** | One of the steps identified above fails. |  |
| **Post-conditions** | The authorized consumer is aware of the onboarded cloud-native VNF packages. |  |
| **Traceability**  | REQ-CNF\_PKG-1 |  |

### 5.X.1.2 Requirements

**REQ-CNF\_PKG-1** 3GPP management system shall have the capability to query the cloud-native VNF Packages, their availability per deployment site, and their status, i.e., onboarded, enabled, etc. using de-facto standards.

*Editor's note: Use cases for LCM of cloud-native VNFs using ETSI MANO are planned for submission in the next meeting.*

*Editor’s note: Use cases related to FCAPS are planned for submission in the next meeting.*

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| **End of Changes** |