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Accelerate your cloud journey with Oracle Communications products certified on VMware Telco Cloud

Oracle Communications has successfully completed two types of certification, 5G core cloud native network functions (**CNFs**) and session delivery virtual network functions (**VNFs**) on VMware Telco Cloud Platform. By receiving the VMware Ready for Telco Cloud certification, this confirms Oracle Communications 5G core network functions and session delivery products work seamlessly in VMware's telco cloud environment, which is designed specifically to meet the fierce demands of telecom networks. Now, communications service providers (CSPs) can benefit from a pre-tested and validated solution, reducing the risk of compatibility problems and downtime. This also provides CSPs with the flexibility to choose a familiar platform.

Overview

5G and cloud native technologies are transforming telecommunications. 5G is built on an open, disaggregated service-based architecture. This allows CSPs to move away from vendor-specific cloud silos towards building multivendor horizontal and vertical environments. CSPs require a robust telco cloud platform to deliver operational flexibility and automation, while reducing operational complexities, and maintaining continuous service delivery with multilayer assurance.

Oracle Communications 5G solutions are based on Cloud Native Computing Foundation principles with no repurposed legacy code, using the best open source and cloud components to drive speed, scale, and security. Oracle Communications is driving programmability to the 5G core network through critical control plane areas such as signalling and routing, policy and charging, network analytics and automation, and network exposure.

Oracle Communications session delivery products help enterprises and service providers manage many challenges in the delivery of IP voice, video, data services, and applications. Service provider solutions are deployed at network borders and in the IP service core to help fixed line, mobile, wholesale, and over-the-top service providers optimize revenues and realize long term cost savings. In the enterprise, session delivery infrastructure solutions seamlessly connect fixed and mobile operators, enabling rich multimedia interactions and automating business processes for significant increases in productivity and efficiency.

VMware's portfolio of telco cloud solutions enables CSPs to deploy and operate 5G functions and services on a consistent infrastructure with cloud-smart automation. VMware Telco Cloud Platform is powered by field proven compute and networking coupled with automation and a telco grade Kubernetes distribution. VMware Telco Cloud Platform empowers CSPs to modernize their 5G networks so they can rapidly deploy and efficiently operate multivendor CNFs and VNFs.
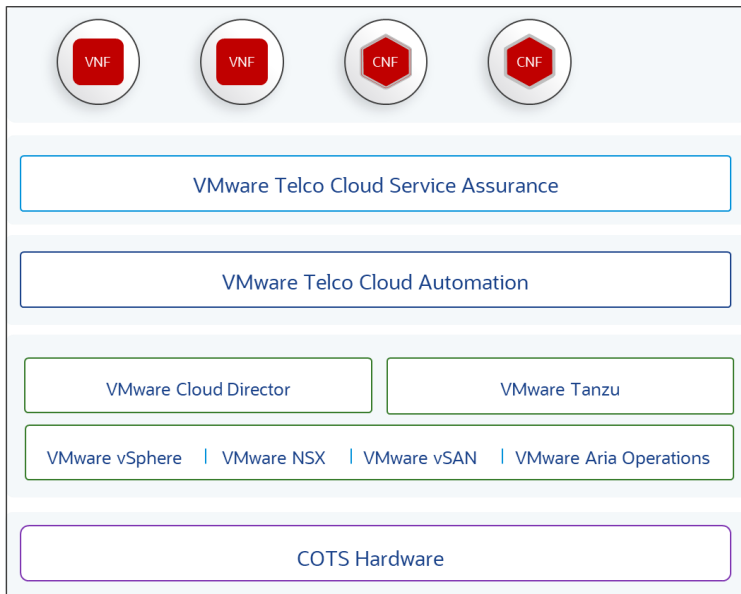
Oracle Communications 5G network functions

The VMware ready for Telco Cloud certification ensures that the Oracle 5G CNFs have been certified to work with the VMware Telco Cloud Platform. This certification will offer many opportunities for CSPs by:

- Providing a consistent infrastructure
- Creating an automation solution for deploying and integrating Oracle 5G network functions (NFs)
- Reducing testing times for CSPs and deploying NFs swiftly
- Automating the entire process, from cluster deployment to NF installation
- Ensuring compatibility between Oracle 5G NFs and VMware cloud platform
- Providing seamless interoperability between network function and cloud platform

The following diagram illustrates Oracle CNF and VNF on VMware Telco Cloud and products within each tier for network modernization.

Figure 1. Oracle CNF and VNF* on VMware Telco Cloud.

* Automation and assurance tests were not part of VNF certification

Oracle Communications 5G network functions (NFs) are certified for deployment on VMware Telco Cloud Platform 2.5 with multiple components as shown in table 1 below. The test for Oracle Communications 5G NFs includes automated and manual onboarding, scalability, and infrastructure tools testing such as Prometheus and Grafana providing insights into NF and network infrastructure performance and health through various metrics.

Table 2. Certified list of Oracle Communications 5G network functions** and VMware components.

Oracle Communications 5G network functions	VMware Components
- Policy Control Function (PCF) v23.1.0 - Security Edge Protection Proxy (SEPP) v23.1.0 - Network Repository Function (NRF) v23.1.0 - Service Communications Proxy (SCP) v23.1.0 - Network Exposure Function (NEF) v23.1.0 - Unified Data Repository (UDR) v23.1.0	- VMware ESXi 7.0 U3f - VMware vCenter Server Appliance 7.0 U3f - VMware Virtual SAN 7.0 U3 - VMware NSX-T v3.2.1 - VMware Telco Cloud Automation v2.1 - VMware TKG v1.5.4 (k8s v1.22.9+vmware.1) - TCA Cluster API version. v2 - VMware vRealize Orchestrator Appliance 8.6

** NEF and NSSF have been planned to be GA in CY24Q1 and NWDAF in CY24H2

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| ✓ | **Benefits:** |

✓ **Creates an automated solution for deploying and integrating Oracle Communications 5G NFs**

✓ **Providing insights by integrating the NFs with observability tools**

✓ **Automates the entire process, from cluster deployment to NF installation**

✓ **Ensures compatibility between Oracle Communications 5G NFs and VMware cloud platform**

✓ **Proves that the network function and cloud platform can inter-operate seamlessly**

About VMware Telco Cloud Platform

VMware Telco Cloud Platform enables CSPs to build, run, manage, and protect their telco cloud to transform their networks, accelerate the delivery of modern services, and thrive in a multicloud world. The VMware telco cloud puts in place consistent infrastructure for operating 4G/5G networks and is leading the way with solutions for orchestration, automation, optimizations, and intrinsic security. VMware Telco Cloud Platform combines telco-specific cloud-native solutions and cloud-first automation with consistent infrastructure to propel CSPs into the future with agility and efficiency while maintaining carrier-grade performance, reliability, and quality.

Oracle Communications session delivery products

Oracle Communications offers VNFs for session delivery platforms including session border controllers (SBC), load balancers and session routers. As a VNF, Oracle Communications Session Border Controller may be deployed as a standalone instance or within an orchestrated virtual environment, and offers the same level of functionality, security, interoperability, and reliability as it does on purpose-built platforms.

Oracle Communications session delivery products are certified as VMware Ready for Telco Cloud Platform with multiple components as shown in table 2 below. The test for Oracle Communications session delivery network functions includes testing compatibility with VMware Telco Cloud, installation, configuration, and management using VMware Telco Cloud, and Oracle Communications VNFs interoperability with other SBCs and network components that are certified as VMware Cloud Infrastructure Ready. Functional testing includes verification that Oracle Communications VNFs supports:

- Deployment and configuration in a highly available pair
- Failover to a secondary instance in the event of a failure
- Continuity to operate normally during a failover

Table 2. List of Oracle Communications session delivery products and VMware components it certified them with.

Oracle Communications session delivery products	VMware Components
• Oracle Communications Session Border Controller S-Cz9.1.0 • Oracle Communications Session Router S-Cz9.1.0 • Oracle Communications Subscriber-Aware Load Balancer S-Cz9.1.0 • Oracle Enterprise Session Border Controller S-Cz9.1.0 • Oracle Communications Operations Monitor v5.0.0.5.0 • Oracle Communications Converged Application Server v8.0.0	• VMware ESXi 7.0 U3c • VMware vCenter Server Appliance 7.0 U3c • VMware NSX T 3.2.0.1 • VMware Virtual SAN 7.0 U3c • VMware vCloud Director for Service Providers 10.3.2a • VMware vRealize Log Insight 8.6.2

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> ✓ **Benefits:**

> ✓ **Certified error-free deployment and configuration of the Oracle Communications VNF**
>
> ✓ **Compatibility between Oracle Communications VNFs and VMware cloud platform**
>
> ✓ **Proves the Oracle Communications network function and cloud platform can inter-operate seamlessly**

Summary

Oracle Communications provides integrated communications and cloud solutions for service providers and enterprises to speed up their digital transformation journey in a communications-driven world from network evolution to digital business to customer experience.

Our latest certification with the VMware Telco Cloud is a testament to Oracle Communications commitment to meet our customers wherever they may be in their cloud journey with an open and interoperable framework underpinned with security and reliability.

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