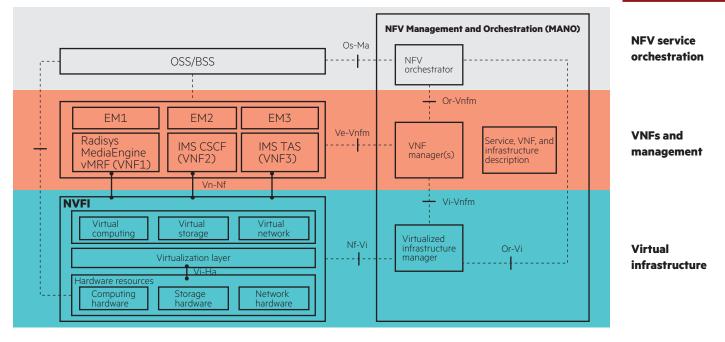
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HPE OpenNFV Partner Program VNF testing with Radisys

Radisys MediaEngine vMRF in ETSI NFV architecture

radisys.



- Execution reference points
- ---- Other reference points
- ----- Main NFV reference points

Reference: ETSI GS NFV 002 V1.2.1 (2014-12)

 $\textbf{Figure 1.} Radisys \ \mathsf{MediaEngine} \ \mathsf{vMRF} \ in \ \mathsf{ETSI} \ \mathsf{NFV} \ architecture \mathsf{NFV}$

HPE OpenNFV Partner Program

With the right **network functions** virtualization (NFV) platform, communication service providers (CSPs) enjoy the freedom to build a custom end-to-end solution based on individual IT and customer needs. This approach facilitates collaboration with third parties based on open standards, regardless of vendor. The **HPE OpenNFV Partner Program** supports this degree of flexibility and openness by including emerging independent software vendors (ISVs) along with leading network equipment providers (NEPs), technology vendors, and service providers. The result—CSPs can transition to NFV in a way that best suits the business and IT.

The HPE OpenNFV Partner Program includes:

Technology partners—top-performing technology companies and vendors that collaborate on technology innovation, integration, and support

Application partners—ISVs are self-tested in a remote HPE OpenNFV virtual environment (referred to as "HPE OpenNFV tested") and are joint-tested in physical HPE OpenNFV labs (referred to as "HPE OpenNFV ready")

Services partners—systems integrators

Testing in the HPE OpenNFV labs

HPE OpenNFV labs provide a one-stop center where integration, collaboration, and testing occur in a safe environment ahead of deployment to carrier networks. With HPE OpenNFV labs, CSPs gain access to software development kits (SDKs), application program interfaces (APIs), training, and integration resources to get applications tested and ready for CSPs, advancing innovation while reducing risks. There are currently five HPE OpenNFV labs locations: Fort Collins, CO, US; Houston, TX, US; Grenoble, France; Tel Aviv, Israel; and Seoul, South Korea.

Partner solutions are tested in the HPE OpenNFV labs leveraging our reference architecture and HPE NFV System. The

HPE OpenNFV Reference Architecture supplements existing systems by identifying the HPE products that readily integrate with scalable, high-performing, and robust NFV solutions. HPE NFV System offers a fully integrated, turnkey solution.

The labs validate partner solutions in three tiers—silver, gold, and platinum—which tests onboarding and basic functionality, performance and scalability, and continued functionality through software updates and changes.

Partner introduction

Radisvs' MediaEngine Virtualized Media Resource Function (vMRF) brings over 15 years of MRF leadership to service providers wishing to deploy advanced multimedia services on public and private cloud infrastructure worldwide. The MediaEngine vMRF provides a wide range of multimedia processing capabilities necessary to create and deploy advanced communications services over voice over Long-Term Evolution (VoLTE)/voice over Wi-Fi (VoWiFi)/Web Real-Time Communications (WebRTC). Radisvs has more deployed ports than anyone in the industry has. This additional industry validation from Hewlett Packard Enterprise for the Radisys vMRF as part of its cloud infrastructure furthers its legacy.

Partner solution overview

Radisys' vMRF delivers to CSPs a pre-validated IP Multimedia Subsystem (IMS) MRF, available as a virtualized network function (VNF), which has been certified on HPE OpenNFV. Radisys MediaEngine delivers IP audio and video packet processing, under the control of an IMS Call State Control Function (CSCF) or IMS Telecom Application Server (TAS), to deliver the scalable media processing for VoLTE, VoWiFi, WebRTC, real-time video, and real-time multimedia transcoding applications.

Solution benefits

By leveraging a pre-integrated, pre-validated system, CSPs can accelerate their new service deployment while minimizing risk and enable CSPs to bring innovative new services to market faster with an agile and elastic virtual network.

Application functionality within HPE OpenNFV Reference Architecture

The strict performance requirements essential for real-time media processing such as minimal latency and jitter can present unique challenges when deploying data plane processing elements such as an IMS MRF over hypervisor technology in a cloud infrastructure. Radisys MediaEngine vMRF has overcome these media plane challenges without sacrificing media quality or network performance and does so with very little capacity reduction relative to bare-metal deployments. Because of extensive interoperability testing and validation of the MediaEngine vMRF in HPE OpenNFV Partner Program, network operators deploying virtualized IMS infrastructure can now deliver carrier-scale HD media processing capabilities with the full benefits of cloud elasticity, scale, and infrastructure re-usability.

Testing statement

"The Radisys MediaEngine vMRF is highly optimized for cloud deployment and enables communication service providers to deploy scalable multimedia communications services in HPE's OpenNFV cloud infrastructure with exceptional performance and reliability," noted Adnan Saleem, chief architect for MediaEngine, Radisys. "Onboarding, launching, and instance management of our vMRF on HPE OpenNFV required a few simple steps to configure, spin up, and successfully serve voice and video calls."

Testing details and proof points

- Optimized for cloud deployment
- Pre-validated VNF
- Integrated with HPE OpenNFV cloud infrastructure
- Scalable media processing
- Exceptional performance and reliability
- Agile and elastic virtual network

Conclusion

While there have been a few virtual IMS (vIMS) announcements in the market, Hewlett Packard Enterprise and Radisys have worked together to deliver vIMS with full HD voice and HD video support. The ability to deliver real-time voice and video communications services, utilizing HPE OpenNFV infrastructure and the Radisys MediaEngine vMRF is an industry first and has been successfully validated in a multivendor vIMS architecture.

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