HPE TELCO BLUEPRINTS WITH VMWARE
TELCO CLOUD INFRASTRUCTURE—CLOUD DIRECTOR EDITION

OVERVIEW

Historically, communications service providers (CSPs) have sourced their telco-grade network equipment from network equipment providers (NEPs). Network Functions Virtualization (NFV), where software is disaggregated from hardware, is prevalent in 5G networks. By deploying telecommunications workloads on IT-based infrastructure, such as HPE ProLiant DL servers, CSPs can achieve lower costs and freedom from vendor lock-in.

As CSPs start deploying 5G, they will need to manage these new technologies. During their network transformation journey, they need trusted partners such as Hewlett Packard Enterprise and VMware® that have unique capabilities to help them deploy NFV Infrastructure (NFVI) without incurring added risks.

HPE and VMware have a legacy of close collaboration that has delivered solutions to enterprise customers for more than 20 years. Now, CSPs can benefit from the next phase of this collaboration.

Purpose-built for demanding telco environments, VMware Telco Cloud Infrastructure—Cloud Director Edition, is a horizontal infrastructure solution that provides CSPs with the choice and flexibility to deploy over 200 certified network functions from industry-leading ecosystem partners. Through VMware Ready for Telco Cloud program, CSPs can now accelerate the deployment of chosen network functions with the confidence that these network functions and the underpinning horizontal infrastructure will operate efficiently and consistently.

HPE TELCO BLUEPRINTS

HPE Telco Blueprints are fully engineered NFV infrastructure reference designs that are extensively validated along with various industry-leading third-party VIM solutions. The HPE Telco Blueprints comply with both network equipment building system (NEBS) and ETSI requirements for equipment deployment within harsh telco environments. HPE Telco Blueprints are based on HPE compute, storage, and networking infrastructure platforms and partner-sourced VIM offerings, optimized for specific NFV use cases.

HPE Telco Blueprints are constantly evolving with specific optimizations for telco use cases across both core and edge deployments. HPE Telco Blueprints offer enhanced performance and scalability for workloads at core sites or across the distributed network edge. HPE Telco Blueprints are designed for flexibility with best practice guidelines developed to enable customization by CSPs and benchmarking completed with various VIM options to validate performance.

VMWARE TELCO CLOUD INFRASTRUCTURE—CLOUD DIRECTOR EDITION

VMware Telco Cloud Infrastructure—Cloud Director Edition combines telco-grade infrastructure with VMware Cloud Director as the virtualized infrastructure manager (VIM). VMware Cloud Director manages an NFVI stack consisting of VMware vSphere® for compute, VMware vSAN™ for storage, VMware NSX® for networking, and VMware vRealize® Suite for operations.
HPE Telco Blueprints with VMware Telco Cloud infrastructure—Cloud Director Edition incorporate VMware Cloud Director as the VIM.

The HPE Telco Blueprints are offered with the HPE Telco Software-Defined Infrastructure (SDI) Toolset that provides storage and network interface card (NIC) performance benchmarking reports and tools to simplify deployment, configuration, and performance benchmarking. The HPE Telco SDI Toolset also includes the HPE Telco NFV Platform Software (NPS) Toolkit, which is also designed to simplify and automate NFVI stack deployment and configuration. The HPE Telco NPS Toolkit, combined with HPE Telco Blueprints, provides CSPs with flexibility in their software design and shortens the time required to deploy new applications. It also offers a new way for CSPs to design, deploy, and manage services in their network.

FIGURE 1. HPE Telco Blueprints with VMware Telco Cloud Infrastructure—Cloud Director Edition architecture

HPE Telco Blueprints with VMware Telco Cloud Infrastructure—Cloud Director Edition highlight HPE’s expertise in architecting NFV infrastructure solutions and provide the following benefits for CSPs:

- **Simplicity:** They are simple to deploy, operate, support, scale, manage, and maintain.
- **Leading design:** Built on HPE’s proven global expertise with NFVI deployments, the HPE Telco Blueprints with VMware Telco Cloud Infrastructure—Cloud Director Edition are based on compute, storage, and network products from HPE. This reduces risk while increasing CSPs ability to compete.

- **Accelerated time to market:** NFVI stack configurations are validated in collaboration with VMware and automated with HPE toolkits. These configurations can be customized by HPE Pointnext Services or VMware system integration partners as required.

- **Open ecosystem:** HPE and VMware’s rich ecosystem of SIs, independent software vendors (ISVs), and NEPs provides CSPs with choice and prevents vendor lock-in.

**CONCLUSION**

HPE has a broad portfolio of infrastructure products (compute, storage, and networking) from core to edge to fit the complex deployment environments of CSPs. When complemented by VMware Telco Cloud Infrastructure—Cloud Director Edition, these solutions empower CSPs to rapidly deploy and efficiently operate multi-vendor containerized network functions (CNFs) and virtualized network functions (VNFs) with agility and scalability across 5G networks.

HPE and VMware have worked together to provide the right mix of telco cloud infrastructure and software capabilities. Together, we can help CSPs accelerate time to market and mitigate the deployment risk of open, disaggregated platforms as they undertake their 5G evolution.

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RESOURCES

- HPE and VMware strategic alliance
- VMware Telco Cloud Infrastructure

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