

Hewlett Packard Enterprise Unveils 5G Lab to Accelerate Adoption of Open, Multivendor 5G Solutions

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HPE 5G Lab will be the catalyst that unlocks a new wave of open, interoperable 5G innovation, as telcos prepare for mass adoption of 5G

SAN JOSE, Calif.--(BUSINESS WIRE)--Hewlett Packard Enterprise (HPE) today unveiled the HPE 5G Lab, a test and development environment where telcos and partners can validate and integrate 5G network solutions. Using the HPE 5G Lab, telcos can speed up 5G adoption and access new revenues faster by getting hands-on experience with the latest 5G innovations in a live test environment. The HPE 5G Lab has already gained support from key industry leaders including Affirmed Networks, Casa Systems, Intel, JMA Wireless, Metaswitch, Nokia, Openet and Red Hat.

HPE's growing 5G portfolio unleashes the potential of 5G at the network core, at the edge, and in the enterprise. Already this year, HPE has introduced [HPE 5G Core Stack](#), an open, cloud-native 5G core network software stack; the [HPE Resource Aggregator for Open Distributed Infrastructure Management](#), simplifying the management of telco grade compute infrastructure for 5G across thousands of sites; and [HPE Edge Orchestrator](#), enabling telcos to deliver new edge computing services to customers at the edge of telco networks. Now, the HPE 5G Lab provides a proving ground enabling telcos, network equipment providers and independent software vendors (ISVs) to validate these technologies, prepare for mass adoption and invest with confidence.

5G standards have been designed so telcos can build their 5G networks with open, cloud-native platforms that utilize modular software and hardware components from different vendors, allowing them to deploy new 5G services faster, more securely and in a more flexible way. However, this represents a big shift in a market that previously relied on proprietary, vertically-integrated systems. In order to embrace this shift with confidence and assurance, telcos are looking to work with trusted and proven partners that can demonstrate performance and interoperability in a live, real-time test environment.

"Governments and telecoms operators around the world are looking to open 5G technologies as an opportunity to move away from a number of vendors which have raised fundamental concerns around security, resilience and market diversification," said Phil Mottram, vice president and general manager of Communications and Media Solutions at HPE. "However, despite multiple successful deployments, doubts still persist about the ability of open 5G technologies to truly replace the old way of building networks. With the launch of the HPE 5G Lab, telcos, solution vendors and national stakeholders can test innovative new solutions with confidence and ensure that they are ready for mass adoption."

By taking an open approach, telcos now have the flexibility to work with practically any ISV or best-of-breed solution provider to create tailored networking solutions tuned to specific verticals and use cases. The HPE 5G Lab encourages telcos, vendors and platform providers to come together to test, document, and validate their technologies as a single solution.

The initial focus of the HPE 5G Lab will be to bring innovation to the previously monolithic cellular network core. To fully realize the benefits and power of 5G, initial deployments of 5G radio access networks, currently utilizing 4G core infrastructure need to migrate to a standalone 5G core. This will enable holistic management, data sharing, and slicing into virtual 5G networks with dedicated usage and characteristics. The HPE 5G Core Stack is truly open, allowing telcos to swap out network functions (NFs) as needed and therefore stay nimble and ahead of the competition. The HPE 5G Lab enables telcos to test and validate multiple NFs from different vendors whilst relying on HPE for integration with the HPE 5G Core Stack.

The HPE 5G Lab, located in Fort Collins, Colorado, is available worldwide to customers and HPE partners via remote access and includes the provision of personnel to manage and operate the lab environment, as well as assist with integration and testing. The lab is based around HPE 5G portfolio solutions and will include multiple 5G related products and solutions:

- **HPE 5G Core Stack** - including 5G network functions from HPE and our partners, HPE Shared Data Environment (SDE) and orchestration layer
- **HPE Telco Cloud** - including industry-standard servers, storage and networking components to run the 5G network, along with cloud and container platform software such as HPE Ezmeral Container Platform, RedHat OpenShift, RedHat OpenStack, and VMware Tanzu.
- **HPE Telco Blueprints for Core and Edge** - including the infrastructure and VM stacks, supporting both third-party and HPE solutions such as the HPE 5G Core Stack and HPE Edge Orchestrator
- **Aruba networking equipment** supporting telco-provisioned services for enterprise and Wi-Fi 6/5G interworking

To access the HPE 5G Lab and achieve validation with the 5G Core Stack, ISVs first need to join the HPE Partner Ready program. This will allow them to demonstrate compliance with 3GPP standards and benefit from HPE's growing 5G ecosystem, including HPE's global salesforce, go-to-market support and innovative delivery models through HPE GreenLake and HPE Financial Services.

With HPE GreenLake, telcos can acquire an end-to-end 5G core network as a pre-integrated software and hardware platform on an as-a-service consumption model. By deploying HPE 5G Core Stack with HPE GreenLake, carriers acquire a purpose-built, open platform for 5G with minimal up-front investment, and the ability to scale according to demand, ready to support unpredictable growth and future-proofed for forthcoming 5G evolutions.

HPE and partners have already showcased several very successful cloud-native, multi-vendor 5G core deployments, such as those demonstrated in [Korea](#) and [France](#).

HPE – a trusted and proven partner to telcos

HPE has over 30 years of experience in the telecoms industry, with more than 300 telco customers in 160 countries. In the core, 700 million subscribers across 82 carriers depend on HPE Mobile Core software, and HPE was recognized by [Frost & Sullivan](#) with the 2019 Leadership award

for Global 5G Infrastructure Enabling Technology. Learn more at: hpe.com/info/5g

Availability and Additional Resources

The HPE 5G Lab is fully operational and is currently being used to finalize integration of partner network functions within the HPE 5G Core Stack.

[Watch a roundtable discussion with HPE and our partners, hosted by Telecom TV from 16:00 CET](#) 23rd July

Supporting Quotes

"We at Affirmed Networks believe a cloud native architecture that drives today's always-on networks at the highest levels of performance and availability is key to rapid adoption of 5G use cases. HPE's initiative by creating this multi-vendor, open eco system for the best of technology providers to pre-integrate their solutions is a welcome step towards accelerating the drive to mass scale deployment and monetization of 5G networks." – Amit Tiwari, Chief Strategic Alliances Officer, Affirmed Networks

"From edge computing to massive IoT deployments, VR / AR and more, 5G will be the foundation of a new generation of communications, managed services and applications for consumers and businesses. A key to making it a reality is the shift by telcos from being locked in to proprietary, vertically-integrated networks from monolithic vendors to the new model of open, cloud-native and multi-vendor 5G solutions. As proven by some of our demonstrations and technical trials with leading telcos, this approach leads to more flexible, agile and cost-effective 5G networks so we are excited to be a founding partner of the HPE 5G Lab to collaborate with HPE, telcos and other leading vendors on 5G solutions." – Jerry Guo, CEO, Casa Systems

"The promise of open 5G innovations will only happen through strong industry collaboration. Through our work with the ecosystem, such as efforts with HPE in their 5G labs on Intel Xeon Scalable processor based HPE Telco Blueprints, and continued investment in our unmatched 5G network infrastructure portfolio, we aim to help our customers accelerate the delivery and deployment of their 5G solutions from core to edge." – Alex Quach, Intel VP and GM Wireline and Core Network

"Metaswitch's Fusion Core 5G Container Network Functions (CNFs) are built to work via open APIs with complementary CNFs, Kubernetes based automation platforms and cloud infrastructures. The HPE 5G Lab provides an important proof point for service providers and enterprises looking to explore elements of the 5G SBA and accelerate telco cloud adoption, something that will be vital for 5G networks to hit the price/performance targets and drive rapid service innovation." - Shubh Agarwal, SVP, 5G, Metaswitch

"Open systems are key to 5G. Openet is very proud to work with HPE and their 5G partners in the HPE 5G Lab to show how a best of breed, open systems approach is the best way to deliver 5G networks and supporting ecosystems." - Niall Byrne, VP Network Strategy, Openet.

"Red Hat is excited to continue our work with HPE to advance open source technologies and principles to help organizations look to deploy their next generation 5G networks. With the integration of our industry leading container platform, Red Hat OpenShift, to the HPE 5G Core Stack and the new HPE 5G Lab, businesses can be empowered to test, innovate and build on an open cloud-native infrastructure." - Darrell Jordan-Smith, global vice president, vertical industries and accounts, Red Hat

About Hewlett Packard Enterprise

Hewlett Packard Enterprise is the global edge-to-cloud platform-as-a-service company that helps organizations accelerate outcomes by unlocking value from all of their data, everywhere. Built on decades of reimagining the future and innovating to advance the way we live and work, HPE delivers unique, open and intelligent technology solutions, with a consistent experience across all clouds and edges, to help customers develop new business models, engage in new ways, and increase operational performance. For more information, visit: www.hpe.com.

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