

Trusted and available VNF

Virtualized mission-critical core network elements

HPE Virtualized I-HSS¹ plus HPE Virtualized NonStop extends unprecedented availability in the private cloud.

Industry trends in technology

The latest technology trends—NFV and Heterogeneous Networking (HetNet)—open business opportunities for new and traditional CSPs. The arrival of NFV introduces fundamental challenges to network infrastructure, subscriber features, and SDM used in core networks. The approach and tools used by CSPs must evolve to meet demands for enhanced individual subscriber models. Hewlett Packard Enterprise brings the advantages of proven SDM functions, along with a highly available and stable virtual environment that meet the very demanding requirements of CSPs.

Virtualized mission-critical environments

Core network operators are challenged to evolve their infrastructure from its legacy, appliance-based implementation toward a flexible virtualized environment. This entails a complete retool and overhaul. With this overhaul, new technologies and unproven implementations are introduced into a mission-critical environment. This could potentially lead to increased risk.



Transforming core networks

Communications service providers (CSPs) are embracing network functions virtualization (NFV) in order to become more efficient and effective in the delivery of services. At the same time, they need to be more nimble in responding to the demands of their increasingly diverse markets. Virtualization technologies and concepts have been employed in delivering flexible network functions over the past few years. They are now being readied for deployment in support of key core network elements. Hewlett Packard Enterprise brings the advantages of proven HPE Subscriber Data Management (SDM) functions, along with a highly available and stable virtual environment to meet the demanding requirements of CSPs.

Ensuring availability in an NFV deployment

There are specific components in the core network that must always be available. Traditionally, this has been the Home Location Region and Home Subscriber Services (HLR and HSS), including the subscriber database. In the new NFV world, the subscriber database is no longer assumed to be aligned exclusively with the HLR and HSS applications. Thus, the subscriber database has become an independent component that is at the heart of NFV deployments. This means that the subscriber database must be deployed in a rock-solid environment.

¹ I-HSS is the HPE Integrated Home Subscriber Server. I-HSS enables CSPs to streamline the transition to LTE networks in Heterogeneous Network environments, embracing a diversity of mobile access networks with a single subscriber management solution.

Solution brief

650 million

subscribers are served globally with HPE SDM solutions.

10 more years

multigenerational HetNet will exist and persist for ten more years.

A Virtualized NonStop solution ensures that the requirements of the subscriber database are met by providing fault tolerance, and solution level availability and reliability in an NFV environment. The Virtualized NonStop goes on to provide similar requirements for other VNF elements identified by the CSP.

Security, strength, protection

In the Virtualized NonStop environment paired with proven Telco applications from HPE, portfolio customers can be assured that they are in a secure environment. Unlike open source, HPE NonStop source software is not published. Solutions deployed in a Virtualized NonStop environment benefit greatly, as viruses and attacks are less likely.

Proven solutions for 20 years

Hewlett Packard Enterprise customers have benefited from a 20+ year partnership between HPE NonStop and Communications Services Business units. Together, they deliver billions of voice and data transactions per week, and connect and disconnect hundreds of millions of devices multiple times each day. In doing so, together they have set the standards for high availability in the Telco industry.

Bringing today's success into tomorrow's world

The rate of change in the world of CSPs is increasing dramatically. New services need to be deployed quicker than ever to a more sophisticated and diverse customer base. These customers of today demand the same high levels of availability and reliability from their CSPs, increasing the need to do it right the first time. This is where Hewlett Packard Enterprise delivers the shortest path to market. The strategy HPE laid out more than a decade ago prepared the mobility management portfolio for the virtualized environment that we have upon us today.

By maximizing reuse and leveraging existing core network elements, customers can shorten the transition time to increasing revenues and reducing data centers' costs.

For more information, contact your local representative to learn how we can help you realize your goals more simply, quickly, and easily using industry-proven and reliable HPE technology.

Learn more at
[**hpe.com/info/nonstop**](http://hpe.com/info/nonstop)
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