



Highlights

- Helps enable rapid and flexible deployment of virtualized network functions
 - Helps reduce costs with a pay-as-you-go billing model and an as-a-service delivery model
 - Enables easier management and control of virtualized networks
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IBM Cloud Managed vCPE Service

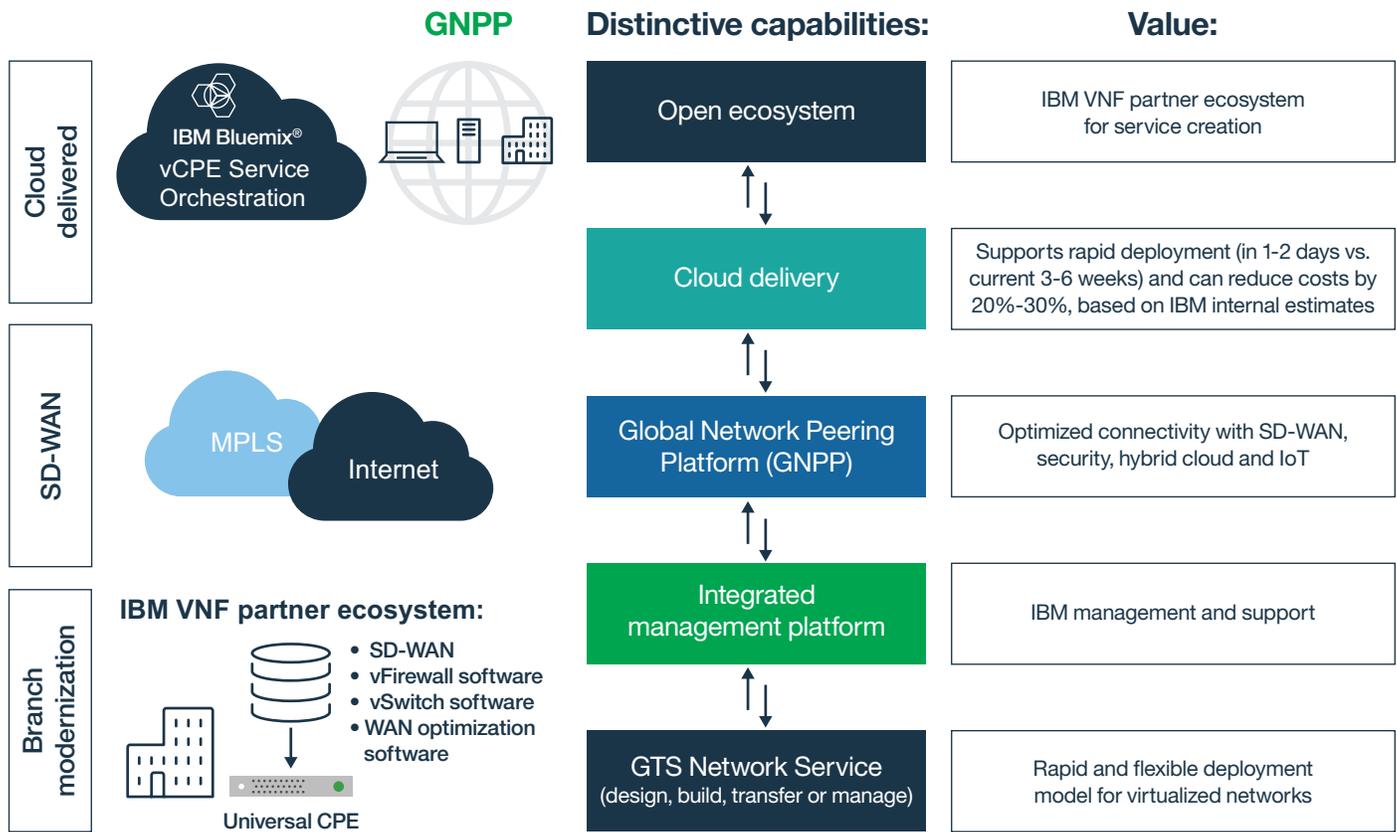
Help drive agile, cost-efficient and well-managed networks

Communications services providers (CSPs) constantly face challenges around declining revenue, speed to market and operational complexity. To overcome these challenges, they need networks that enable automated, speedy and ultimately profitable service delivery. Hence, telecommunication networks need to be agile, cost efficient, well orchestrated and managed. The quest for the holy grail of programmable networks is driving the accelerated adoption of network function virtualization (NFV) and software-defined networking (SDN). But can CSPs gain value from virtualized networks without a complex and costly transformation of their existing network environment?

IBM® Cloud Managed vCPE Service helps design, build and run virtual customer premises equipment (vCPE) environments that can enable CSPs to rapidly deploy and support new network service offerings. In a vCPE environment, key networking functions such as routing, security, WAN optimization, application performance and the like are virtualized. As a result, you can eventually place, scale and service these functions from almost anywhere in the network. This managed vCPE solution from IBM not only helps improve flexibility, it also helps support seamless and on-demand service delivery. With pay-as-you-go billing and as-a-service delivery model, the solution also helps increase cost efficiency while bringing down the total cost of ownership (TCO).

IBM provides strategy and assessment, design and deployment, and management and monitoring services as part of the vCPE solution. Seasoned IBM specialists first conduct an in-depth readiness assessment and develop a detailed strategy roadmap, customized to your business and IT environment. They then use a tested approach to create a design and deployment roadmap, and help integrate the best-fit solutions that are designed to match costs with benefits. When the vCPE environment is deployed, IBM provides modular and catalog-based network monitoring, management and reporting services to support your physical and virtual networks across a broad range of network technologies, technology providers and networking equipment.





Improving agility with flexible provisioning of virtualized network functions

With IBM Cloud Virtual CPE managed network as a service, the virtual network functions (VNFs) can be hosted practically anywhere. Hosting locations might include on-premises at a branch location, in a data center, on a public cloud or in a hybrid cloud environment. This solution also allows network functions like security to be scaled up according to customer traffic demands. For example, the network requirement for firewall security at a branch location on a normal working day may be 1G, but towards the end of the month it may grow to 5G. In such a situation, this solution can rapidly provision the requirement by bringing up the firewall VNF dynamically at the branch or data center location.

Helping increase cost efficiency and reduce TCO with a cloud-based solution

Using as-a-service pricing model and managed service from an IBM Bluemix® cloud platform, this vCPE solution helps reduce the TCO at your branch locations. Having multiple physical devices, each serving a network function with hard-wired service chains, can become too expensive when CSPs roll out new services at branch locations. With a vCPE environment, network functions can be more easily and cost efficiently deployed, built and service chained. This vCPE solution also offers pay-as-you-go billing, enabling you to follow a full license-based, operational expenses model instead of investing in multiple appliances up front to set up your branch locations. This subscription-based solution allows you to be billed only for the services you use and for the time you consume these services.

Enabling easier management and control of virtualized networks

The solution features “zero touch provisioning” that enables VNFs to start in amnesiac mode, download the latest software image and be directed for auto configuration from the cloud platform. This feature helps you to eliminate manual intervention and facilitates automation and auto provisioning. Furthermore, you can use the IBM Remote Management Platform to automate most of the regular monitoring tasks such as link status, hardware health check, software integrity and more. The platform also enables you to more carefully manage configuration changes as well as software inventory and version control.

With the solution, you can access an IBM partner VNF ecosystem and have services delivered as an “overlay” that require no complex integration with your existing systems. IBM integrates new services and VNF partners into the ecosystem as needed based on your requests, and, as a result, you’ll find integration with the entire ecosystem a lot easier.

Why IBM?

IBM can provide virtually all the skills, processes and tools you need to design, run and manage your vCPE environment. We use a leading-edge cloud platform—IBM Bluemix—to host virtualization and SDN control elements along with orchestration tools, to help synchronize your network with the rest of your IT.

Instead of manually resolving issues, IBM helps you use virtual engineer technology to identify and fix problems more rapidly. IBM specialists help resolve issues that can’t be solved automatically.

IBM encourages CSPs to explore new networking technology like SDN, NFV and analytics-driven automation at the IBM Client Innovation Centers for Networks. The centers are designed to accelerate the prototyping and deployment of your new networking solutions. These facilities also help position your networks as a source of revenue growth, higher customer satisfaction and increased employee engagement.

IBM has deep strategic relationships with leading technology providers. This, coupled with our unbiased view on multiple network technologies and open reference architecture, allows us to deliver network solutions designed to best match your business needs.

IBM specialists include certified experts and numerous technicians who hold equipment certifications from leading networking technology providers across 170 countries. They offer deep skills in heterogeneous network interoperability.

IBM uses tested processes based on the IT Infrastructure Library (ITIL) service management best practices. Using repeatable methodology, project management disciplines and customizable service level agreements, IBM can provide you the world-class service delivery you expect from an industry leader.

Take the next step

To learn more about our NFV and SDN offerings, please contact your IBM representative or visit the following: [IBM Networking Services](#) or [@IBMServices](#)



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