

Visualization of Communication Quality in Private Clouds

Contributing to the Quality Evaluation of In-House Data Center Services

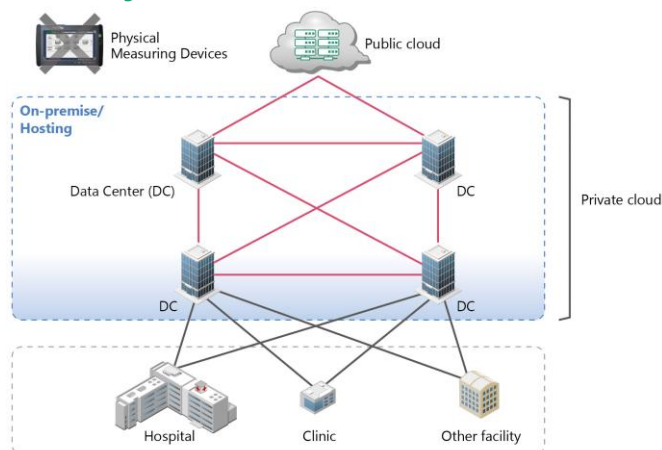
Virtual Network Master for KVM MX109031PC

Network Master Pro MT1000A / MT1040A



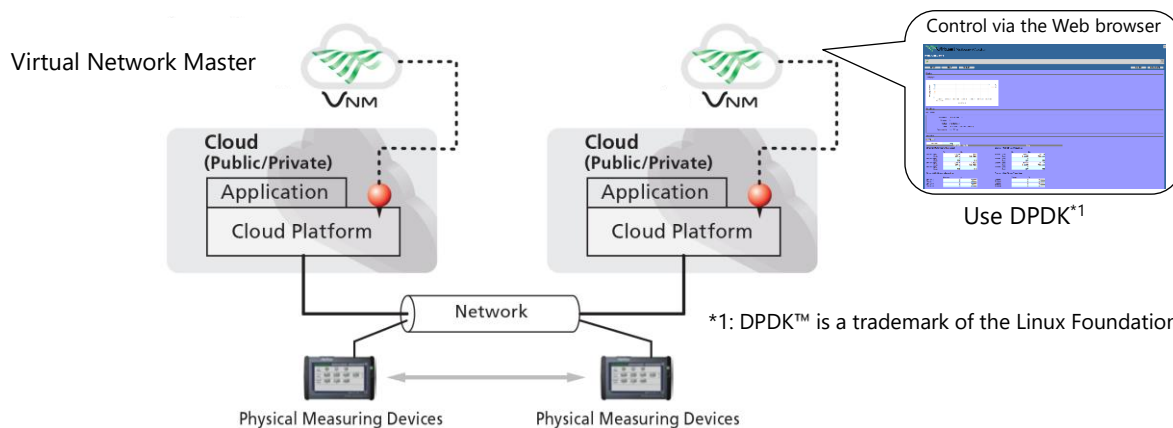
Challenges in Evaluating the Network Quality of a Private Cloud

Since healthcare and financial systems require high levels of availability and stability, they are typically run using a private cloud. It is essential to employ server virtualization technology, such as KVM, across multiple data centers (DCs) in order to enable system failover in the event of a failure, ensure uninterrupted operation, and achieve redundancy. Ensuring service-level performance is vital. In a virtual environment where installing hardware testers is difficult, on the other hand, not all characteristics can be evaluated accurately through a ping or other conventional simple software-based communication quality test method.



Quantitative Measurement Environment for a Virtual Platform

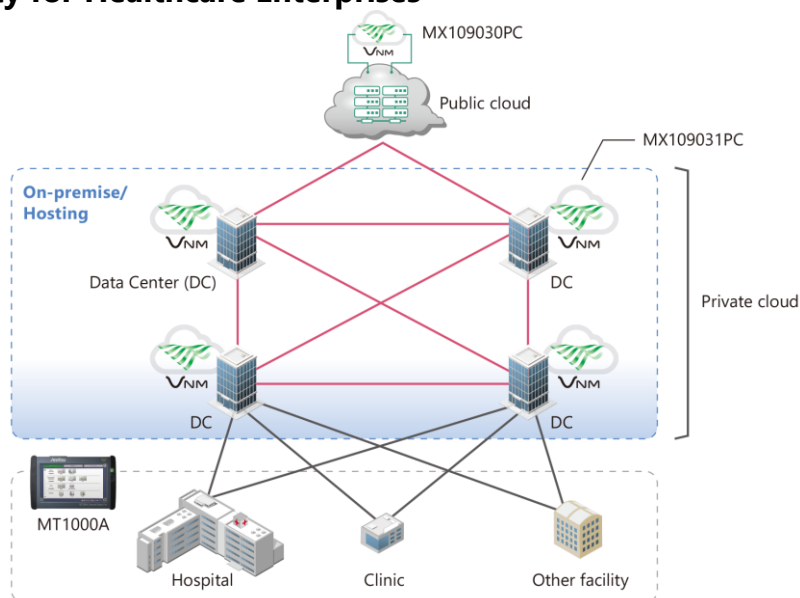
The Virtual Network Master (VNM) is a new software-based measuring instrument designed to meet this challenge. It enables one-way latency, frame loss, and other measurement items to be evaluated quantitatively from a virtual platform. The communication quality of the network, including the virtual layer, can be visualized.



Use Cases

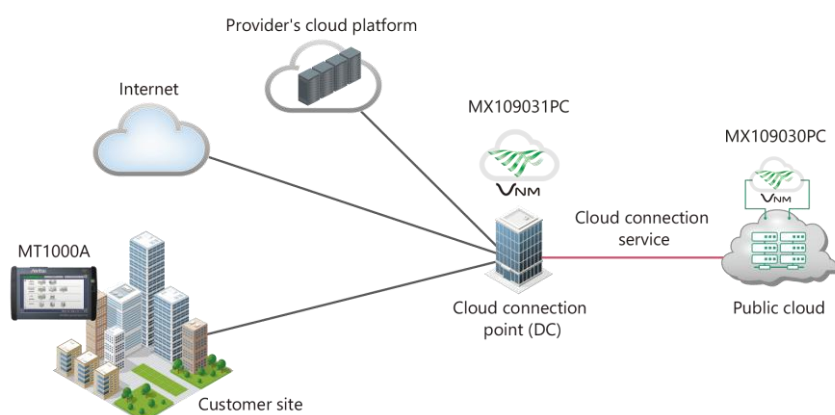
Visualization of Communication Quality for Healthcare Enterprises

Healthcare enterprises operate electronic medical record and other business systems in their private clouds. Any communication failure can directly affect their healthcare services. Therefore, healthcare services require high availability, high redundancy, and an excellent BCP, and it is essential to interconnect multiple data centers (DCs) while utilizing KVM and other virtualization technologies. Moreover, as DC-DC connections and DC-cloud connections increase, it is becoming vital to visualize communication quality continuously. Introducing MX109031PC into your KVM virtual environment allows the quality of communication between DCs, as well as between a DC and a cloud, to be evaluated under real-world conditions, helping to ensure stable operation and quick troubleshooting.



Visualization of Communication Quality of a Cloud Connection Service

With cloud usage becoming mainstream in enterprise network services and many other offerings, services for connecting to a public cloud or other cloud platform are now widely used. Meanwhile, service users demand E2E communication quality spanning from customer sites to cloud servers. This makes it necessary for cloud connection service providers to objectively prove the quality of communication from a connection point to a cloud based on numerical data. Deploying MX109031PC in a DC that serves as a cloud connection point visualizes the quality of communication between a DC and a cloud, which helps to clarify the scope of responsibility, isolate failures rapidly, and provide customers with evidence-based explanations.



Ordering Information

Model	Name	Remark
MX109031PC	Virtual Network Master for KVM	MX109031PC-TL003 or MX109031PC-TL011 is required.
MX109031PC-TL003	3 Months License	
MX109031PC-TL011	1 Year License	