Frequently asked questions about the LANCOM vRouter

The LANCOM vRouter is a software-based router for operation in a virtualized environment based on a hypervisor such as VMware ESXi, Amazon Web Services (AWS), Microsoft Hyper-V, or Microsoft Azure. Based on the longstanding, tried-and-trusted operating system LCOS (LANCOM Operating System), it works just like a hardware router to offer the same security and a comprehensive range of functions.

Which are the scenarios where it makes sense to use a vRouter?

Multi-site scenarios – medium-sized enterprises with several sites

Companies operating at several sites have high expectations of a router. It should offer a comprehensive range of functions, high performance and scalability. All of these demands are easy to implement with the LANCOM vRouter. It is based on the operating system LCOS and offers compareable functionalities as a LANCOM hardware router.

What's more, the LANCOM vRouter is easily managed and monitored via the LANCOM Management Cloud to ensure optimum transparency of the network.

Large scale enterprises – extensive distributed networks

For large, highly distributed companies with several sites, the LANCOM vRouter is the solution that provides an agile network. Based on the operating system LCOS, its extensive range of functions facilitates any number of parallel applications. At the same time, it places no restrictions on the design of the network infrastructures.

Thanks to its built-in IPSec-VPN functionality, the LANCOM vRouter ensures the secure networking of up to 3,000 sites. Its integration into the LANCOM Management Cloud makes the vRouter easy to manage and monitor. An optimal combination for high-performance networks.

Cloud-managed and virtualized networks

The LANCOM vRouter is ideally suited for companies that already operate virtualized infrastructures and orchestrate their network via the LANCOM Management Cloud.

It integrates seamlessly into the LMC, where it is managed from the user interface. Users benefit from the software-defined networking technology and control over the network via SD-WAN. Also, the software-based router harmonizes perfectly with all of the other network components. This makes the network highly integrated and fully compatible. By combining highly effective LMC-based management with the vRouter, you keep track of the entire installation even in highly complex enterprise networks.

For which scenarios is a vRouter unsuitable?

Any scenario where the router is required for Internet access, e.g. via DSL, 4G, etc., or as a network termination router. Also we recommend the use of a hardware router wherever the network operates with highly integrated features such as All-IP, analog, and ISDN telephony, WLAN, or 4G access. If your company does not operate its own virtualized server landscape where the LANCOM vRouter can operate, a hardware router is the preferred choice. Basically, the use of a LANCOM vRouter is not recommended for smaller scenarios such as doctor's practices, accounting companies, and small offices.

When is it better to use a hardware-based router instead of a vRouter?

When deciding between using a virtual router (vRouter) running on a virtual machine and a hardware-based router, it is important to consider the type of traffic and application requirements.

When it comes to time-sensitive traffic and applications such as VoIP, a dedicated hardware-based router is the preferred choice. The key advantage of a hardware solution is that the operating system has direct and exclusive access to the hardware. For this reason, a hardware-based router provides the necessary security and performance for critical applications that require high performance and guaranteed prioritization.

Alternatively, a vRouter can be used as a standalone instance on a hypervisor. However, in scenarios with high processing and prioritization requirements, the vRouter should not be used as a shared resource alongside other applications on a hypervisor. In the case of shared resources with other virtual instances, reliable processing in the vRouter cannot be guaranteed.

Which software options are available for the vRouter?

The LANCOM Public Spot Option and WLC Basic Option are activated by default on the vRouter. The number of VPN tunnels, ARF networks, Public Spot users, and WLC-managed devices can be selected via the respective vRouter license. Other LANCOM software options such as the All-IP Option, Content Filter Option, etc. are currently not supported.

Which virtual machines does the vRouter operate on?

In productive environments the LANCOM vRouter supports VMware ESXi, Azure, Hyper-V and AWS.

When I operate a vRouter, do I still need a gateway for Internet access?

Generally speaking you will still require a gateway for Internet access, e.g. via DSL, cable, or 4G modem.

Which systems are available for managing and monitoring the LANCOM vRouter?

The LANCOM vRouter is managed and monitored by the same systems as a hardware router. Either with the easy-to-use and intelligent LANCOM Management Cloud, or with the LANtools, or even from the console.

Can the vRouter from LANCOM be operated in a datacenter?

Yes, the vRouter from LANCOM operates in datacenters without problem.

Which operating systems does the vRouter run on?

The vRouter from LANCOM is based on the longstanding, tried-and-trusted operating system LCOS (LANCOM Operating System). It offers the same security features and a wide range of functions.

Is it possible to operate a vRouter with conventional LANCOM hardware-devices?

Yes, this is possible without difficulties. Both, the vRouter and common hardware routers, are based on the longterm tested operating system LCOS. Thereby, ideal interoperability of all used components is guaranteed. For example, a LANCOM vRouter as a central VPN gateway and a hardware-based LANCOM VPN router is a perfect combination for secure VPN site networking on the branch side.

What are the system requirements for installing a vRouter?

A CPU equipped with virtualization technology (Intel VT-x or AMD SVM)

The vRouter requires a x84_64 CPU with at least 1 GB RAM and up to 5 network cards

A vRouter cannot be installed directly on x86 hardware; a hypervisor is a fundamental requirement.

The following hardware requirements apply:

normal - 2 GB RAM for vRouter 50 and 250

big - 4 GB RAM for vRouter 500 and 1000

large - 8 GB RAM for vRouter unlimited

Which RAM memory expansion is recommended for the different vRouter dimensions?

normal - 2 GB RAM for vRouter 50 and 250

big - 4 GB RAM for vRouter 500 and 1000

large - 8 GB RAM for vRouter unlimited

Are vRouter licences of the same type additive?

Yes, as long as the vRouter licences are of the same type, their periods can be added up with each other.

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