



Enea NFV Lab

Network Functions Virtualization (NFV) has fundamentally redefined how network infrastructures are architected and how services are deployed. Realizing the architectural framework as seen by the European Telecommunications Standards Institute (ETSI) and the Open Platform NFV community (OPNFV) requires access to modern and suitable hardware infrastructure, many software components and far-from-trivial integration and configuration.

Enea, within OPNFV, provides an open source reference platform which helps standardize and accelerate such deployments. However, companies making NFV products and services still require NFV-ready hardware infrastructure and know-how in order to deploy, install and configure the software platform.

GET AN ACCELERATED START WITH ENEA NFV LAB

Enea NFV lab consists of a rich set of NFV-ready ARM-based infrastructure that is made available to you supported by experienced engineers that can help you assemble a set of base infrastructure to enable real-world VNF deployments or even build full-fledged carrier-grade NFV platforms.

Reduce time-to-market by getting qualified support and early access to cutting edge hardware, thanks to Enea's long-lasting partnerships with all major ARM licensees (Freescale/NXP, AMD, Cavium, Texas Instruments, APM, etc.).

Get **support by the domain expert**. Enea already hosts the first ARM-based OPNFV community lab (Pharos Project), which is a compliant set of test infrastructure used by the community to verify OPNFV reference platforms and tools. Besides, Enea engineers are active contributors in the OPNFV community, and therefore experts within the building blocks of the platform (e.g. KVM, OpenStack, OpenDaylight, Open vSwitch, etc.).

Build NFV carrier-grade platforms with predictable performance:

While standardization and flexibility are the main objectives of OPNFV reference platforms, Enea offers additional NFV building blocks that incorporate performance improvements, management capabilities and functionality extensions: *Enea Linux 5 CGL* is a commercial distribution that can serve as either high performance hypervisor for NFVI or purpose-built VNF container; *Enea On-Device Management* is a feature-rich VNF management agent that supports major management protocols (NETCONF, SNMP, YANG, etc.); *OpenFastPath* is an accelerated TCP/IP stack for VNFs.

TRUST YOUR NFV BUSINESS TO ENEA

Enea is an **industry-leading company in the NFV domain**. Enea was the first company to demonstrate a complete ARM-based OPNFV reference platform and to host an ARM-based OPNFV community lab. Enea invests over 20% of its revenue on R&D to maintain leadership in the NFV domain and provide best expertise and advice to customers.

Enea is a **significant open source community player**. As a member of relevant communities such as OPNFV, Linaro, Yocto Project, OpenDataPlane (ODP) and OpenFastPath (OFP); Enea holds key roles: Linaro Networking Group (LNG) kernel maintainer, Yocto Carrier-Grade Linux (CGL) and virtualization meta-layer maintainer, OFP co-founder, etc.

Enea has **extensive experience and reputation in networking** and telecom sector. Enea is the company behind the most extensively deployed embedded operating system in the communication market. In fact, Enea's solutions are deployed in a variety of networking nodes (i.e. over half of the world's cellular base stations and a majority of the world's satellite base stations).

Enea has built a **broad and solid ecosystem** of partners and customers. Serving networking OEMs (NEPs and TEMs) has been the dominating part of Enea's business for more than two decades. Enea has broad experience working with all hardware architectures and telecom OEMs, and holds long lasting partnerships with all the major network hardware manufacturers.

Enea customers enjoy **world-class support** coverage to address immediate and long term support needs. Enea ensures the lifetime of your application with over 400 engineers and offices in 8 countries within Europe, North America and Asia.

SERVICE PACKAGES

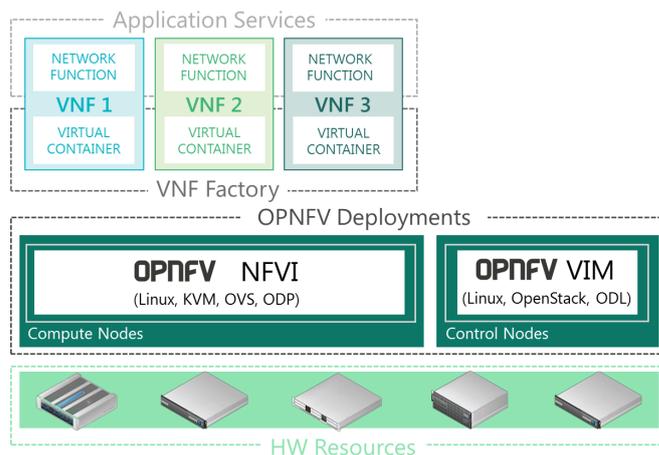
■ **OPNFV Deployments:** Enea NFV experts can help you build complete OPNFV platforms. Choose the compute and control nodes (NFVI and VIM) where you want to run the platform, and the corresponding Operating Systems (different Linux distributions are available). Then pick the desired OPNFV release, deployment method, and our experts will install and support it for you during an agreed period of time.

■ **VNF Factory:** This service allows customers to concentrate on VNFs, whether it is for development, validation or porting. Enea experts can build the required virtual container for

your network function based on various Linux distributions. If predictable performance is of your concern, the selection of Enea Linux 5 CGL as VNF OS allows for advanced customizations such as different tuning and kernel configurations (e.g. scheduling types, RT patch, specific boot time, etc.), custom sets of packages and compact footprints. Other additions such as management functionality (NETCONF/SNMP VNF agents) or Carrier Grade Linux (CGL) certification can also be provided.

■ **VNF Application Services:** The NFV lab services offering extends to software services that provide customers with a cost effective group of experts to prototype, develop, test or port a wide range of VNFs.

■ **NFV Training:** Enea is a Linux Foundation Authorized Training Partner that has been training professionals for over 3 decades. Enea's training portfolio includes relevant courses for engineers that cover from OPNFV to Linux performance and real-time. All courses can be provided in our offices worldwide as well as at the customers' premises.



NFV Lab Service Packages