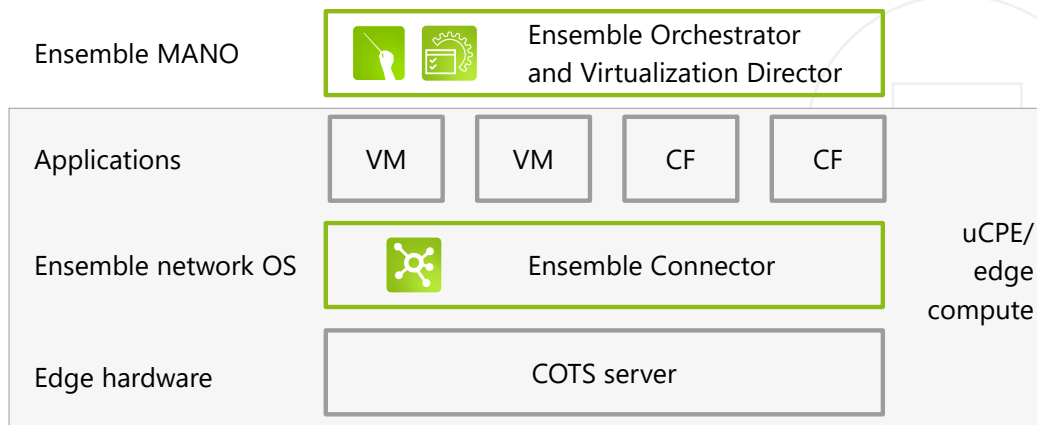# Ensemble virtualization solution

Network virtualization simplified

Communication service providers (CSPs) and enterprises are looking for ways to be more efficient, innovative and agile at the network edge, while also reducing CapEx and OpEx. Network functions virtualization (NFV) and universal CPE (uCPE) enable them to accelerate the innovation cycle and reducing the time and cost of deploying new services in a multi-vendor environment. That means new revenue for CSPs and new applications for enterprises.

NFV and uCPE are transforming how communication and cloud services are developed and managed. But, while the benefits are clear, NFV and uCPE   may introduce complexity. To address this complexity, our Ensemble portfolio delivers a truly open network virtualization suite providing powerful orchestration, virtual hosting, management and automation tools. Ensemble offers a flexible, multi-vendor solution and an industry-leading ecosystem of partners that delivers a wide variety of popular virtualization use cases. With Ensemble, CSPs and enterprises are now able to enjoy a new generation of on-demand, application-aware services.

Ensemble MANO	Ensemble Orchestrator and Virtualization Director	
Applications	VM VM CF CF	uCPE/ edge compute
Ensemble network OS	Ensemble Connector	
Edge hardware	COTS server	

Ensemble enables you to:

✓ Deploy with confidence
Deploy an award-winning virtualization suite with numerous successful customer deployments

✓ Leverage the power of open
Benefit from open principles of SDN and NFV to deploy functions at the metro service edge, in the data center and in the cloud

✓ Realize application flexibility
Replace closed appliances with software hosted anywhere in the network on any open hardware

✓ Deliver high-performance virtualization
Deliver high speed performance on your choice of COTS server and hardware accelerators.

✓ Launch with zero touch provisioning (ZTP)
Versatile framework that covers end-to-end aspects of ZTP for NFV service activation across multi-WAN topologies.On-demand service delivery

✓ Provide on-demand service delivery
Increase the capacity or add new capabilities in real time without investing in infrastructure or dispatching technicians

Ensemble overview

	Ensemble Connector	• High-performance virtual hosting and virtual networking platform • Enables support for hosting multi-vendor virtual network functions (VNFs) and applications • Rich set of operational features, including ZTP • Support for a wide range of third-party COTS and ADVA hardware platforms • Software-based encryption and secure NFVI for layered protection
	Ensemble Orchestrator	• Powerful ETSI MANO-compliant NFV orchestration solution • Provides a single point of entry for end-to-end VNF and network service lifecycle management • Scalable platform with full VNF lifecycle management • Attractive commercial models with option for hosted SaaS usage
	Ensemble Virtualization Director	• Advanced network management solution that can support automated deployment and management of NFV-based services • ZTP for uCPE and SD-WAN • NFV dashboard for performance and fault management

Ensemble provides a truly open and multi-vendor solution. We work with a wide variety of software, hardware and technology partners, as shown below.

VNF providers

6WIND · A(elleran · CERTES NETWORKS · Check Point SOFTWARE TECHNOLOGIES LTD. · CLOUDGENIX

creaNORD · dispersive · ekinops · EXFO · flexiWAN

F**RTINET · InfoVista · ixia · JUNIPER NETWORKS · MAVENIR

Metaswitch Networks · netrounds · NEXCOM · NOZOMI NETWORKS · paloalto NETWORKS

QOSMOS · Quortus · ribbon · riverbed · Saguna

SENETAS · silver peak · sinefa · SONICWALL · SPIRENT

TREND MICRO · untangle · VERSA NETWORKS · veryx · VIAVI · viptela

vmware

Technology partners

ADVANTECH · ECROSSER Acrosser Technology Co., Ltd. · ALPHA · CASWELL Complete Your Solutions Subsidiary of Ennoconn · CAVIUM

DELL · iEi IEI Integration Corp. · intel · edge-core NETWORKS · kontron · Lanner

L3 NETWORKS · MIRANTIS · NEXCOM · Netcracker · redhat.

Silicom Ltd. Connectivity Solutions · SUPERMICRO · ufiSpace · WIND

Solution integrators

dacoso data communication solutions · DELL · EDGETEAM TECHNOLOGY innovating networks · IBM.

iricent · Loop Telecom · kapsch >>> · KGPCo

LightRiver TECHNOLOGIES · NEC · WALKER AND ASSOCIATES INC · Tech Mahindra

ADVA™