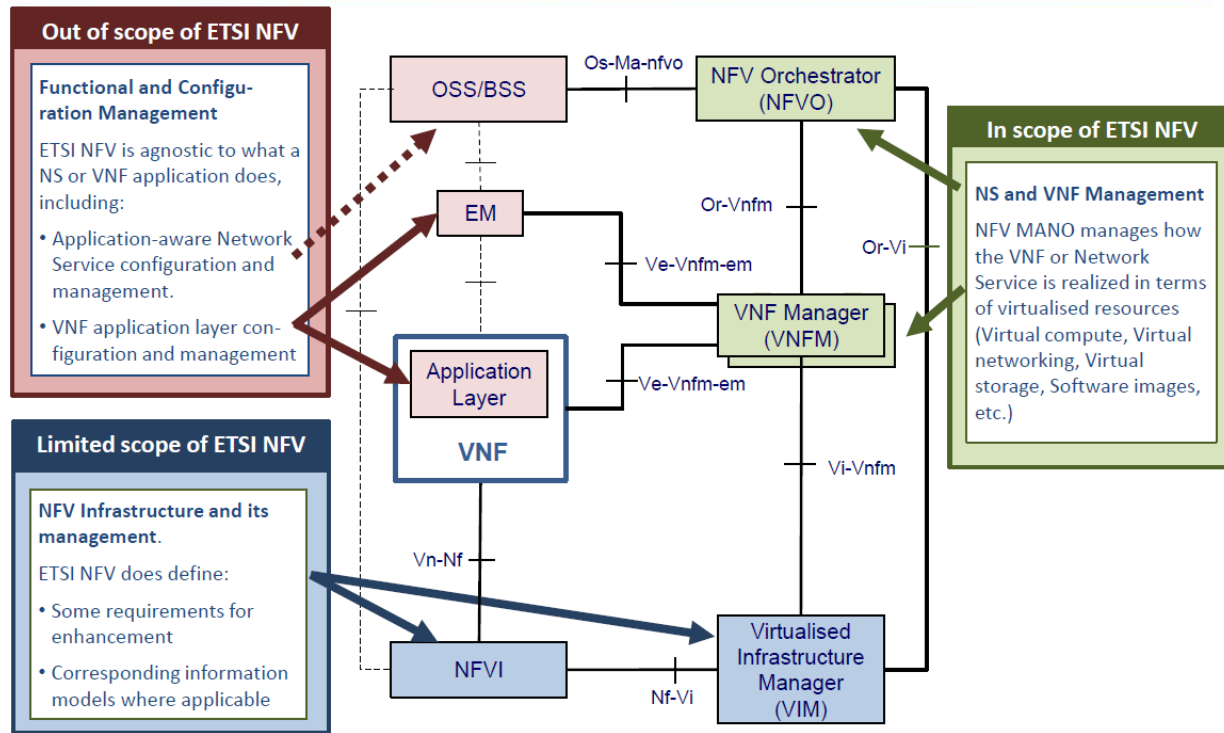


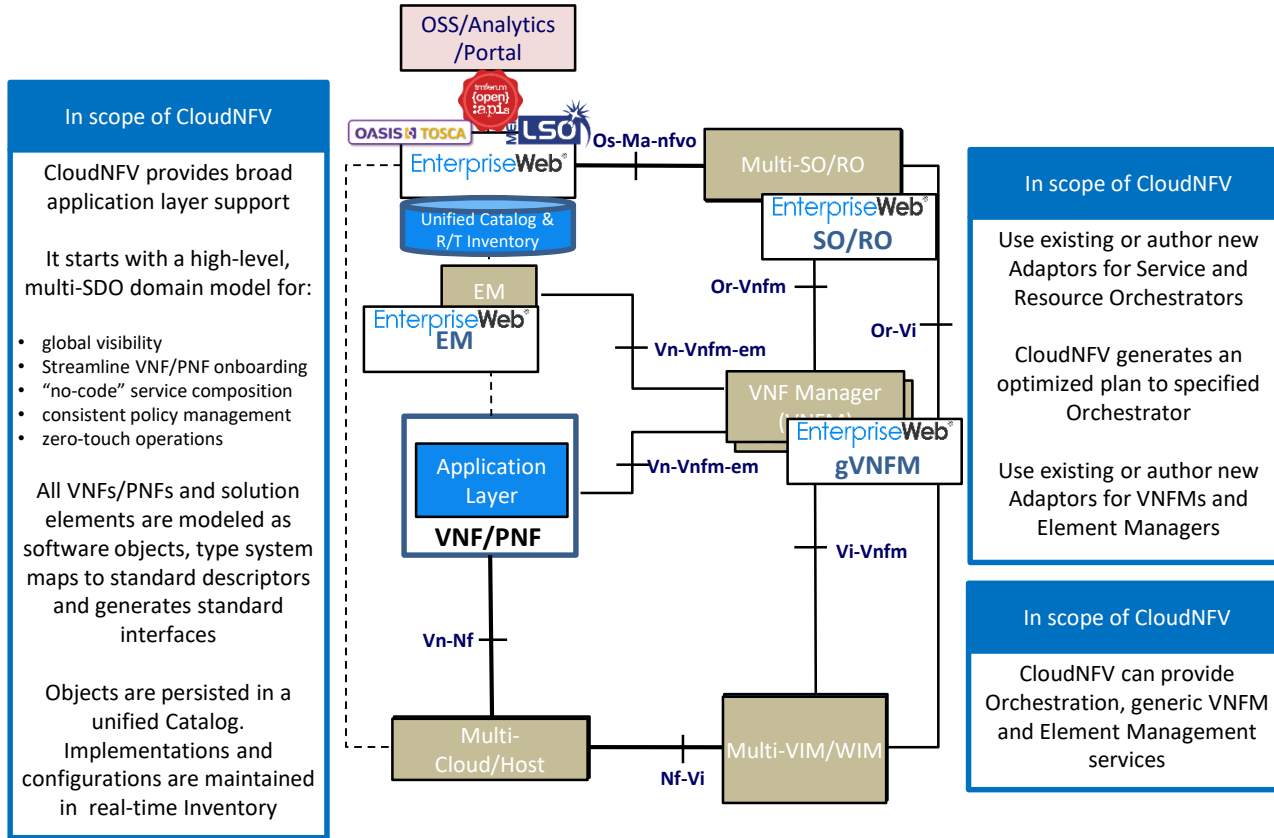
Standards-based interoperability is a good thing, but “how matters”.

If the standards simply lead to hard-coded and manually integrated implementations, then interoperability is a very limited claim as all implementations are one-off and proprietary.

Interop TEST	Metrics	Effort	Custom Code / Manual Integration	EnterpriseWeb Differentiation	EnterpriseWeb Products
VNFD onboarding	100% of VNF vendors (14) 100% of VNFs (17)	Onboarding a VNF Package, with no advanced preparation, with documentation and files provided, took <b>on average 1 hour effort by one person</b> even when factoring internal VNF-C complexity and external dependencies.	Zero. <u>No code changes</u> were required for any of the onboarded VNF Packages regardless of data formats, protocols, vendor interface, etc. <u>No manual integration</u> to platform was necessary.	<b>Vendors and operators can rapidly onboard VNF Packages, modeling properties and behaviors via EnterpriseWeb's REST API or Portal. EnterpriseWeb's type system auto-fills parameters and generates full implementations of standard-based interfaces (ETSI NFV, OASIS TOSCA, MEF LSO, TMF OpenAPIs) and Cloud concepts resulting in descriptor, executable graph object with a REST API.</b>	<b>Application Manager</b> onboards VNF Packages to <b>Catalog</b> making them available to <b>Service Manager</b> for composition
gVNFM integration	100% of VNF vendors (14) 100% of VNFs (17)	Completed as part of the VNF onboarding process, no additional effort required, <b>integration was automatic</b> simple selection from list (EnterpriseWeb gVNFM or any 3 <sup>rd</sup> party gVNFM or sVNFM previously on-boarded).	Zero. <u>No code changes</u> were required to use EnterpriseWeb gVNFM. <u>No manual integration</u> to gVNFM.	EnterpriseWeb offers a programmable gVNFM with extended support for application configuration and Entity Management (FCAPS), both of which are enablers for DevOps and Lifecycle Management automation.	<b>Application Manager</b> onboards gVNFM components to <b>Catalog</b> and exposes list of related workflow tools and standard operations from <b>Task Manager</b> product so they can be mapped to gVNFM, which are linked to VNF Packages
Multi-VNF composition NSD	Various combinations	Composing Network Services from heterogeneous multi-vendor VNF Packages took <b>on average 15-20 minutes by one person</b> .	Zero. <u>No hard-code or manual integration</u> between elements, the platform or to infrastructure making it easy to flexibly modify Service composition for changing requirements and VNF Packages.	EnterpriseWeb enables rapid declarative composition of intent-based Network Services. The Service is an executable graph object with a REST API exposing an automatically generated standards-based interface over the set of APIs enabling advanced automation with support for MEF Lifecycle Service Orchestration and TMF Open APIs.	<b>Service Manager</b> supports composition of VNF Packages (with their gVNFM) with NFVO, Clouds, VIMs (by explicit reference, policy or algorithm), which are onboarded in the <b>Resource Manager</b> product, runtime automation is supported by the <b>Task Manager</b> product
Distributed Multi-Cloud / Multi-VIM	Various combinations	Configuring a service to deploy VNF Packages on one or more target hosts (Cloud/VIM combinations) was a simple selection from list of available/compatible environments (separately modeled), <b>integration was automatic</b> .	Zero. <u>No hard-code or manual integration</u> between service and target hosts making it easy to re-configure Service for portability, disaster-recovery with no change to Service logic.	EnterpriseWeb supports Hybrid/Multi-Cloud and multi-VIM deployments. Resources are modeled as executable graph objects with a REST API exposing an automatically generated standards-based interface that supports declarative composition in services and DevOps and Lifecycle Management automation.	<b>Resource Manager</b> model Clouds, VIMs to <b>Catalog</b> making them available to <b>Service Manager</b> for composition
Multi-NFVO Federation	Various combinations	Configuring a service to deploy VNF Packages using one or more Orchestrators was a simple selection from list (EnterpriseWeb or any 3 <sup>rd</sup> party NFVO previously on-boarded) <b>integration was automatic</b> .	Zero. <u>No hard-code or manual integration</u> necessary making it easy to support Federated multi-vendor solutions.	EnterpriseWeb supports heterogeneous multi-vendor NFVO execution environments. 3 <sup>rd</sup> -party vendor components are onboarded as executable graph objects with a REST API exposing an automatically generated standards-based interface that supports declarative composition in services and DevOps and Lifecycle Management automation. It also enables advanced DevOps capabilities such as A/B testing so components can be swapped out for best-of-breed and forward migration.	<b>Resource Manager</b> onboards NFVO components to <b>Catalog</b> making them available to <b>Service Manager</b> for composition



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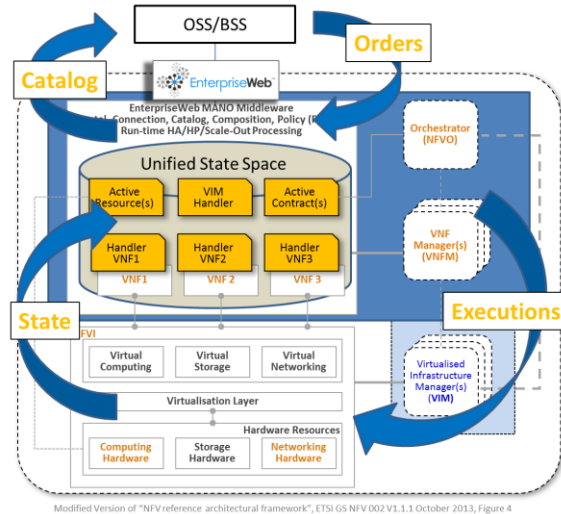
**100% Model-driven** *Graph-connected real-time domain model*

No Hard-code *Streamline Onboarding*

No Manual Integration *Rapidly Prototype New Services*

Extreme Automation *Zero-touch Operations*

**Cloud-native Architecture** *Scalable & Distributable Solution*



EnterpriseWeb ran ETSI  
NFV PoC #1 "CloudNFV"



EnterpriseWeb has led 6 award-winning  
Catalyst projects in the TM Forum



Layer 123 Network Transformation  
Award "Best NFV Interoperability"

NFV Use-Cases: vIMS, vEPC, VoLTE, C-RAN, vCPE, SD-WAN, Multi-Cloud, Multi-VIM, Multi-VNFM, Multi-Orchestrator, etc.