

- R-58421 The xVNF SHOULD be decomposed into granular re-usable VNFCs or PNF Components.
- R-82223 The xVNF MUST be decomposed if the functions have significantly different scaling characteristics (e.g., signaling versus media functions, control versus data plane functions).
- R-16496 The VNF MUST enable instantiating only the functionality that is needed for the decomposed VNF (e.g., if transcoding is not needed it should not be instantiated).
- R-02360 The VNFC or PNF MUST be designed as a standalone, executable process.
- R-34484 The VNF SHOULD create a single component VNF for VNFCs that can be used by other VNFs.
- R-23035 The VNF MUST be designed to scale horizontally (more instances of a VNF or VNFC) and not vertically (moving the existing instances to larger VMs or increasing the resources within a VM) to achieve effective utilization of cloud resources.
- R-30650 The VNF MUST utilize cloud provided infrastructure and VNFs (e.g., virtualized Local Load Balancer) as part of the VNF so that the cloud can manage and provide a consistent service resiliency and methods across all VNF's.
- R-12709 The VNFC or PNF Component SHOULD be independently deployed, configured, upgraded, scaled, monitored, and administered by ONAP.
- R-37692 The VNFC or PNF Component MUST provide API versioning to allow for independent upgrades of VNFC or PNF Component.
- R-86585 The VNFC or PNF Component SHOULD minimize the use of state within a VNFC or PNF Component to facilitate the movement of traffic from one instance to another.
- R-65134 The VNF SHOULD maintain state in a geographically redundant datastore that may, in fact, be its own VNFC.
- R-75850 The xVNF SHOULD decouple persistent data from the VNFC or PNF Component and keep it in its own datastore that can be reached by all instances of the VNFC or PNF Component requiring the data.
- R-88199 The VNF MUST utilize virtualized, scalable open source database software that can meet the performance/latency requirements of the service for all datastores.
- R-99656 The xVNF MUST NOT terminate stable sessions if a VNFC or PNF Component instance fails.
- R-84473 The VNF MUST enable DPDK in the guest OS for VNF's requiring high packets/sec performance. High packet throughput is defined as greater than 500K packets/sec.
- R-54430 The VNF MUST use the NCSP's supported library and compute flavor that supports DPDK to optimize network efficiency if using DPDK. [1]
- R-18864 The VNF MUST NOT use technologies that bypass virtualization layers (such as SR-IOV) unless approved by the NCSP (e.g., if necessary to meet functional or performance requirements).

•R-64768 The ~~x~~VNF MUST limit the size of application data packets to no larger than 9000 bytes for SDN network-based tunneling when guest data packets are transported between tunnel endpoints that support guest logical networks.

•R-74481 The ~~x~~VNF MUST NOT require the use of a dynamic routing protocol unless necessary to meet functional requirements.