QxStack
for NFVI
on Ubuntu*

QCT QxStack Network Function Virtualization Infrastructure (NFVI) on Ubuntu* Host OS

Network service providers are looking for ways to deliver services faster and more cost-effectively in the Telco business. To fulfill these customers' requirements and workloads, Quanta Cloud Technology (QCT) has engineered an Intel® Select Solution for Network Functions Virtualization Infrastructure (NFVI) on Ubuntu* Host OS, which is tuned to take advantage of Intel's latest technologies.

QCT's reference architecture is verified by Intel to meet the expected performance based on Intel's reference design for carrier-class use cases that require high reliability and telco-case capabilities. With Data Plane Development Kit (DPDK) and Intel® QuickAssist Technology (Intel® QAT) for enhancing the network performance, QCT tuned the BIOS parameters and tested the solution to ensure the performance on the QCT platform with Ubuntu* as host.

Covers All the Hardware/ Software Settings and Recommendations

QCT's reference architecture empowers network service providers to build an optimized, agile NFVI with the latest Intel technologies. This reference architecture provides guidances and recommendations on the QCT hardware configuration and software settings that help the users deploy their NFVI with less time, effort, and expense.

Validation on QCT's Hardware

QCT QuantaGrid D52BQ-2U server has been verified to be part of Intel Select Solution for NFVI on Ubuntu* Host OS. Its ultimate compute and storage density, and its flexible and scalable I/O options expansion slot hardware design are good for NFVI solutions since network service providers are looking for high computing, low latency, high throughput solutions.
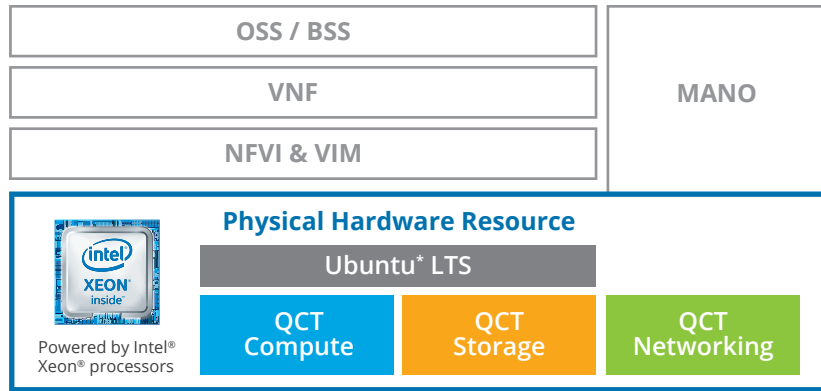
Network Performance on Openssl/ DPDK

The adoption of Intel® QAT and DPDK provides core platform technologies to deliver outstanding NFVI performance for networking, storage, cryptography and compression.

Network service providers can plan their own NFVI based on this reference architecture when they seek the computing and storage resources with add-in platform acceleration products for carrier class use cases that require high reliability and performance.

Supported by Canonical

select solution

Faster Deployment.
Optimized Configurations.

OSS / BSS	MANO
VNF	
NFVI & VIM	

Physical Hardware Resource

Ubuntu* LTS

Powered by Intel®
Xeon® processors

| QCT Compute | QCT Storage | QCT Networking |

QuantaGrid D52BQ-2U

Reference Hardware Configuration for Intel® Select Solution for NFVI, base configuration

Components	Specification	QTY
System	QuantaGrid D52BQ-2U	1
CPU	Intel® Xeon® Gold 6152 Processor, 2.1 GHz, 22 core	2
RAM	384GB (12 * 32GB 2666MHz DDR4 RDIMM)	12
SSD-NVMe	Intel® SSD Data Center Family P4500 SERIES 2TB	4
SSD-SATA	Intel® SSD DC S4600 SERIES 960GB	2
NIC Card	Dual Port 25GE Intel® Ethernet Network Adapter XXV710 SFP28+ (low-profile PCIe)	2
QAT	Intel® QuickAssist Adapter 8970	1

Learn More

QCT: go.qct.io/solutions/qct-premier-intel-select-solutions

Intel Select Solutions: intel.com/selectsolutions

About QCT

Quanta Cloud Technology (QCT) is a global datacenter solution provider. We combine the efficiency of hyperscale hardware with infrastructure software from a diversity of industry leaders to solve next-generation datacenter design and operation challenges. QCT serves cloud service providers, telecoms and enterprises running public, hybrid and private clouds.

Product lines include hyper-converged and software-defined datacenter solutions as well as servers, storage, switches, integrated racks with a diverse ecosystem of hardware component and software partners. QCT designs, manufactures, integrates and services cutting edge offerings via its own global network. The parent of QCT is Quanta Computer, Inc., a Fortune Global 500 corporation.

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QCT authorized partner

Faster Deployment. Optimized Configurations.

v1.0