



Certification from a Trusted Partner Ensures Fast Time to Value

Certification is about more than passing a few tests, checking some boxes and receiving a piece of paper. We rely on certification to ensure the fuel in our car doesn't damage the engine and that the tires maintain traction on the road. Certification is about trust.



When something is certified, we can rely on it to work in the way we expect it to. It means there are no surprises. Similarly, IT managers don't want surprises in their data centers. They expect their servers and storage to work reliably at predictable and consistent performance levels. That degree of trust in critical infrastructure can be delivered only when you know all the parts come from reputable manufacturers and are designed to operate together. Certification gives you assurance that the hardware and software will deliver the performance you need consistently so that your business can operate at its peak without interruption.

Quanta Cloud Technology (QCT) has long and deep experience, and strong relationships built over many years with major hardware and software vendors. It is ready to design, build and deploy a fully certified solution to meet your specific business needs.

Why certification matters

Assembling high-performance infrastructure for high-availability environments is challenging. The hardware and software configuration for one use case might not be the best option for another. Understanding which components are the right ones for different scenarios and which components work together optimally requires expertise and a deep understanding of every

part of the chain. This is especially critical with the evolution of the software-defined data center (SDDC).

Buying a certified solution from a reputable vendor gives you assurance that the solution you choose will work from day one and save you money in the long run. A certification service goes further than simply checking off the specifications of the hardware. A strong certification service ensures that the solution you choose meets all of your needs. It does this by ensuring every layer of the hardware and software stack is optimized to deliver fast performance at a level of reliability your business can depend on.

It takes wisdom and understanding to choose the optimal hardware and software. And after those decisions are made, it takes experience in working with systems across a wide variety of contexts to understand how to optimize those components to ensure the best possible performance and reliability.

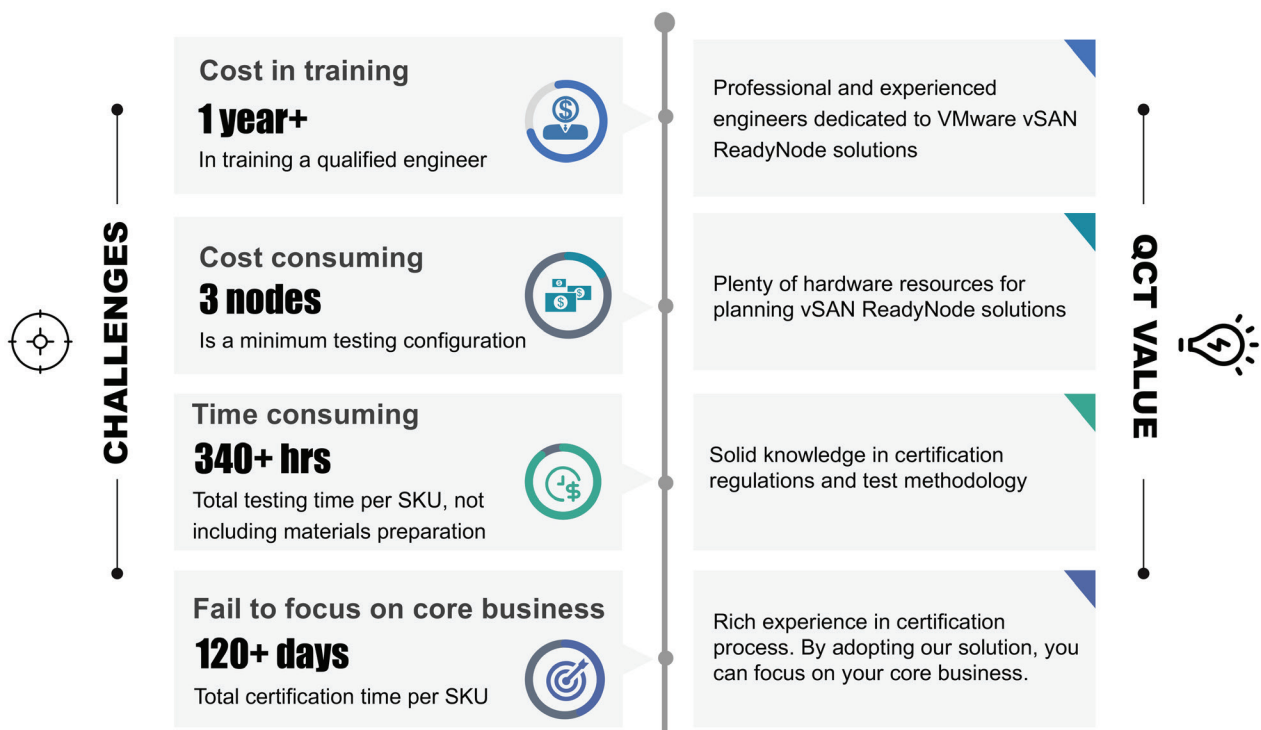
Meeting the certification challenge

A key component of any data center is having the right storage architecture and solution. VMware vSAN™ can deliver on that need, but getting the best possible performance and reliability from a VMware vSAN™ solution requires a high degree of skill and experience. The experience and expertise required to build a vSAN™ solution can take more than a year to acquire. And your team also needs to know how to run the vSAN ReadyNode™ test system, as well as troubleshoot and tune it.



Building a test configuration to prepare for a production deployment requires many resources and a significant investment of time. It can take as many as 120 days¹ to conduct full testing and certification to ensure everything is working as expected and at a high reliability level. When you add the cost of establishing three nodes for testing and the minimum of 340 hours required for testing², the overhead required to build, test and deliver a certified system can exceed the capability and budget of most ISVs.

Choosing the right partner can deliver a much faster time to value so you can get on with your core business. Assembling, operating and maintaining a data center is time consuming, costly and relies on access to appropriately skilled people (see chart below). A trusted partner will have worked with dozens of different businesses and have deep and broad experience you can leverage. It is also far more likely to have fast access to experts in each part of the puzzle.



1 Including seven days for hardware component compatibility checking, five days for VMware IOVP listing checking, 70 days for ordering and arrangement of the server and components, two days for test-bed preparation, 30 days for testing and troubleshooting, and 14 days for case management and communication with VMware.

2 The 340 hours includes test environment building, a health check and actual test time of all the testing items based on VMware's certification guidance.

QCT collaborates with ecosystem partners to deliver SDDCs.

QCT has long and deep experience in building

VMware vSAN ReadyNode™ solutions, providing a ready-to-use SDDC solution and delivering a rapid return on investment for your data center.

QCT, through its extensive experience, has validated and optimized many different combinations of vSAN ReadyNode™ between QCT's hardware platform and VMware vSAN™ profiles. These are targeted to a wide variety of use cases based on customers' demands.

For example, for enterprises that rely heavily on business-critical applications, QCT has collaborated with Intel® to launch a preconfigured and pre-validated offering that is performance optimized by using Intel® Select Solutions for VMware vSAN™.

This solution takes advantage of QCT's latest server platform, VMware's® leading virtualization software and high-performance storage using Intel® Optane™ SSDs, which significantly reduces the latency of sensitive workloads and accelerates overall deployment. This makes it a perfect choice

for high-performance applications.

Intel® Optane™ SSDs, equipped with NVMe, are up to six times faster than SAS equivalents and offer predictable performance with very little variation in read/write and latency in a wide variety of storage capacities. By adopting the Intel® Optane™ SSD DC P4800X as the cache tier in vSAN™, systems can deliver extremely high performance and ultra-low latency while running write-intensive workloads. This is because the Intel® Optane™ SSD DC P4800X combines the attributes of both memory and storage.

QCT's expertise across the entire stack means its certified solution exceeds Intel's® KPIs by more than 35% (see below).

QCT delivers an end-to-end certification service.

To help simplify the hardware component selection process, the preconfigured vSAN

Intel® Select Solution Program

	Program's KPIs	QCT's Performance
VMmark 3.1 Score	6 or more	8.24
VMmark 3.1 Tile Counts	7 Tiles or more	9 Tiles

Testing Performance Exceeds Program's KPIs

QCT Performance-Optimized SKU

- Pre-configured and pre-validated offering
- 2nd Gen Intel® Xeon® Scalable processors with Intel® Optane™ SSD

Business-Critical Application

- Designed for NVMe future-fast SSDs to suit your business-critical demands

Ensure Performance

- Subject the configurations to rigorous testing and benchmarking to verify performance at a system-wide level





ReadyNode™ is compliant with the rigorous rules of the vSphere® and vSAN™ compatibility guidelines. The certification is divided into four service levels according to VMware's program, including I/O Vendor Program (IOVP) Certification, vSAN Component Certification, vSAN ReadyNode™ Certification and vSAN ReadyNode™ lifecycle management. Since the certification service is a step-by-step process, the components need to be certified for IOVP and vSAN™ Component first. Therefore, even if some customers can conduct the vSAN ReadyNode™ test by themselves, the test may be in vain if the servers or components have not been certified yet.

With in-depth experience and engineering expertise in hardware design and manufacturing, QCT manufactures its own servers and makes some of their components. Thus, it is relatively easy for QCT to provide the four service levels, or an end-to-end solution.

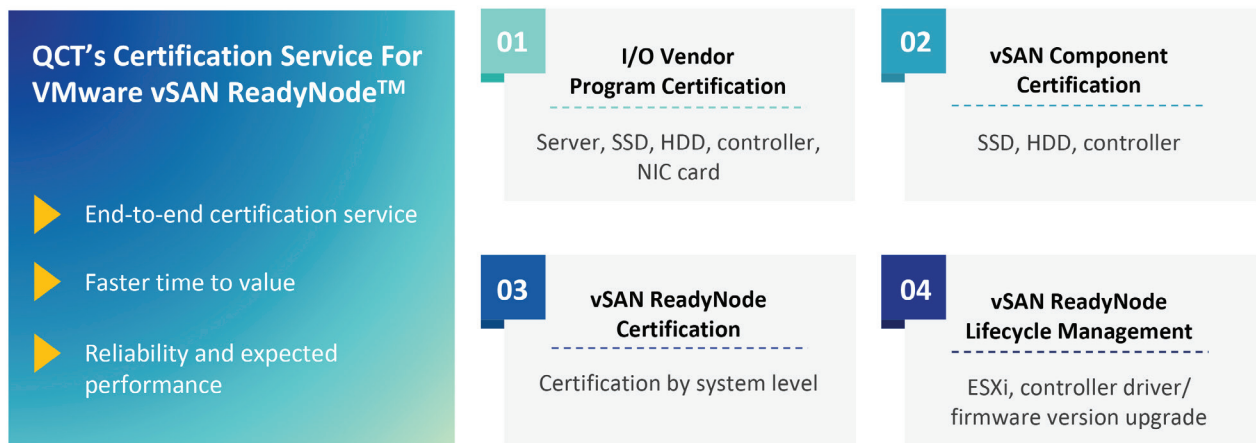
QCT certification services provide full end-to-end certification for the VMware® solution, and they are easy to order and deliver a fast time to value. You can be assured that all the parts have been specifically chosen, tested and certified to deliver the expected performance.

QCT also provides professional advice about the optimal configuration to address your specific needs. The vSAN ReadyNode™ Certification Service starts with choosing the right hardware for your use case. The hardware platform is then installed, followed by a rigorous testing process that's followed by certification, including cooperation with the VMware® certification team.

In addition to collaboration with Intel® and VMware®, QCT has strong relationships with everyone from BIOS makers to major component manufacturers. QCT has rapid access to vSAN™ engineers to ensure rapid turnaround when managing your specific needs and expectations. A deep knowledge of both hardware and software coupled with rich experience and strong relationships means QCT can advise you as to the best-fit configuration for your vSAN™ environment.

Certification is about more than checking boxes. It's about assurance and trust. Designing and deploying a certified system that will operate at the performance and reliability levels you need is about more than choosing compatible hardware from a list.

QCT's certification-as-a-service offering ensures that its VMware vSAN ReadyNode™ solutions fulfill your different business needs, providing reliable end-to-end service so you can focus on your core business (see below).



For more information on QCT's VMware vSAN ReadyNode™ solution, please visit:
<https://go.qct.io/solutions/enterprise-private-cloud/qxstack-vmware-edition-vsan-readynode/>



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