

# Dell Technologies

## Checklist

# Top 5 Reasons to Introduce SmartDPU Software Solutions

Meeting the needs of modern workloads with offloaded and accelerated network infrastructure using innovative, DPU technology jointly developed with VMware

SmartDPU Software Solutions is a turn-key HCI-based DPU solution with full testing and validation that can help organizations keep up with workload capacity and performance needs to help drive revenue growth and unparalleled efficiencies across the infrastructure.

## 1. Deploy a jointly developed turnkey DPU solution

In partnership with VMware, Dell Technologies has engineered a complete end-to-end DPU solution to help provide enterprise organizations transition to a modern and automated DPU ecosystem that will help them meet the needs of demanding workloads and applications. All components are integrated and shipped as a full solution from a recognized solution provider.

## 2. Optimize IT infrastructure performance

Our SmartDPU Software Solutions enable the offload of infrastructure functions from host or server CPUs to DPUs, thus freeing up CPU cycles to serve applications. This results in higher workload consolidation per host and lower infrastructure TCO. Additionally, the latency and throughput of the infrastructure are improved by accelerating networking infrastructure services on the DPU using built-in hardware accelerators.

## 3. Reduce operational complexity

This solution has VMware vSphere® Distributed Services Engine™ software on the DPU to help reimagine virtual infrastructure as a distributed architecture by offloading networking functions from the CPU to DPU. The DPU software also leverages existing tools and user experiences with vCenter to help preserve management experiences customers are familiar with. The VxRail HCI System Software of this solution helps to automate non-disruptive DPU upgrades, patches, node addition or retirement with intelligent lifecycle management and native integration with vCenter.

## 4. Rely on a trusted jointly developed HCI solution

The VxRail platform hosting this initial DPU offering is the only jointly engineered Hyper-Converged Infrastructure (HCI) solution with VMware, for VMware, to enhance VMware environments. VxRail powered by Dell PowerEdge server platforms and VxRail HCI System Software, features next generation technology to future proof infrastructures and enable deep integration across the VMware ecosystem.

## 5. Gain confidence in deployment and operations

The entire SmartDPU Software Solutions offering has been qualified by Dell Technologies allowing customers to deploy an end-to-end validated solution and is backed by a comprehensive set of hardware and software deployment and support options covering the entire lifecycle of the enterprise IT investment. Dell Technologies also delivers single vendor support, eliminating the usual headaches encountered when dealing a multi-vendor solution.

Learn More about the Dell Technologies SmartDPU Software Solutions at <https://www.dell.com/en-us/dt/networking/smartdpu.htm>

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