

## Microsoft Azure Stack HCI 2-Node Solution with Intel SSD Technologies

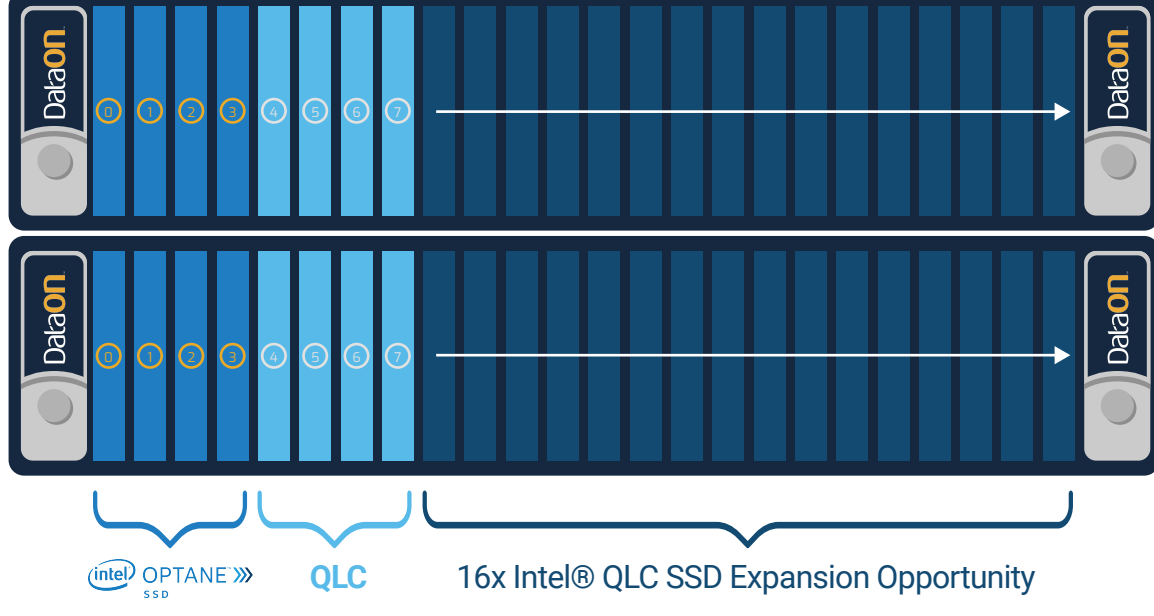


### SOLUTION

Two 2U Nodes

Four Intel® Optane™ P4800X SSDs

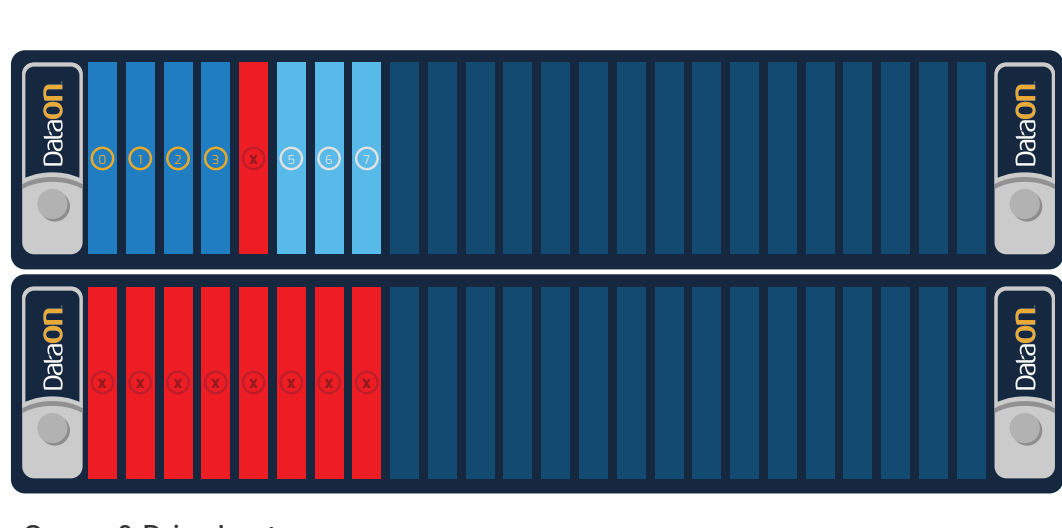
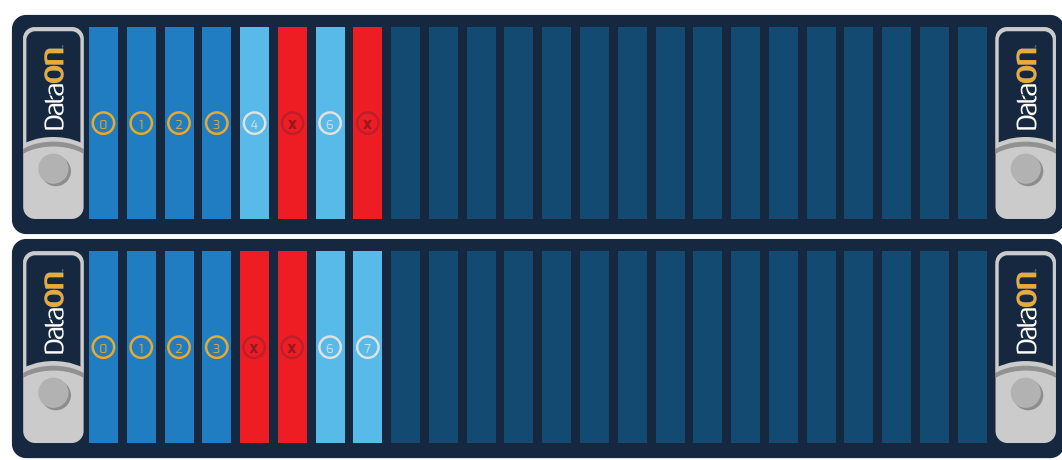
Four Intel® D3-P4326 SSDs



### Let's look at a DataON HCI-224 two-node cluster

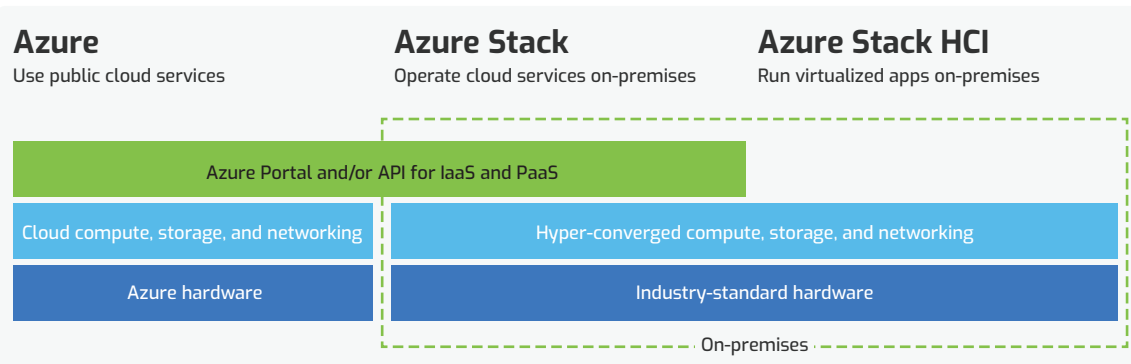
This one features a unique mix of storage. Intel® Optane™ SSD DC P4800X in the front end Intel® SSD D5-P4326 15.36TB QLC 3D NAND to create a system that optimizes capacity, performance and cost.

### Two-node cluster drive failure and server failure



DataON's two-node solution supports having both a drive failure and server failure at the same time.

### TECH STACK

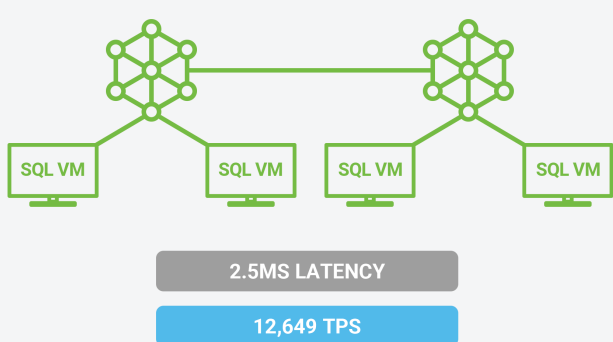


### Azure Stack HCI

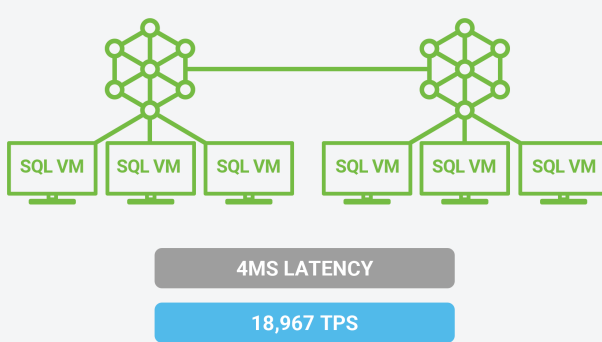
Microsoft brought their existing HCI technology into the Azure Stack family so their customers can run virtualized applications on-premises with direct access to Azure management services such as backup and disaster recovery.

### Efficiently scales for edge applications

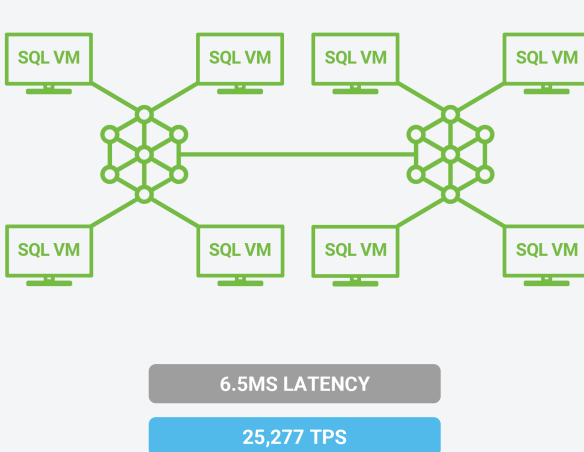
2 NODES | 2 VM'S PER NODE | 4 VM'S TOTAL



2 NODES | 3 VM'S PER NODE | 6 VM'S TOTAL



2 NODES | 4 VM'S PER NODE | 8 VM'S TOTAL



Throughout these tests, we clearly see the benefit of having the Intel® Optane™ SSDs in this mix, they're taking the brunt of the writes, freeing up the Intel® SSDs for responsive reads as the capacity tier.

Even as we doubled the workload to eight SQL Server VMs hitting this HCI cluster, latency moved up only a little, showing this configuration to be well-suited for workloads that may burst from time to time.

### CONCLUSION

For this project, we ran a series of SQL tests on the system to illustrate the performance workloads that are commonly found in edge and SMB use cases. Our goal was to understand how effectively Microsoft Azure Stack HCI in this DataON cluster was able to leverage hardware to bring about the desired results. Specifically, this means providing a solution that offers a rare combination of performance and value.

Overall, the DataON HCI-224 two-node HCI cluster with Intel® Optane™ SSDs and Intel D5-P4326 QLC SSDs was simple to deploy, easy to use, and powerful enough for a wide range of workloads. Its price point also makes it available to a wide range of users. On top of that, this solution has been validated with Azure Stack HCI, certified for Windows Server 2019, and validated as an Intel Select Solution.

DataON. This report is sponsored by DataON. All views and opinions expressed in this report are based on our unbiased view of the product(s) under consideration.