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## **CHELSIO TO DEMONSTRATE NEXT-GENERATION STORAGE REPLICATION FOR HIGH-PERFORMANCE BUSINESS CONTINUITY AT MICROSOFT IGNITE 2018**

### **Industry's First Demonstration of Windows Server 2019 Storage Replica using 100 Gigabit iWARP RDMA**

**SUNNYVALE, Calif. – September 26, 2018** – Chelsio Communications, Inc., a leading provider of high performance (1Gb/10Gb/25Gb/40Gb/50Gb/100Gb) Ethernet Unified Wire adapters and ASICs for storage networking, virtualized enterprise datacenters, cloud service installations, and cluster computing environments, today announced the showcasing of its latest T6 iWARP RDMA adapters with the Windows Server 2019 Storage Replica across local and long-haul connections. The results shown at Microsoft Ignite 2018 in Orlando, demonstrate Storage Replica (SR) capability in Windows Server 2019 Standard and Datacenter Editions operating at cost-effective 100Gbps using SMB3.1.1 over Chelsio's T62100-CR RDMA enabled NICs, with consistently high performance levels. The demonstration confirms iWARP's ability to sustain SR's unique load pattern, and thanks to its TCP/IP underpinnings, natively operate beyond a cluster environment to extend the RDMA transport over long distance.

High-availability and disaster protection are critical requirements for business continuity. Storage Replica feature now available in Standard as well as Datacenter Editions with Windows Server 2019 offers local and remote replication for redundancy in the face of infrastructure failure and catastrophic events. Windows Server 2019 Storage Replica includes major performance improvements to its log system, leading to far better replication throughput and latency for block-level replication on all-flash storage arrays and clusters.



SR provides two modes of operation: synchronous replication enables mirroring of data with zero data loss at the file system level, while asynchronous replication allows local completion of I/O operations. Storage Replica over iWARP RDMA combines high performance with the high efficiency provided by the zero copy and CPU bypass operation of the iWARP RDMA transport, without requiring any metro extension equipment, unlike other RDMA transports. The Microsoft Ignite presentation shows SR operating in synchronous mode over a 50Km fiber loop, connecting two storage servers. Long distance replication is shown to provide near local access performance levels, with negligible impact on I/O rates and near zero additional latency. In addition, the iWARP RDMA transport provides remarkably stable and consistent operation.

“iWARP is the perfect cost-effective, high-performance, easily managed solution that enables today’s datacenters to non-disruptively deploy RDMA enabled Ethernet networks, with management under a single unified network infrastructure,” said Kianoosh Naghshineh, CEO, Chelsio Communications. “Using the scalability and performance built into Windows Server 2019 Storage Replica long-haul business continuity capability and end-to-end Ethernet RDMA networking solution, datacenters can perform critical services such as disaster recovery at extended distances faster and more efficiently.”

Ned Pyle, Principal Program Manager, Windows Server and Storage, Microsoft said, “This joint demonstration highlights how Windows Server 2019 Storage Replica, combined with Chelsio’s T6 Unified Wire with end-to-end 100GbE iWARP support, helps enable user availability, expansion and utilization of remote storage infrastructures.”

As a long-standing partner of Microsoft, Chelsio invests heavily in joint engineering resources and expertise to test and validate upcoming versions of Windows software on Chelsio networking infrastructure. Continuing this long tradition of cooperative engineering, Chelsio is committed to delivering broad high-performance iWARP networking adapter support for Windows Server 2019 as well as for Windows 10 Enterprise environments.



## **Additional Resources**

[Secure Data Replication at 100GbE](#) Technical Brief

### **About Chelsio iWARP**

Chelsio T6 iWARP adapters enable building very efficient, high performance, Microsoft Cloud deployments very quickly. iWARP works with any legacy Ethernet switch, thereby enabling incremental Windows Server 2019 installations without requiring a concurrent forklift upgrade of the switch infrastructure, or the entire datacenter. This ability to work with any non-DCBX switch, allows use of the most cost effective new or existing switch infrastructure with the least amount of support, while enabling an immediate plug-and-play deployment. In addition, Microsoft's support of iWARP protocol since Windows Server 2012-R2 release, has allowed for years of testing for a very robust, tested, deployment with iWARP.

### **About Chelsio Communications**

Chelsio is a recognized leader in high performance (1Gb/10Gb/25Gb/40Gb/50Gb/100Gb) Ethernet adapters for networking and storage within virtualized enterprise datacenters, public and private hyperscale clouds, and cluster computing environments. With a clear emphasis on performance and delivering the only robust offload solution, as opposed to simple speeds and feeds, Chelsio has set itself apart from the competition. The Chelsio Unified Wire fully offloads all protocol traffic, providing no-compromise performance with high packet processing capacity, sub-microsecond hardware latency and high bandwidth. Visit the company at [www.chelsio.com](http://www.chelsio.com), and follow the company on [Twitter](#) and [Facebook](#).

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