SOLUTION BRIEF



Simplifying Access to Software-Defined Storage (SDS) Solutions and Private Cloud

Intel[®] Server Products for Cloud – Virtual SAN* (VSAN) Ready Node Software-Defined Storage (SDS), Software-Defined Infrastructure (SDI), Private Cloud



Intel[®] Server Products for Cloud

- *Certified Systems* save time and money, freeing up resources to focus on value-add and competitive differentiation
- *SDI Market Access* with systems including 3rd party software certifications
- Unbranded systems allow resellers to customize and brand to meet end-user requirements
- *Intel Quality & Reliability* with world-class integration, validation, certification, and support
- Standard Intel 3-year warranty ensures customer satisfaction

Accelerating the path to private cloud with SDS and VMware* VSAN Ready Nodes from Intel

Research shows that 80% of workloads will run on a cloud architecture by 2024.¹ To successfully navigate the transition to private cloud, customers need a software-defined infrastructure (SDI) that is automated, resilient, and programmatically extensible. Modernizing storage resources is an essential element to SDI, driving up customer demand for SDS solutions.

To increase reseller access to the SDI market and enable them to help customers modernize storage resources, Intel is delivering a new server product optimized for SDS. The Intel® Server Products for Cloud – VSAN Ready Nodes are fully-validated, pre-configured server systems that include VMware certifications for VSAN. With these VSAN Ready Nodes from Intel, resellers have access to the software-defined storage market, making it easier to deliver SDS solutions to customers.

Cost-Effective, Scalable Storage with Intel and VMware VSAN

Traditional storage is fixed, siloed and hard to scale, and addressing these

challenges remains one of the key barriers customers face as they move to a cloud-based infrastructure. VMware* VSAN provides one path to SDS with the simplified storage provisioning, granular scalability, advanced management, and outstanding performance required for enterprise-class SDS solutions. To help accelerate storage modernization, Intel is providing VSAN certifications as part of its VSAN Ready Node to give resellers better access to the SDS market and enable them to deliver innovative storage solutions to their customers.

Reduced Complexity, Improved ROI & Faster Time to Market

Designing, testing and validating SDS solutions is a costly and resourceintensive process. By starting with a higher-level of integration and certification, partners can reduce costs and speed time to market. This approach gives partners more flexibility and choice about where to invest R&D spend to ensure they remain competitive and drive differentiation in the market. There is also increased acquisition value to the partner, since they source a validated bundle of products with a single order code, rather than acquiring each component individually.

Solutions Targeted at Individual Customer Needs

Intel® Server Products for Cloud – VSAN Ready Nodes are available in multiple All-Flash (AF) or Hybrid (HY) system configurations, each designed for specific workloads and use cases. This enables partners to address a wide array of customer needs. By taking advantage of Intel's latest technologies and worldclass engineering and validation expertise, partners can build innovative solutions faster with a lower total cost-of-ownership.

Customer Use Cases

- Business-Critical Applications
- Virtual Desktop Infrastructure
- Disaster Recovery
- Test and Dev Scenarios
- Enterprise Production Workloads



vmware[®]

Intel Built for Quality, Reliability and Value

Built for Maximum Performance

VSAN Ready Nodes from Intel are powered by the latest Intel technology, and include Intel® Server Boards, Chassis, Intel® Xeon® processors, Intel® Solid State Drives (SSDs), and third-party memory in configurations optimized and pre-certified for VMware VSAN.

Available in both All-Flash and Hybrid configurations, these server systems are optimized for outstanding storage performance. The Intel® Xeon processor E5 v4 product family accelerates virtualized storage with features such as Intel® AVX 2.0 and Intel® Virtualization Technology. Intel SSDs provide high throughput and low latency, which maximizes power while reducing cost and space requirements. All-Flash configurations (AF-8 and AF-6) deploy Intel's high-endurance NVMe SSDs for the caching tier, delivering excellent performance, high IOPS and low latency.

Smart Boards Ensure System Stability and Increased Uptime

Intel® Server Boards have more than 100 sensors built in that monitor all critical functions and use management capabilities to automatically flag problems before they impact business operations. Event logs and lightguided diagnostics also assist in rapid identification and issue remediation.

Verify Authenticity with Intel® Transparent Supply Chain

To address security concerns and guard against counterfeiting and malware, VSAN Ready Nodes from Intel feature the Intel Transparent Supply Chain. This board feature enables the ability to verify the authenticity of board components and firmware through digitally signed statements of conformance and firmware load verification.

Enhanced Benefits

To further help partners succeed, Intel® Technology Providers will have the opportunity to qualify for the Intel® **Technology Provider Cloud Specialist** designation. Cloud Specialists have access to exclusive resources specifically designed to help in the planning, implementation and delivery of cloud-optimized solutions with strong performance and rapid efficiency. Specialist benefits extend to the VSAN Ready Node from Intel, and will include special access to Intel experts and engineering resources to assist Cloud Specialists as they identify exact customer requirements. Other benefits include access to valuable solution guides, technical support, and other tools to stay ahead of the competition and build customer value.

Intel Warranty Delivers Value and Confidence

VSAN Ready Nodes from Intel come with a standard three-year warranty that includes the option to extend coverage to five years. Warranties come with Intel's 24/7 technical support and commitment to replace or refund any product that fails. Additionally, since all components are purchased in a single SKU, resellers have a single source for all support needs.

Engage with Intel Today

Intel continuously delivers leadingedge technologies to help resellers innovate and differentiate themselves in the market. This is true with Intel Server Products for Cloud – VSAN Ready Nodes, designed to help partners realize an easier path to reliable SDI solutions.

Contact your Intel sales representative or Intel authorized distributor for any inquiries.

More information can be found at http://www.intelserveredge.com/intelcloud-block-vsan/

| Hybrid Configurations (Hard drives for capacity, SSDs for cache) | | | |
|--|---------------------------------|---|--|
| Order Codes | VMware* VSAN Profile | Intel [®] Server System | Features⁴ |
| VRN2224THY2 ² | Hybrid 2 (HY-2) ² | 2U 4 node Intel® Server Chassis H2224XXKR2 and Intel® Server Board S2600TPR | - Up to 20 VMs and 4K IOPs per node - 2 TB raw storage capacity - Intel® Xeon® E5-2620 v4 - 32 GB memory |
| VRN2224THY42 ² | Hybrid 4 (HY-4) ² | 2U 4 node Intel® Server Chassis H2224XXKR2 and Intel® Server Board S2600TPR | - Up to 30 VMs and 10K IOPs per node - 4 TB raw storage capacity - Intel® Xeon® E5-2620 v4 - 128 GB memory |
| VRN2224THY6 ² | Hybrid 6 (HY-6) ² | 2U 4 node Intel® Server Chassis H2224XXKR2 and Intel® Server Board S2600TPR | Up to 50 VMs and 20K IOPS per node 8 TB raw storage capacity Intel[®] Xeon[®] E5-2680 v4 256 GB memory |
| VRN2208WHY8 ² | Hybrid 8 (HY-8) ² | 2U 1 node Intel® Server System R2208WTTYSR with Intel® Server Board S2600WTTR | Up to 100 VMs and 40K IOPS per node 12 TB raw storage capacity per node Intel[®] Xeon[®] E5-2680 v4 384 GB memory |
| All-Flash Configurations (SATA SSDs for capacity, NVMe SSDs for cache) | | | |
| Order Codes | VMware* VSAN Profile | Intel® Server System | Features ⁴ |
| VRN2208WAF6 ³ | All-Flash 6 (AF-6) ³ | 2U 1 node Intel® Server System R2208WTTYSR with Intel® Server Board S2600WTTR | - Up to 60 VMs and 50K IOPs per node - 8 TB raw storage capacity - Intel® Xeon® E5-2680 v4 - 256 GB memory |
| VRN2208WAF8 ³ | All-Flash 8 (AF-8) ³ | 2U 1 node Intel® Server System R2208WTTYSR with Intel® Server Board S2600WTTR | - Up to 120 VMs and 80K IOPs per node - 12 TB raw storage capacity - Intel® Xeon® E5-2680 v4 |

1 Source: Intel and Bain analysis

2 3rd party SW stack and HDD NOT included

3 3rd party SW stack NOT included

4 Results based on VMware internal measurements

Intel technologies' features and benefits depend on system configuration and may require enabled hardware, software or service activation. Performance varies depending on system configuration. **No computer system can be absolutely secure**. Check with your system manufacturer or retailer or learn more at **intel.com**.

- 384 GB memory

Software and workloads used in performance tests may have been optimized for performance only on Intel[®] microprocessors. Performance tests, such as SYSmark and MobileMark, are measured using specific computer systems, components, software, operations and functions. Any change to any of those factors may cause the results to vary. You should consult other information and performance tests to assist you in fully evaluating your contemplated purchases, including the performance of that product when combined with other products. For more complete information visit http://www.intel.com/performance.



Intel, the Intel® logo, Xeon and Xeon Phi are trademarks of Intel® Corporation in the U.S. and/or other countries. *Other names and brands may be claimed as the property of others. © 2016 Intel® Corporation.