Sun™ Cluster 2.2 Product

Just the Facts

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Positioning

Introduction

The Sun™ Cluster product is a loose coupling of two or more servers (nodes). Sun Cluster provides a highly available, scalable, flexible, and manageable solution for enterprise–wide computing.

This product is targeted at customers who run business–critical applications, which in today's environment is every enterprise customer. These customers cannot afford to lose their business–critical computing resources for extended periods of time due to hardware or software failures, or even due to routine maintenance such as application upgrades. To these customers, extended downtime is unacceptable and expensive in terms of lost revenue and productivity. These customers are willing to make investments in solutions that minimize the impact of downtime. Sun Cluster is designed specifically to address the high–availability needs of these customers.

Sun's approach to clustering for high availability is simple, yet elegant. Sun leverages its core competencies in servers, storage, system software, and support to provide a cost–effective, flexible solution. The Sun Cluster solution uses Sun's standard server and storage products, allowing customers to integrate existing Sun products and some earlier generation Sun products into a cluster. This solution is very flexible, allowing a wide variety of Sun servers and storage products to be clustered.

Sun Cluster 2.2 (including Sun Cluster 2.2 updates) provides a comprehensive solution for customers with a need for high availability and scalability of critical data and services. Sun Cluster 2.2 is the next phase of Sun's Full Moon clustering roadmap, which delivers an easy–to–use, continuously available, multiplatform clustering solution that is completely integrated with the Solaris™ Operating Environment.

Sun Cluster 2.2 merges the capabilities of Sun Cluster 2.1 and HA 1.3 in a single offering. It is an integrated parallel database and high–availability solution including all of the Sun Cluster 2.1 patches to date.

Sun's investment in this technology is huge. There are approximately 200 development engineers dedicated to providing the "best of breed" clustering products for Sun's customers and to introduce new features aggressively.

Sun Cluster is one of the most highly available, scalable, and flexible clustering solutions in the industry today. With Sun's Full Moon clustering technology roadmap, Sun has set a course toward making Sun clusters the most easily manageable in the industry. When fully implemented, Sun's Full Moon clustering technology will make it easier to manage a cluster of several servers than many individual servers. This manageability benefit, together with the high–availability and scalability benefits, will make clustering a standard requirement for enterprise–wide computing. Sun is uniquely positioned to deliver on the Full Moon technology roadmap—Sun has articulated a vision for clustering, laid out a roadmap to get there, and committed the resources to make it a reality.

Product Family Placement

Sun Cluster is an integrated solution built on the solid foundation provided by Sun's hardware and software products and relationships with Sun's allies.

- **Hardware**

– Sun Enterprise™ servers	– Outstanding servers in terms of price/performance, scalability, and RAS features (reliability, availability, and serviceability)
– Sun storage products	– A comprehensive line of robust storage products of various capacities, supporting a variety of interfaces from fast/wide to Ultra™ differential SCSI to Fibre Channel arbitrated loop
– Cluster interconnect	– Industry–standard FastEthernet (100 Mb/sec.), Gigabit Ethernet (up to 20 MB/sec.), and scalable coherent interconnect (up to 50 MB/sec.) for private cluster communication

- **Software**

– Solaris 2.6, 7, and 8 Operating Environment	– One of the most robust UNIX® operating environments in the industry
– Sun Cluster software	– Clustering software technology for cluster monitoring and fault management
– Sun Cluster API	– Published API for making commercial and custom applications highly available on Sun clusters
– GUI–based cluster–management software	– To monitor the status of cluster membership of a node, logical hosts, HA and parallel data services, and interconnects
– VERITAS Volume Manager (VxVM) software, Solstice DiskSuite™ software, VxVM Cluster Functionality (formerly Cluster Volume Manager) (for OPS)	– Choice of volume managers and file systems
– High–availability agents	– High availability agents for popular applications are developed and maintained by Sun, while others are available from third parties, such as DB2 from IBM – These agents significantly reduce the time and cost to deploy high–availability applications on Sun clusters

- **Strategic alliances**

– Certified cluster applications	– Sun collaborates with leading ISVs such as Oracle, Informix, Sybase, IBM, BEA, SAP, Lotus, Tivoli, and Netscape to certify their applications on Sun clusters – Many ISVs use Sun servers as their development platform, resulting in time–to–market advantages for Sun and competitive benefits for customers