DATASHEET

SUNPLEX™ SCALABLE AGENTS FOR SAP SOLUTIONS

INCREASING SERVICE LEVELS, WHILE REDUCING COSTS AND MINIMIZING RISKS

KEY HIGHLIGHTS

- With the Sun Cluster 3.0 Scalable Agent for SAP, Sun Cluster software can be used with the leading SAP solutions
- The Sun Cluster 3.0 Scalable Agent for SAP solutions ensures high availability for an entire SAP deployment.
- SunPlex-SAP is the only highly available environment to monitor and automatically fail over all components of the SAP infrastructure, from the SAP application servers to the central instance, and the database.
- The SunPlex environment is the only HA solution in the industry that manages the availability of the SAP *live*Cache database.
- Sun Cluster 3.0 software supports up to eight nodes in a cluster, allowing multiple SAP solutions to be deployed in one cluster.
- All tiers of the SAP stack can be consolidated within the SunPlex environment, allowing for a single point of management for all the tiers.
- The SunPlex environment simplifies installation and eases administration of the SAP deployment leading to lower operation costs.

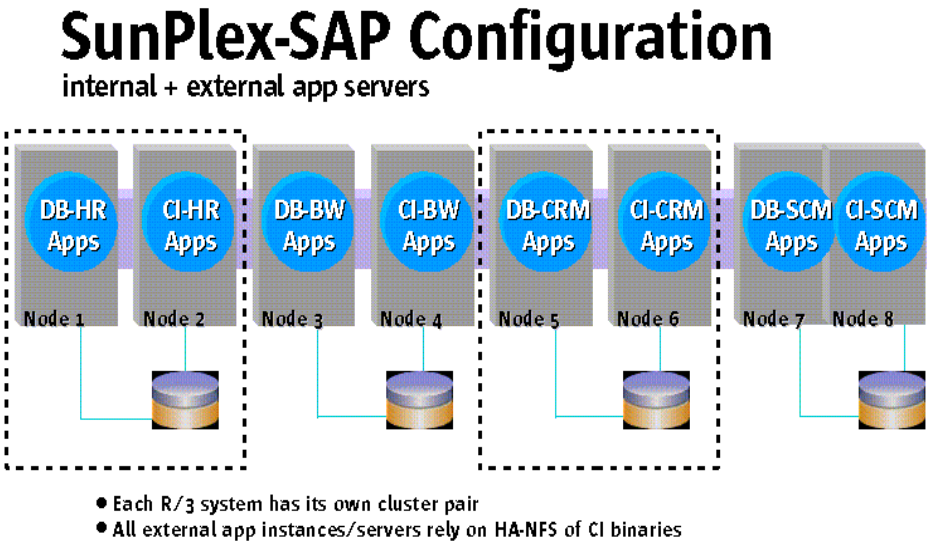
Sun™ Cluster 3.0, Sun's advanced clustering technology and key component of a SunPlex™ system, supports and complements mySAP.com e-business platforms by delivering improved service levels of SAP applications, while reducing associated costs, easing management and improving the resource utilization of the system. With the Sun Cluster 3.0 Scalable Agent for SAP, Sun Cluster software can be used with the leading SAP solutions, including mySAP Supply Chain Management, mySAP Customer Relationship Management, mySAP Product Lifecycle Management, mySAP Business Intelligence, and other core SAP solutions.

SUNPLEX SYSTEMS

SunPlex systems are designed to manage application services for tightly coupled environments, and are built on powerful Sun products such as Sun Cluster 3.0 software, the Solaris™ 8 Operating Environment, Sun Fire™ servers, StorEdge™ storage arrays, network connectivity products, and Sun services. As a key component to SunPlex systems, Sun Cluster is designed to deliver integrated availability, scalability, manageability, and ease of use.

SUN CLUSTER 3.0 AGENTS FOR SAP SOLUTIONS

The Sun Cluster 3.0 Scalable Agent for SAP solutions ensures even higher availability for the entire SAP deployment. If a node within the cluster goes down, others automatically take over the workload, reducing downtime and ensuring consistent service levels of critical applications. This provides the best end-to-end availability for SAP solutions because it is the only HA environment to monitor and fail over all components of the SAP infrastructure, from the SAP application servers to the central instance, and the database. The SunPlex environment also offers a failover agent for SAP *live*Cache database, a memory-based technology that offers performance benefits to SAP applications. These advanced features create an easily managed application environment for SAP deployments that provide more than just highly available services. The Scalable Agent for SAP provides for consistent application service levels.



Unlike competing products, Sun Cluster 3.0 software is tightly integrated with the Solaris 8 Operating Environment providing continuous network, data and service availability of SAP solutions. The combination of these products delivers increased scalability and security for Sun Cluster services including Global Devices, Global File Service, Global Network Service and Scalable Services and offers seamless integration with the Sun Management Center software for overall ease of management.

Manageability is further enhanced with SunPlex Resource Group Manager (RGM) feature which provides a central point of control for cluster services. The RGM software simplifies administration by managing each system's resources within a cluster context. As a result, all cluster resources are efficiently managed and administered as if they were on a single system.

The Sun Cluster 3.0 Scalable Agent for SAP has a significant advantage over competitor's products because the agent automatically recovers failed SAP application instances in addition to the central instance. The Database is automatically recovered with the help of the Sun Cluster 3.0 HA agent for the Database. In the event of an application instance failure, SAP log-on groups allow clients to connect to a surviving application instance to continue service. However, this surviving instance could quickly become overloaded resulting in degradation in service levels until the failed instance is recovered manually. By using the Sun Cluster 3.0 Scalable Agent for SAP, the failed instance is *automatically restarted* to allow for redistribution of client load among members of the log-on group. In this way, SAP deployments in the SunPlex environment are assured of consistent service levels.

The key features of the SunPlex environment for SAP solutions include:

- The Sun Cluster 3.0 Scalable Agent for SAP solutions is database independent, allowing customers to choose any DBMS supported by SAP solutions.
- Users can run as many SAP solutions or application instances as the hardware will support, enhancing flexibility when deploying the mySAP.com infrastructure.
- The Sun Cluster 3.0 Scalable Agent for SAP solutions can start, stop and monitor multiple SAP solutions and SAP application instances, allowing an SAP application to be automatically restarted in the case of a failure.
- The Sun Cluster 3.0 Scalable Agent for SAP consists of two methods (C-programs) - a failover method which starts, stops, and monitors the SAP Central Instance, and a scalable method which uses just one set of SAP scripts to start, stop and monitor *multple* SAP application instances. Because there is only one set of SAP scripts to maintain and update (instead of a unique set for every individual application instance), the scalable agent eases operation of the SunPlex-SAP deployment.
- The Sun Cluster 3.0 failover agent for SAP *live*Cache monitors the health of the *live*Cache database. In the event of a failure, the database is failed over to a backup node that has the SAP x-server process alive as a warm standby. This ensures the fastest possible recovery time for the SAP *live*Cache database.
- The Sun Cluster 3.0 Global File Service (GFS) offers a single management view of the SAP solution and/or DBMS to ease administration. In addition, the Global File Service simplifies installation of the SAP application instances because SAP scripts need to be installed just once on the GFS, to be applied on all nodes of the cluster.
- Sun Cluster 3.0 software supports up to eight nodes in a cluster, allowing multiple SAP solutions to be deployed in one cluster.
- Sun Cluster 3.0 software supports SAP R/3 Release 4.0, 4.5 and 4.6 and can be used with SAP solutions including mySAP Supply Chain Management, mySAP Customer Relationship Management, mySAP Product Lifecycle Management, mySAP Business Intelligence and core SAP solutions.

THE BENEFITS OF SUNPLEX SYSTEMS IN SAP DEPLOYMENTS

Consistent Service Levels

The Sun Cluster 3.0 environment enhances availability of all key components of a SAP deployment by optimizing recovery of failed components to ensure consistent service levels. In addition, it manages the availability of each component independently of the others enabling the failure to be isolated and managed within the component without impacting the uptime of the whole site:

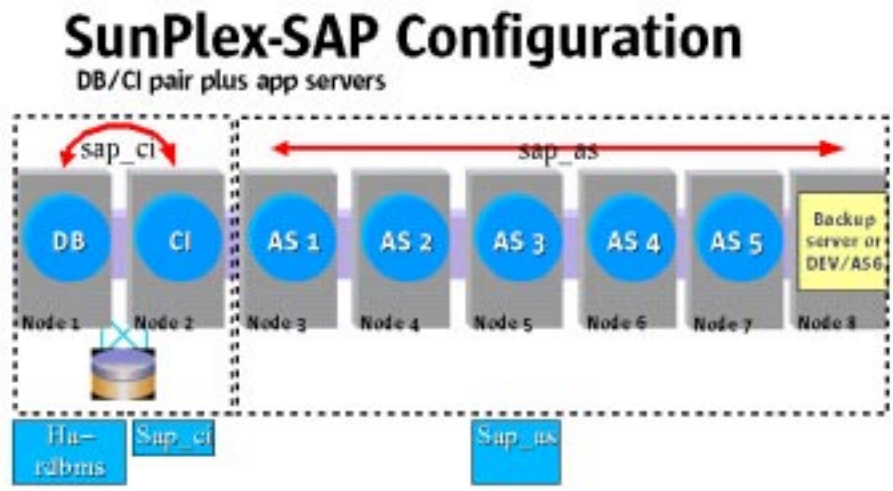
- Highly Available Database: The Sun Cluster 3.0 HA agent for the database allows for automatic failover of the database to minimize downtime. The SAP central instance automatically reconnects to the database once the database is restarted.
- Highly Available Central Instance: The Scalable Agent for SAP provides for failover of the central instance, thus ensuring the availability of enqueue and message services. In the event of a failure, the central instance can be restarted locally a selectable number of times to optimize recovery time, and only then failed over to a different cluster node.
- Consistent Service Levels: The Scalable Agent for SAP manages application instances by automatically recovering a failed instance to ensure consistent service levels of the SAP application. With the use of SAP log-on groups, and the Scalable Agent for SAP, clients experience consistent service levels.
- Independent Failure Management: Failures in the central instance, application instances and the database are managed independently of each other such that a failure in one does not impact the other.
- Highly Available NFS: The Sun Cluster 3.0 HA-NFS agent allows for automatic failover of the NFS server to minimize downtime.
- Private Interconnect: The SunPlex environment ensures the availability of the private interconnect by providing for failover of one path to another. Application level traffic can be carried over this high bandwidth, low latency private interconnect to allow for fast messaging.
- Efficient Resource Utilization: All tiers of the SAP stack (database, central instance, application instances) can be consolidated within the SunPlex environment, improving resource utilization by offering pools of resources within which a failed component can be recovered. Sun Cluster 3.0 works in conjunction with Solaris Resource Manager allowing for guaranteed resources to the SAP system which has the higher priority to the customer's business process while optimizing the use of server resources
- Reduced Risk: Improved availability and ease of operations which reduce the probability of user errors.

Ease of Operations

- Easy Installations: Sun Cluster 3.0 includes the SunPlex Manager, an easy to use tool that allows for quick and easy installation of the Sun Cluster software, Volume Manager, and some applications.

- Flexible Configurations: Application instances can be managed within the SunPlex environment, or can be run outside the cluster, dependent on HA-NFS to ensure availability of services.
- No Idle Backup Resources: The Scalable Agent for SAP can manage multiple SAP

SunPlex systems are designed to manage application services for tightly coupled environments, and are built on powerful Sun products such as Sun Cluster 3.0 software, the Solaris 8 Operating Environment, Sun Fire servers, StorEdge storage arrays, network connectivity products, and Sun services.



systems within a single cluster. Each SAP system is managed independently of any other, so a failure or restart of one does not affect any other. However if the resources of a node are required by a production system it is possible to stop a customer-defined less important (e.g. training or development) SAP system. This enables maximum use of cluster resources.

- Intelligent Automatic Recovery: SunPlex systems allow for dependence to be established between the database, and the central instance to ensure that the database is started before the central instance.
- Easy to Manage: All tiers of the SAP stack (database, central instance, application instances) can be consolidated within the SunPlex environment, allowing for a single point of management for all the tiers. Also, because the SAP-SunPlex infrastructure is easy to manage and administer, fewer system administrators need to be trained to manage the infrastructure.
- Easy Updates: The global file service eases the administrative tasks of running SAP in a cluster by allowing for a single installation on the Global File Service for all nodes, and one copy of SAP and database software. So, any updates to either the SAP kernel or the database software need to be done just once, and the changes are applied to all nodes.

By ensuring consistent service levels, reducing risks, and offering ease of operations, SunPlex systems vastly improve service levels for SAP deployments, at the same time lowering the cost of deploying an SAP site.

FOR MORE INFORMATION

To learn more about the Sun Cluster 3.0 Scalable Agent for SAP solutions, please visit the Sun Web site at www.sun.com/sap.

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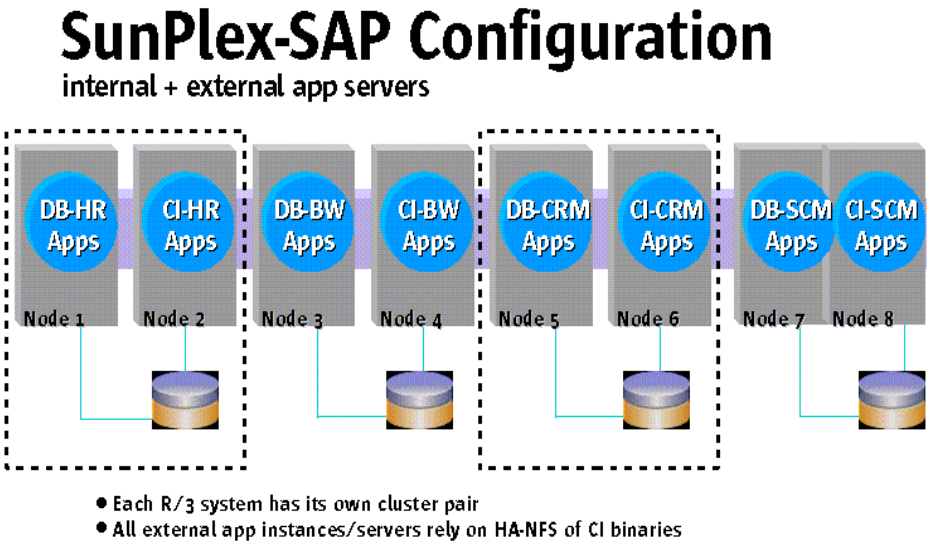

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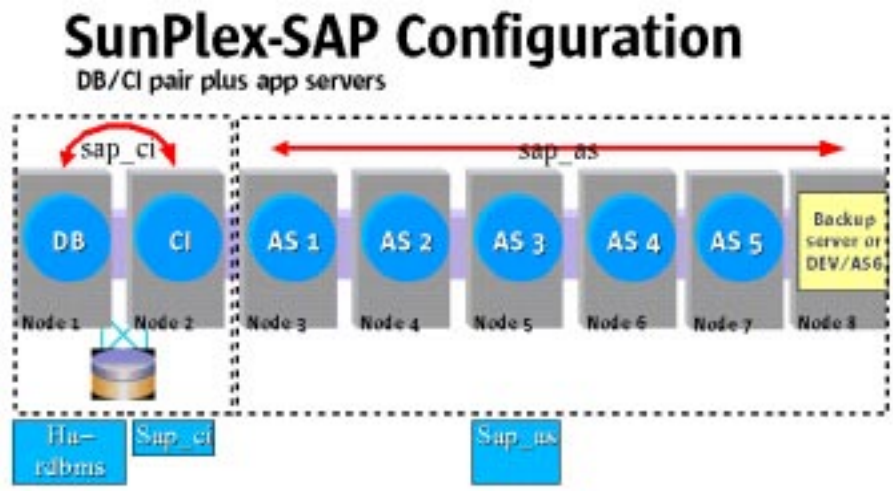

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