Oracle Cloud File System

KEY FEATURES

- General purpose extent based cluster file system with metadata journaling
- POSIX and Window file system compliant
- Dynamic Cluster Volume Manager for general purpose file systems
- File and volume level striping and redundancy
- Automatic and flexible volume and file system resizing

KEY BENEFITS

- Simplifies file management for general purpose and database files
- Elastic storage pooling and provisioning
- Empowers resource sharing through consolidation
- Automates tedious tasks and eliminates hot spots
- Eliminates storage waste and reduces total cost of ownership

Oracle Cloud File System provides unprecedented simplicity in storage management, automated provisioning and storage consolidation for general purpose and database files. Oracle Cloud File System delivers a storage cloud infrastructure that provides network access, rapid elasticity and provisioning for pooled storage resources that are key requirements for cloud computing. Oracle Cloud File System compliments Oracle Automatic Storage Management and delivers one solution for managing all database files, business data, application binaries and personal data in your cloud infrastructure. Oracle Cloud File System includes Automatic Storage Management Dynamic Volume Manager, Automatic Storage Management Cluster File System and advanced functionality including snapshots, replication, tagging, security, encryption and auditing.

Managing All Data in the Cloud

Oracle customers will benefit from a single integrated solution instead of dealing with the complexities of integrating different software layers from different vendors. Oracle Cloud File System is designed to manage general purpose and database files across multiple operating system platforms with one management interface, one set of installation and configuration tools, one clusterware framework and a single vendor for support and troubleshooting. It eliminates the need for 3rd party volume managers and file systems.

Oracle Cloud File System simplifies storage management across file systems, middleware and applications in private clouds. It supports network accessible storage with a unified namespace for all files. It offers rapid elasticity and increased availability of pooled storage resources, and an innovative architecture for balanced I/O and highest performance without tedious and complex storage administration. It delivers a scalable solution suitable for deploying small to multi-terabyte file systems. It consolidates volumes and file systems with optimal storage utilization reducing storage waste and cost.

Volume Management Platform of Choice

Automatic Storage Management Dynamic Volume Manager provides system administrators with cluster volume management services and a standard device driver interface for managing volumes across different operating system platforms. An Automatic Storage Management Dynamic Volume can be easily resized to adapt to the storage needs of the file system without taking it off-line to increase availability and uptime.

"Oracle's security feature in Automatic Storage Management Cluster File System gives us fine-grain access and secure control over sensitive data that needs the extra protection," said Daniel Smith, Senior DBA at Carfax Inc.. "In addition, Automatic Storage Management Cluster File System replication coupled with Oracle Data Guard provide a complete Disaster recovery solution for database files, external files and all other general purpose files in the OS."

Dynamic Volumes benefit from striping, mirroring and data rebalancing features to that deliver the highest performance and scalability while simplifying storage provisioning of pooled storage resources and storage migration.

Managing General Purpose Files

Oracle Cloud File System includes Automatic Storage Management Cluster File System, a general-purpose POSIX, X/OPEN and Windows compliant file system designed for single node and cluster configurations. It uses native operating system commands, the *acfsutil* command line and the Oracle Enterprise Manager.

An Automatic Storage Management Cluster File System is created on top of an Automatic Storage Management Dynamic Volume. It supports a highly available industry standard NFS and CIFS network file access protocols (HANFS). Automatic Storage Management Cluster File System provides for a single-node mount registry and the Oracle Grid Infrastructure cluster-wide mount registry and dynamic file system resizing. It is designed as an extent base file system with meta-data journaling for high efficiency, performance and fast recoverability.

Advanced Functionality

Automatic Storage Management Cluster File System supports advanced functionality including point-in-time Snapshot, Replication, Tagging, Security, Encryption and Auditing.

Read-write point in time snapshots enable instant backups and recovery, back up off hosting through NFS exports, space efficient provisioning of database homes as well as databases for test and development and more. The replication feature enables disaster recovery (DR) for non-database files. This compliments Oracle Data Guard for a comprehensive DR solution from Oracle. The tagging function allows for group operations for files spread though out multiple file systems.

The advanced functionality also includes realm-based security for finer grain access control for files. The encryption feature provides data encryption for data at rest. And, finally, the auditing feature provides an auditing framework required by many financial institutions.

The Automatic Storage Management Cluster File System combined with the advanced functionality provides for a comprehensive cluster file system solution for all your data management needs.

RELATED PRODUCTS

Oracle Clusterware
Oracle Real Application Clusters
Oracle RAC One Node
Oracle Data Guard

Contact Us

For more information about the Oracle Cloud File System, visit oracle.com or call +1.800.ORACLE1 to speak to an Oracle representative.

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