

Oracle Cloud File System

KEY FEATURES

General purpose extent based file system with metadata journaling

POSIX and Window file system compliant

Dynamic 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 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 file data. Oracle Cloud File System delivers a storage cloud infrastructure that provides network access, rapid elasticity and provisioning for pooled storage resources and the key requirements for cloud computing. Oracle Cloud File System compliments Automatic Storage Management which is designed to manage Oracle Database files. Together they deliver one solution for managing all business data, application binaries and personal data in your cloud infrastructure. Oracle Cloud File System includes Automatic Storage Management Dynamic Volume Manager and Automatic Storage Management Cluster File System.

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 files outside of an Oracle database 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 file data stored outside of an Oracle Database. 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 volume management services and a standard device driver interface for managing volumes cross different operating system platforms. Automatic Storage Management Cluster File System and other 3rd party file systems can use it to create and manage general purpose file systems. An Automatic Storage Management Dynamic

"Oracle's new 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."

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.

Automatic Storage Management Dynamic Volume Manager uses the Automatic Storage Management to consolidate all volumes and file systems. Multiple volumes and file systems can be stored and managed within the same set of disk groups. Automatic Storage Management distributes data evenly across all disks in a disk group to eliminate I/O bottlenecks and the need for I/O tuning. It provides intelligent file and volume level striping, mirroring and innovative rebalancing features that deliver the highest performance and scalability while simplifying storage provisioning of pooled storage resources (adding and removing capacity) 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 in a Automatic Storage Management disk group. It supports industry standard NFS and CIFS NAS file access protocols. Automatic Storage Management Cluster File System provides for a single-node mount registry (similar to `fstab` in Linux) 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.

Automatic Storage Management Cluster File System supports advanced data services with point-in-time Snapshots, Replication, and File Tagging. File system Security and Encryption features for more granular and secure access control and protection of data at rest.

Automatic Storage Management Cluster File System may be used to store business data (i.e. BFILES, external tables, images, etc), application software tier (i.e. Oracle database binaries, Oracle and 3rd party applications, and personal files (home directories, personal files).

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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