

Mastering Automatic Storage Management (ASM)

Course Summary

Description

ASM, introduced in early 2004, has been around the block for several years now; but there is still a sense of awe and unfamiliarity to even the most seasoned Oracle DBAs. The reason could span from lack of awareness to even myths surrounding the product, such as it's yet another database to be managed. In simple terms, it's just a volume manager similar to whatever is available in your OS right now with one difference – it's designed keeping in mind the benefits to the Oracle Database; and that alone. In this session, attendees will learn all there is to know about ASM regardless of their expertise level or exposure to ASM. The course guides the attendees through the concepts of ASM using a live demonstration from building the ASM instance and managing it.

Objectives

At the end of this course, students will be able to:

- Know what ASM is and what value it provides
- Build an ASM instance from devices
- Manage and maintain ASM instance
- Troubleshoot and tune for performance

Topics

- Why is Filesystem inadequate for Oracle
- The Issue of POSIX locking
- Alternatives to files – raw, OCFS, ASM
- Introduction to Volume Management for DBAs
- ASM as a volume manager – comparison with others
- Why I/O is faster in ASM
- Concept of ASM "instance" and how it is difference from a database instance. Why ASM is not a "database"
- Building ASM from devices
- Cluster Synchronization Service – how to configure
- Compatibility of ASM and database versions
- How to present "disks" to ASM
- How to create diskgroups
- How to create tablespaces, files on diskgroups
- Redundancy – External/Normal/High
- Real-life tips and technique
- Preferred mirror read (in 11g)
- Extents and Allocation Units
- Data Dictionary Views for ASM
- ASM Command Line Interface
- How to check hotspots and unbalanced disks
- How to add/drop disks online
- How to check for rebalance
- Concept and Management of Striping
- Backup and restore of metadata of ASM (11g)
- Moving files in and out of ASM
- Fast disk resync (11g)
- ASMLib – concepts, configuration and management
- Using SRVCTL for ASM management in RAC
- Troubleshooting

Audience

This course is designed for Oracle DBAs or anyone using AMS.

Duration

One day

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