



## Technical Expertise Arkeia Software and Oracle RMAN

Arkeia's module for Oracle RMAN provides Oracle database administrators with a cost-effective, seamless, Oracle-tested solution for backing up Oracle databases on Linux platforms. Unlike conventional backup products that require the Oracle database to be taken offline prior to backup, the tight integration of Arkeia's module with Oracle's RMAN data management API enables database administrators to incrementally archive and restore databases while leaving their mission-critical production servers online.

### Advantages of Using Oracle RMAN Backup with Arkeia

*From "Ready to Recover"*

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Although a DBA may feel that his or her current backup solution works fine, does the DBA know that some RMAN features might make the current backup solution even better than fine? RMAN offers many features that are not available using traditional physical backup techniques. These features include: trial recovery, skipping unused blocks, performing true incremental backups, recovering data at the block level, using multiple I/O channels to access backup devices, and writing directly to enterprise backup systems.

RMAN allows trial recovery. If a recovery fails using a traditional hot or cold backup, the entire recovery may have to be restarted, resulting in additional downtime. RMAN allows you to perform a trial recovery prior to the actual recovery to be sure all the files needed for recovery are available and usable.

RMAN skips unused blocks. When taking a complete RMAN backup of a database, RMAN will not backup those database blocks that have never contained data. This can save a substantial amount of space on your backup media and help to minimize the backup window.

RMAN offers true incremental backups. During an RMAN backup, every block in every data file is read into memory and examined to determine whether its contents have changed since the last backup, but only those blocks that have changed since the last backup will actually be written to the backup device.

RMAN offers block-level recovery. The RMAN utility can identify corrupt database blocks during an RMAN backup. During a recovery, RMAN allows you to recover just the affected blocks within the damaged data file, leaving the rest of the data file online and available to application users.

RMAN allows multiple I/O channels to access backup devices. When writing the database backup to a disk or tape device, RMAN has the ability to use several concurrent processes to perform the right activity. This can greatly speed up the backup process, particularly in situations where the backups are being written directly to tape.

RMAN can interact directly with enterprise backup systems. The complexity of most business computing environments has increased dramatically in recent years. Therefore, it's generally not feasible to perform backup to a dedicated tape drive at each server anymore. Instead, corporate computing environments are making increased use of enterprise-wide backup solutions. These systems utilize agent software installed on each server to write that server's backup information to a central backup repository.

### Arkeia Software

Arkeia Software provides federated data protection software and appliances for networked storage. Delivering solutions for mid-sized enterprises and multi-site organizations, Arkeia Software protects more than 100,000 networks for 5,000 customers in 50 countries. The Arkeia EdgeFort appliance, award-winning Arkeia Network Backup software, and Arkeia Options are delivered through a global network of distributors and value-added reseller partners.



### Arkeia Software and Oracle RMAN

**There is an Arkeia answer for every data protection need.**

- ▶ **All-in-one solution for enterprises with distributed data:**
  - Arkeia EdgeFort
- ▶ **Scalable backup solution for mid-sized and large networks:**
  - Arkeia Network Backup
- ▶ **Automatic bare-metal restore:**
  - Arkeia Disaster Recovery
- ▶ **Hot backup solutions for running applications:**
  - Arkeia Options

