



## Oracle Database Backup Service

Secure Backup in the Oracle Cloud



#### UNITING BUSINESS AND IT WITH ORACLE CLOUD SOLUTIONS

- » Greater productivity for end users
- » Business-friendly storage automation for LoB managers
- » Self-service control for power users and developers
- » Visibility, agility, and simplicity for system administrators

*“The software industry has seen a 47 percent growth in cloud processes, forcing companies to rethink their IT strategies.”*

—GARTNER 2013

Today’s organizations are increasingly adopting cloud-based IT solutions and migrating on-premises workloads to public clouds. The motivation is clear: cloud computing allows users to tap into a virtually unlimited pool of computing and storage resources over the Internet. Cloud users enjoy the simplicity and “always on” characteristics of a computing utility, with inherent scalability, proven reliability, and the ability to provision resources dynamically as they are needed.

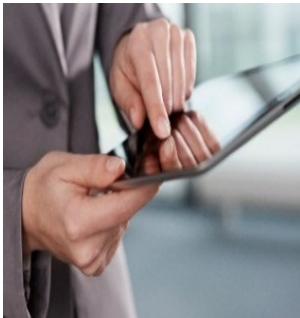
These proven benefits are especially pertinent for enterprises that have established multi-tiered storage architectures. These companies may wish to backup production data to a secure cloud storage service to minimize the capital and operating expenses of owning and operating storage infrastructure. If they store data in an offsite location for disaster recovery purposes, a cloud backup service can be especially valuable. It fulfills business continuity and disaster recovery requirements since the data is immediately accessible. For data that must be archived for a specific period of time or to meet regulatory requirements, a cloud backup service is an economical alternative to tape drives.

Part of the Oracle Cloud Platform as a Service (PaaS) portfolio, Oracle Database Backup Service is a cloud-based storage solution for Oracle Database backups. This cost effective, scalable, low-cost backup solution can be used to consolidate storage infrastructure or as an integral part of a multi-tier database backup and recovery strategy. Customers can purchase storage capacity in 1TB blocks on either a month-to-month or long-term basis.

### A Secure Backup and Restore Solution for On-Premises Oracle Databases

For organizations that don’t have tape infrastructure, yet who do have offsite storage requirements for their archival data, cloud-based storage is a great alternate. It offers instantaneous backup capacity and is more efficient than tape vaulting. There are no up-front capital costs and no storage-management tasks to perform. Customers enjoy on-demand capacity and pay-per-use pricing. The data is accessible from anywhere, at anytime, from any supported Oracle Database server connected to the Internet.

Once you move your backups to Oracle Cloud, you will obtain automatic three-way data mirroring with an unlimited number of backups. Thanks to the limitless scalability and elastic design of this service, you have the assurance that there will always be sufficient backup resources available for your escalating needs. It’s easy to add additional storage capacity with a few clicks—with zero hardware investment. An online dashboard lets you monitor capacity and instantly buy more as needed.



**Oracle Database Backup Service** provides a transparent, scalable, efficient, and elastic cloud storage platform for Oracle Database backups.

Oracle Database Backup Service interfaces with Oracle Recovery Manager (RMAN). This means you can issue familiar RMAN commands to initiate backup and recovery operations between on-premises Oracle Databases and Oracle Cloud. You simply download a backup module, configure it with RMAN, and immediately perform cloud-based backup and recovery operations using RMAN commands.

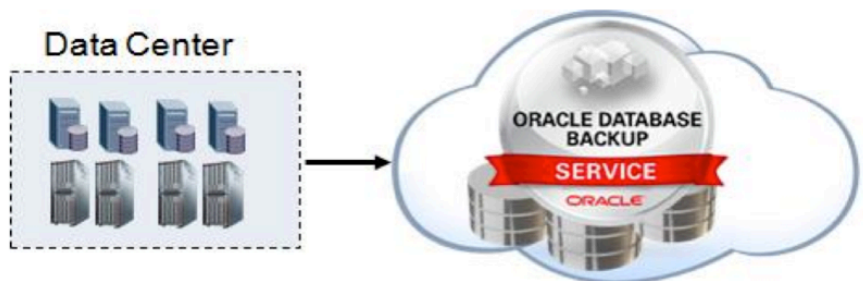
You can achieve optimal performance by increasing the number of parallel streams in the form of RMAN channels—without any additional cost. You can also reduce the amount of data transferred by compressing the backup using RMAN compression algorithms, also without any additional cost. This combination of parallelism and compression dramatically improves backup rates to maximize cloud storage capacity. The reduced size is especially useful when transmitting backups over low-bandwidth networks.

Backups are encrypted using RMAN encryption at the source (with keys kept locally) before being transmitted to the cloud. RMAN encryption is offered at no cost when using Oracle Database Backup Service. Encrypting backups ensures that data is secured at the source, transmitted securely over SSL, and protected against unauthorized access. Backups remain compressed and encrypted while at rest in Oracle Cloud.

To improve reliability, data is automatically replicated to three separate physical machines in the same data center. This triple mirroring prevents data loss in the event of hardware failure, with exceptional security, reliability, redundancy, and data isolation for all database instances.

## Extending Your On Premises Databases to Oracle Cloud

At last, customers that have invested in on-premises Oracle Database systems have a convenient, economical way to establish a multi-tiered backup and restore strategy that utilizes Oracle Cloud.




Oracle Database Backup Service makes it easy to keep critical database resources in the cloud.

## Use Case #1: Consolidation

Storage infrastructures are growing to keep up with the demand for information growth. In response, most organizations have established elaborate tiered data storage and backup solutions based on disk arrays and tape libraries. Active data is typically maintained on high-performance, high-cost fiber channel or solid-state disk drives, while less active data is moved to more cost-effective storage media—often tape. Oracle Database Backup Service is ideal for organizations that wish to consolidate and virtualize their storage infrastructure as part of a move to the cloud. Unlike traditional tape-vault solutions, cloud backups are immediately accessible whenever a restore is required. All RMAN-supported recovery procedures are supported using the cloud

### THE VALUE OF ORACLE DATABASE IN THE CLOUD

- » **Simple** - An easy way to backup data to the cloud for instant access via the internet
- » **Fast** - Perform cloud-based backup and recovery operations within minutes by configuring the destination to Oracle Cloud
- » **Secure** - Data is encrypted at the source and the keys are maintained locally for maximum protection
- » **Reliable** - Data is replicated across multiple storage nodes within the same region
- » **Flexible** – Add storage capacity on demand as business needs increase



*Oracle Cloud is based on open standards. All Oracle PaaS services work together seamlessly, with easy portability between on-premises and cloud environments.*

backup. And since cloud backups are accessible from anywhere via the Internet, the backups can be used to create clones for test, development, or QA environments, on-premises or in the cloud.

## Use Case #2: Tiered Storage

Traditionally, primary storage includes new data from mission-critical applications and databases. Secondary storage includes 30- to 90-day-old data that needs to be kept on hand for business continuity, as well as fixed content and backup/recovery data. Long-term or archival storage includes data older than 90 days, often maintained for historic reasons or legal compliance. Data is systematically moved among storage tiers according to pre-defined procedures. Each tier usually features different types of media, including high-speed fiber channel and flash storage, serial disk drives, and tape drives.

Oracle Database Backup Service gives you a whole new set of options for storing and maintaining these various tiers of data. For example, assuming service level agreements permit it, you might perform RMAN backups to the Fast Recovery Area of local disk drives, then move data to either tier 2 storage or to the cloud. Likewise, for small, non-critical databases, cloud storage can serve as tier 1 storage. This strategy allows you to avoid purchasing, managing, and maintaining lots of disk and tape backup systems, while dramatically simplifying recovery operations.

## A Cohesive Platform in the Public Cloud

There is a huge push to migrate existing on-premises workloads to the public cloud, with the consequent need for portability between on-premises and cloud environments. Oracle is facilitating this migration with Oracle Database Backup Service. This unique public cloud solution, part of the Oracle PaaS family of services, is ideal for many types of backup strategies.

Oracle Database Backup Service leverages the same infrastructure as other Oracle Cloud services including provisioning, identity management, administration, and monitoring. Seamless integration, convenience, and flexibility have already motivated many Oracle customers to adopt this service. It is a cost-effective alternative to writing, shipping, and storing data in tape vaults. It's also a good option for offsite storage when no tape infrastructure is available.

This new cloud service allows you to leverage all the benefits of backing up data to the cloud with minimal changes to your existing infrastructure. You simply install a cloud backup module, configure a few RMAN settings, and you are ready to back up your data to the cloud. These backups can be automatically created and updated with little or no operator involvement. Oracle offers virtually unlimited data storage capacity with no up-front capital expenditure.

Sign-up for a [Free Trial](#) of Oracle Database Backup Service so you can see for yourself how easy it is to backup Oracle Databases to the cloud.

[Watch this demo](#) if you would like to learn more, or visit this [website](#) for additional details.



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