

Oracle Database Backup Testing

Vijay Kumar Tiwari IT Consultant, HCL Tech, Texas, United States

ternati

ABSTRACT

Testing the recovery of data on test systems is needed to come out with effective techniques for data recovery to be used in production environment. A good backup approach is to backup all data files available. A happy company and a happy employee are the ones who have a solid backup plan and recovery program. The above is to show ways of backing up essential/ test databases and methods to test these databases.

INTRODUTION

Verifying & testing database backups, defining theories pertaining to Database backups and processes to test the backup.

Data is the essential possession of any company. Acknowledging the fact that your company runs on Oracle database, data becomes its integral part. A retail or banking company survives on data. Humongous quantity of data is present with such companies as user details, system details etc. The data protectors especially the database admin or system admin should be aware of its importance to an organization. In the need of hour, even old data has to be assessed by the company and hence data should be readily available. Backup is the only solution. Backup is a mirror copy of the database which can aid in restoring data in case of any emergency or data loss.

Ways to back up?

There are several ways to back up data in an Oracle Database. Their classification is either Physical or Logical backups. While physical backup can be done using 3rd party tools like Netbackup, Tivoli Username

ta backups, Oracle Secure Backup and RMAN the Logical backups are done via export/ import utilities.

Finest Way for Database Backup?

Backup strategies as mentioned above have a fair share of good and bad and the main focus here is on RMAN backups.

What Exactly Gets Done to Backup Oracle

Backups need help from Enterprise Manager (graphical user interface) mode or else via the OS command line prompt. RMAN is a strong and powerful yet refined utility provisioned by Oracle to function backup and restoration.

Test/validate the database backup – Recovery Strategies?

The testing phase of backup and recovery strategies is advisable to be done in a test environment for forecasting the time consumed to have the database running during unfortunate incidents. Post backing up the database, validation of the recovery process during unforeseen circumstances will be dependent on the way the backups have been designed. The hiatus at which the backups are scheduled and whether the backup is full or incremental, all play a role. A good backup access is always preferred for reviving corrupted data from corrupted storage disks or failed hardware.

Practically any unwanted event should be forecasted

International Journal of Trend in Scientific Research and Development (IJTSRD) ISSN: 2456-6470

in advance along with any wrong steps that can occur. The testing should be done from all that can go wrong point of view. This leads to the perfect strategy for validation of data backup in case of any mishap.

To validate backups, we can use the following syntax,

RMAN> **BACKUP VALIDATE DATABASE**; where the status of files is an **OK** which means these are usable or restorable. Preview of the database restore can be done which will provide a lineup of files and their presence without even restoring them. RMAN> **RESTORE DATABASE PREVIEW**;

Concluding

Testing the recovery of data on test systems is needed to come out with effective techniques for data recovery to be used in production environment. A good backup approach is to backup all data files available. A happy company and a happy employee are the ones who have a solid backup plan and recovery program. The above is to show ways of backing up essential/ test databases and methods to test these databases.

·•••

Research and Development

SSN: 2456-6470