

Making Magic with Oracle

Some cool tricks for DBAs

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Agenda

- A Cool Trick
- Data Masking
- Data Repository and Version Control
- Smaller Copy of Production
- Flexible with Data Pump
- Data Recovery Advisor

A Cool Trick

Who never had a problem with a SQL that is killing your Database Performance and you can't fix it because it's running from an external closed application that you or your developers can't touch?

Since Oracle version 10 this is a problem of the past, now you can easily solve this kind of problem using the `DBMS_ADVANCED_REWRITE` package, which allows you to transform/customize queries on the fly, changing for example one query with a bad explain plan for another one with a good explain plan.



DBMS_ADVANCED_REWRITE

Before you become too excited, please remember the following restrictions:

- It does not work with bind variables.(Alternative solution at [Metalink Doc ID. 392214.1](#))
- Only works for the SELECT statement.
- Does not work when the base table is modified through DML.



Data Masking with Oracle

- Important to protect your sensible data in Dev/QA/Test Environments
- Protect your data when sending it to outside your company.
- Normal Products used for Data Masking?



OEM / Data Pump



<http://www.oracle.com/technetwork/database/datapump11g2009-transform-133936.pdf>

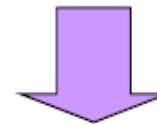
What is Data Masking

Key Drivers

- Application Development & QA
 - Offshore / in-house
- Data Sharing
 - Claims processing
 - Marketing analysis of customer data
- Regulations
 - PCI
 - Sarbanes-Oxley
 - HIPAA
 - Graham-Leach-Bliley
 - EU Data Protection Directive



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Data Repository and Version Control

As a DBA, I'm always looking for proactive ways to allow me to be prepared in case of a disaster strike or if an emergency release rollback is required (I love to use always the "What if" methodology), and due to these reasons, have a metadata repository and version control of it is always useful .

Using Data Pump: SQLFILE parameter



Creating Smaller Copies of Production

That is a very common task for a DBA, you are always having a task to create a copy of your Database (for development or test purpose) but your destination server don't have enough space to create a full copy of it! This can be easily solved with Data Pump, for this example, let say that you only have space for 70% of your production database, now to know how to proceed, we need to decide if the copy will contain metadata only (no data/rows) or if it will include the data also.

Using Data Pump: `TRANSFORM=PCTSPACE` and `SAMPLE` parameters

More Data Pump Stuff

- Clone a User
- Change Tablespaces
- Change Datafile Location
- Flashback Consistent Backups

More Data Pump Stuff

- Flashback Consistent Backups

By default expdp is consistent only for the table that is currently being exported.

You can use: FLASHBACK_TIME or FLASHBACK_SN

Note: On 11g the CONSISTENT parameter was deprecated , At 11g you can use the FLASHBACK_TIME=systimestamp to get data pump export to be consistent to a single point in time.

Since 11.2 you can also use the legacy mode option to use the old parameter CONSISTENCY=y

Data Recovery Advisor

- RMAN> LIST FAILURE;
- RMAN> ADVISE FAILURE;
- RMAN> REPAIR FAILURE PREVIEW;
- RMAN> REPAIR FAILURE;
- RMAN> REPAIR FAILURE NOPROMPT;

Questions? More Information?



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And Remember to participate more with your local User Group



Thank you! Have a Nice Day