



# Oracle DBA

Some tips and Best Practices  
To become a successful professional

LA OTN TOUR 2013



8/9i/10g/11g OCP, RAC OCE, AS OCA, E-Business OCP , SQL /PLSQL  
OCA , Oracle 7 OCM

Oracle 7 , Oracle 11gR2 and OVM 3.1 Beta Tester

ITIL Certified

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Twitter: fcomunoz



# **FRANCISCO MUNOZ ALVAREZ**

Oracle ACE Director

NZoug President

LAoug President

CLOUG President

IOUC LA Spokesperson

Revera – Oracle Professional Services Manager



# Francisco Munoz Alvarez

## ORACLE ACE DIRECTOR OF THE YEAR

Oracle ACE director hones skills while helping others.

When it comes to learning something new, Francisco Munoz Alvarez doesn't look for a teacher; he looks for someone who has a problem.

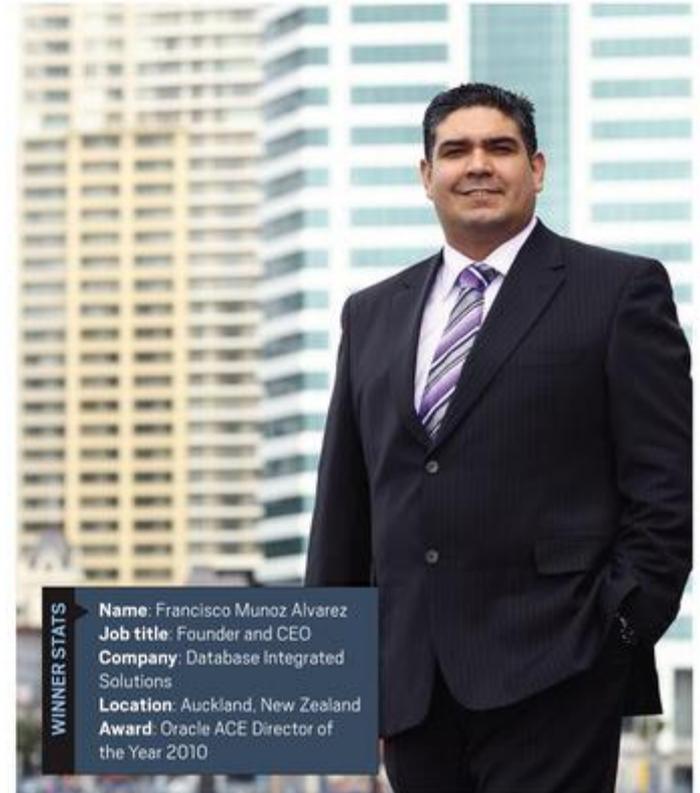
"One of the best ways to learn is by helping others," says Alvarez. "When someone has a problem on an OTN [Oracle Technology Network] forum, I enjoy trying to assist them with it. I've learned a lot by trying to help other Oracle users to solve their problems."

Over the years, he has learned enough to become an Oracle ACE, an Oracle ACE director, and now *Oracle Magazine's* Oracle ACE Director of the Year. Alvarez is also the founder and CEO of Database Integrated Solutions.

For Alvarez, learning—and helping others—takes legwork. This year, as an Oracle ACE director, he has appeared at 22 conferences in 18 countries, where he not only gives talks but takes the time to answer questions and assist users with complex Oracle challenges. In addition, he frequently helps his blog visitors (about 25,000 per month) solve difficult Oracle-related problems.

Given that he's also president of the New Zealand and Chilean Oracle user groups and the Latin American Oracle User Group, Alvarez' energy seems to have no limits when it comes to the Oracle community. He himself puts it best: "I never get tired of helping people learn how to share their knowledge and experience."

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**WINNER STATS**  
**Name:** Francisco Munoz Alvarez  
**Job title:** Founder and CEO  
**Company:** Database Integrated Solutions  
**Location:** Auckland, New Zealand  
**Award:** Oracle ACE Director of the Year 2010



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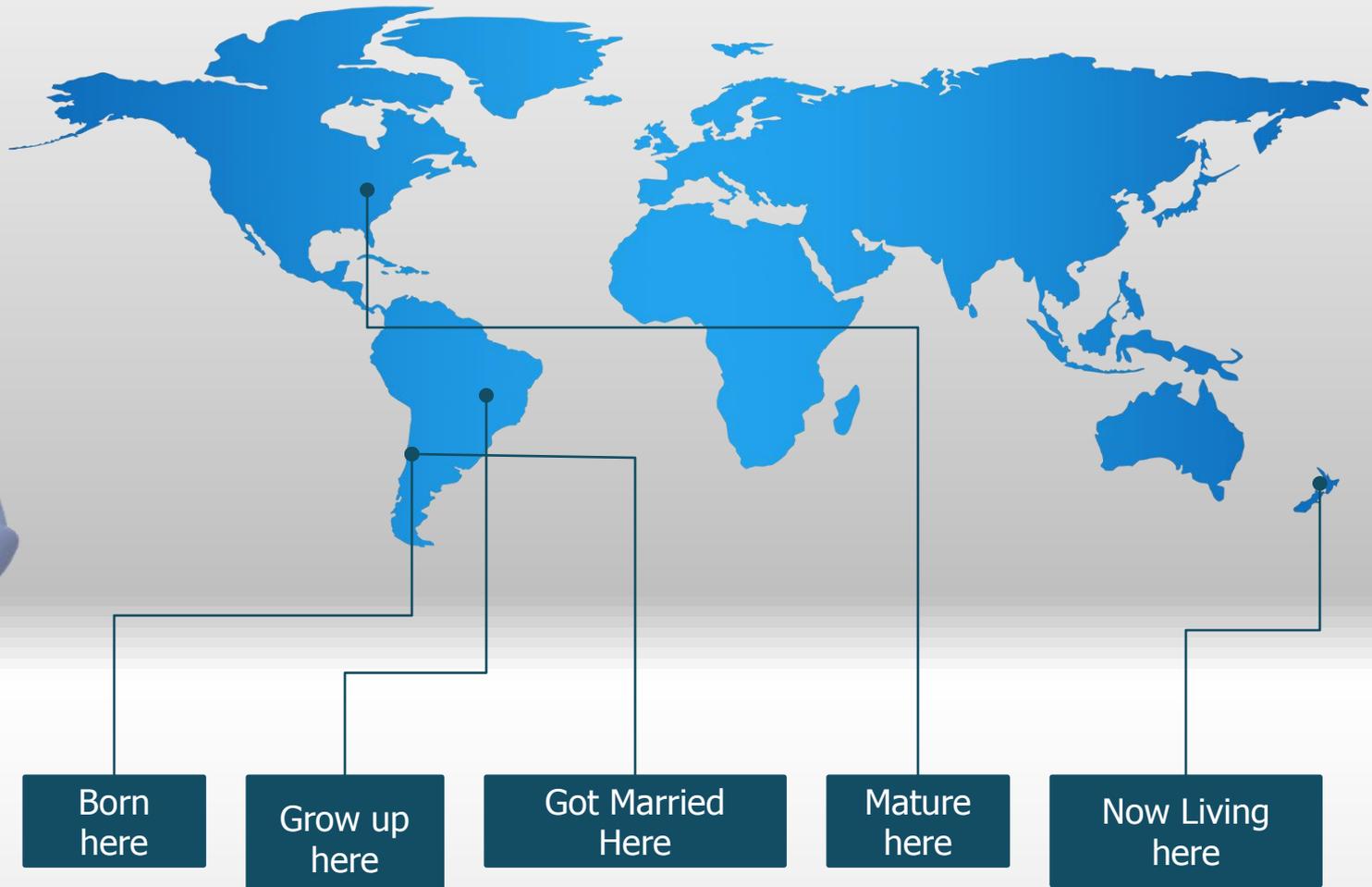
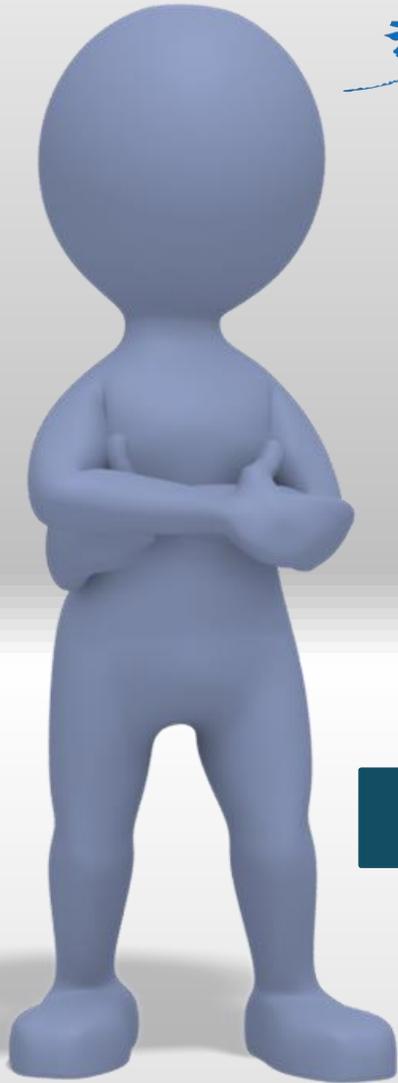
## Oracle Database 12c Backup and Recovery Survival Guide

A comprehensive guide for every DBA to learn recovery  
and backup solutions

Francisco Munoz Alvarez  
Aman Sharma

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Coming Soon: September 2013



# Agenda



Change yourself



The 3 Rules



Evolution of the DBA Role



Some tips and best practices



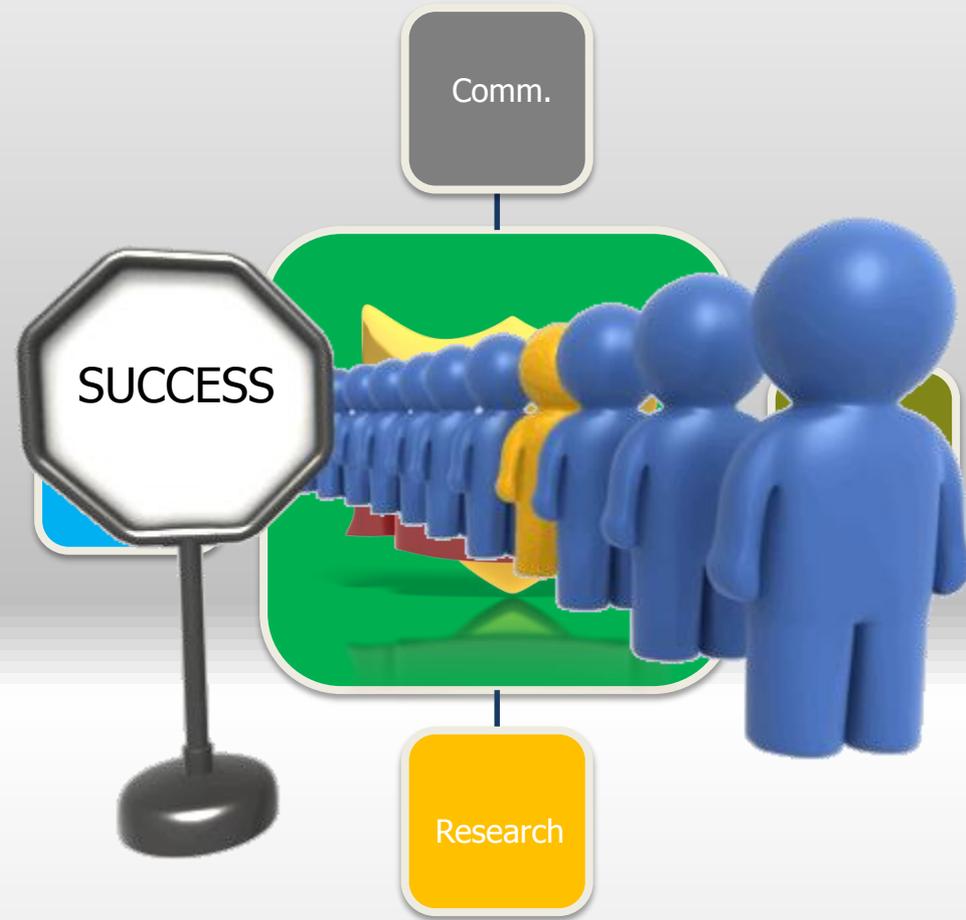
The 3 DBAs

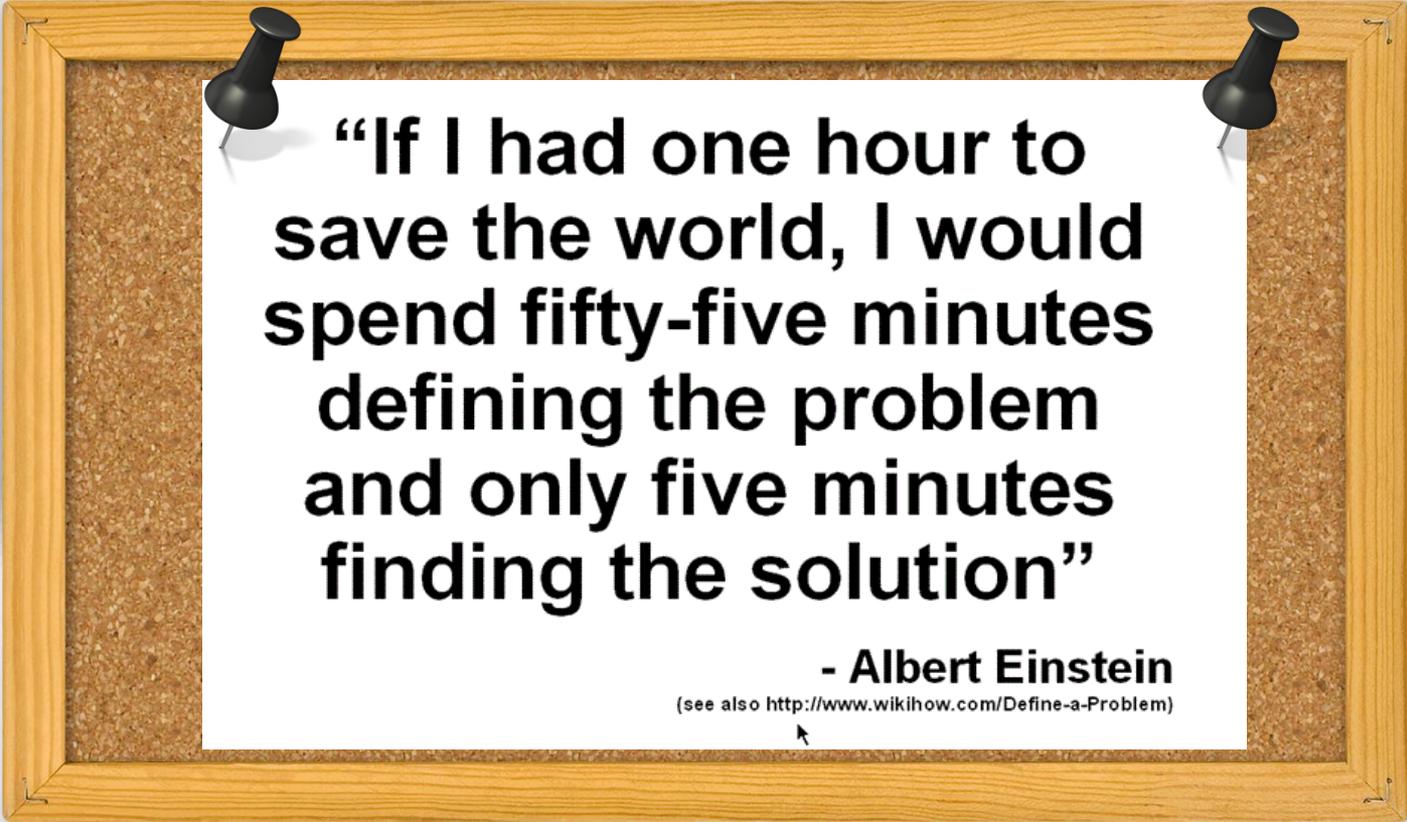


## First: Learn to Change Yourself

If do you want to become a successful professional, first you need to educate yourself to be successful!

Your future success depends only in your attitude today! You control your life, nobody else!





**“If I had one hour to  
save the world, I would  
spend fifty-five minutes  
defining the problem  
and only five minutes  
finding the solution”**

**- Albert Einstein**

(see also <http://www.wikihow.com/Define-a-Problem>)

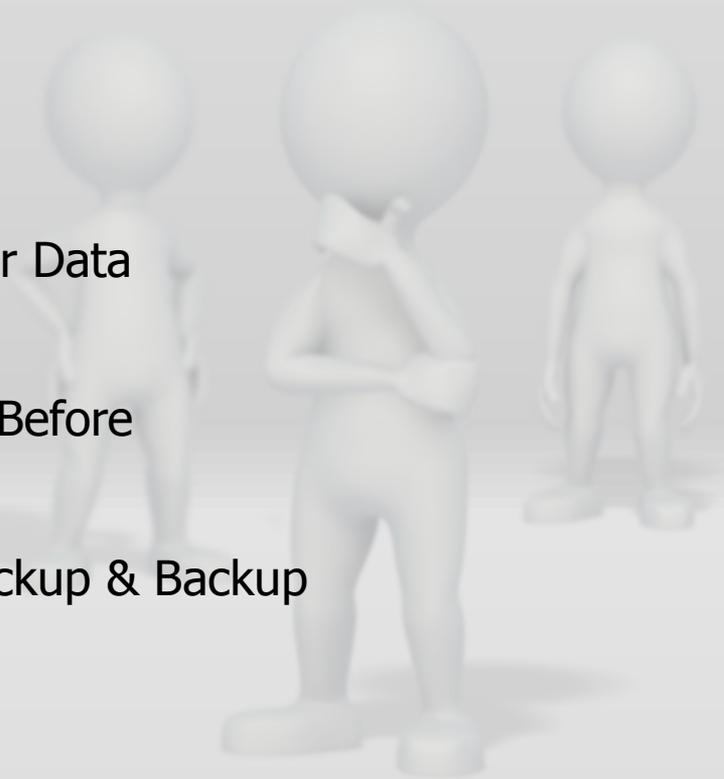
# My 3 Rules

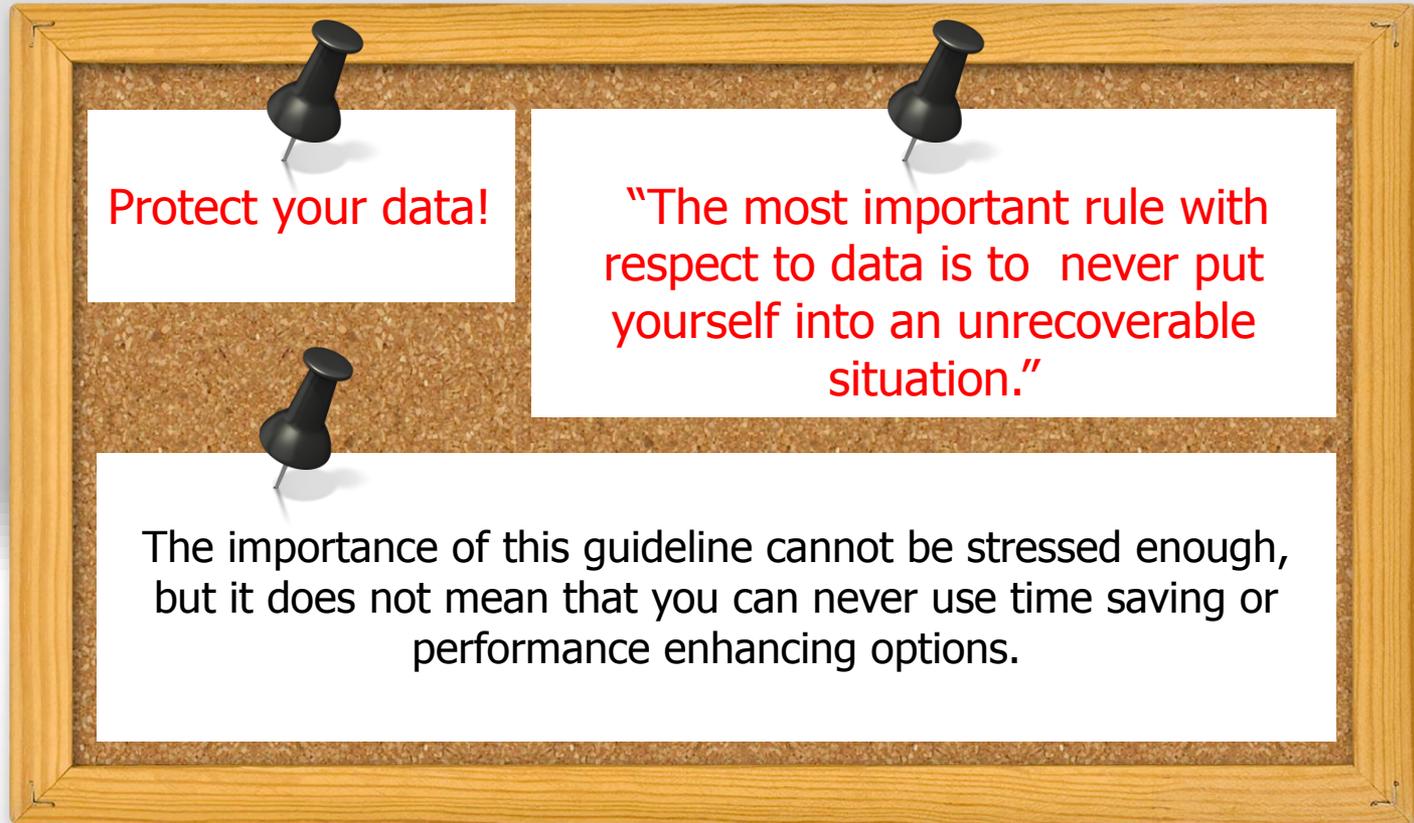


Protect Your Data

Always Try Before

Backup, Backup & Backup

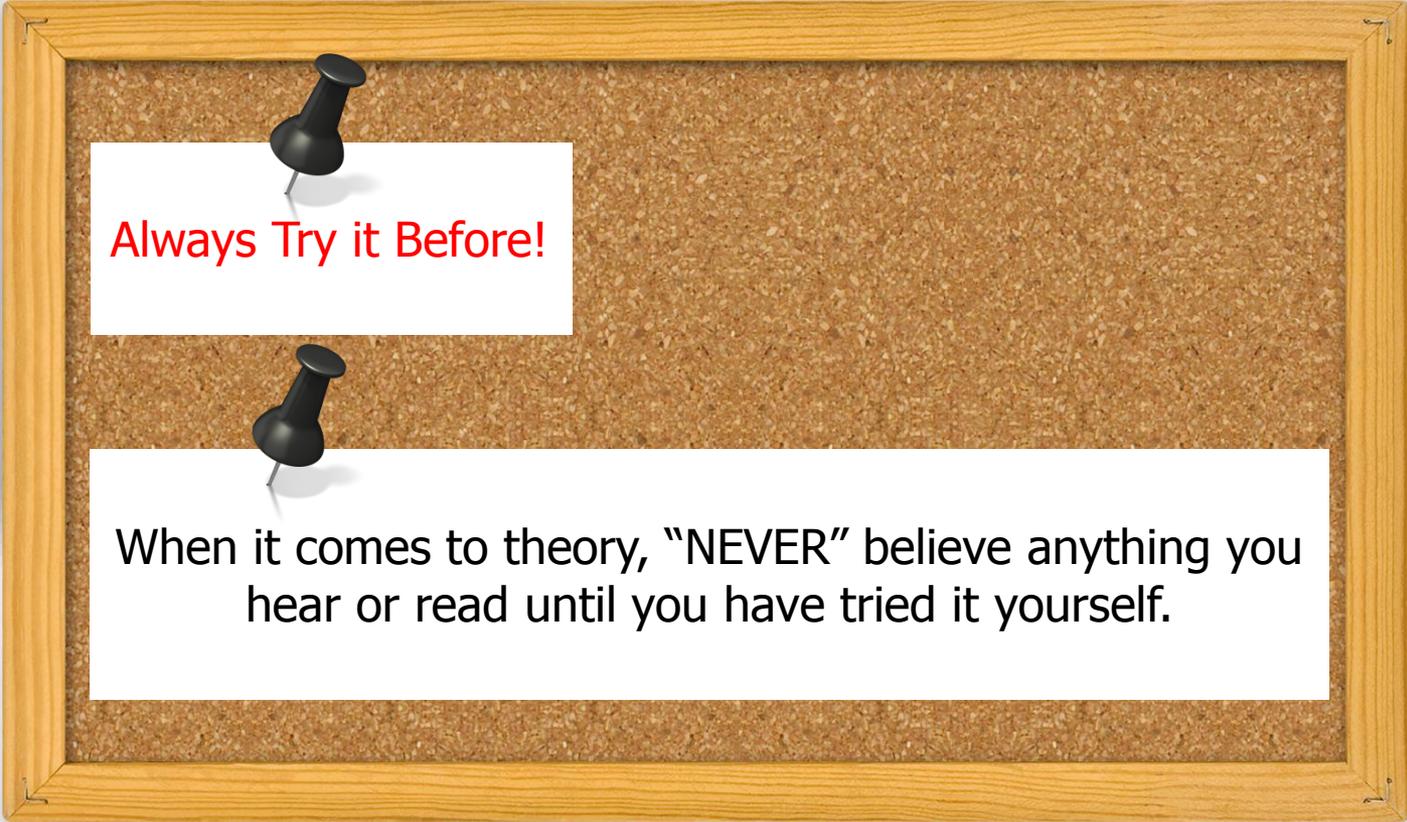




Protect your data!

"The most important rule with respect to data is to never put yourself into an unrecoverable situation."

The importance of this guideline cannot be stressed enough, but it does not mean that you can never use time saving or performance enhancing options.

A corkboard with a light-colored wooden frame is positioned on the right side of the image. It has two white rectangular notes pinned to it with black pushpins. The top note is smaller and contains the text 'Always Try it Before!'. The bottom note is larger and contains a longer paragraph of text.

Always Try it Before!

When it comes to theory, "NEVER" believe anything you hear or read until you have tried it yourself.

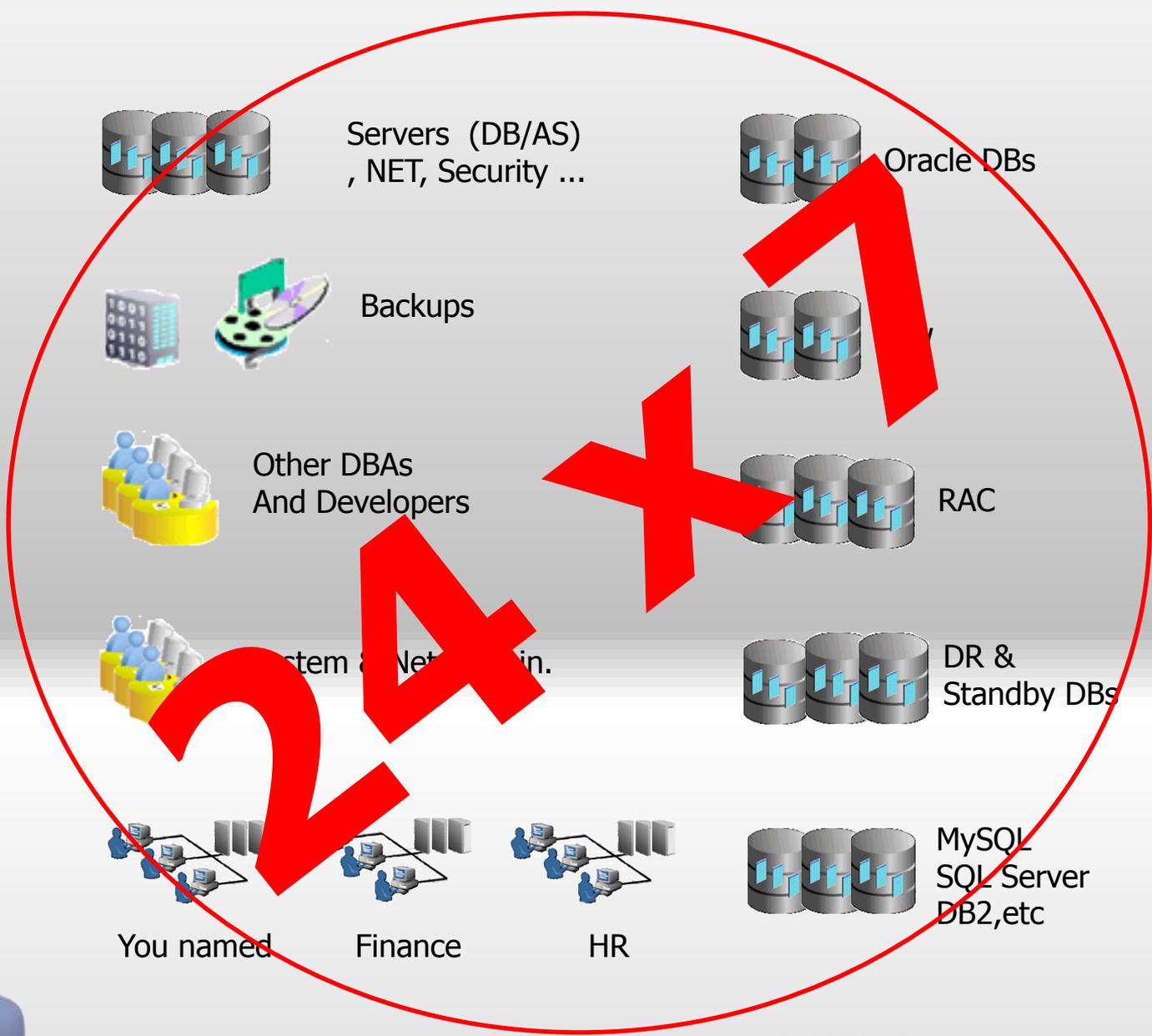




Backup, Backup &  
Backup

Why? Because bad  
stuff happens...





# Some tips and Best Practices



# Backup, Backup & Backup



- Nothing bad will happen ... is a easy change...
- I test it before and nothing happens ...

- Remember each environment is different
- Always Backup before a change
- Always Backup after a change
- If possible Encrypt Backups for your security



- Reduce Risks
- Allow an easy Rollback if necessary
- Could save your job



# Have a Good Backup Strategy



- I have a full backup daily, that's enough!

- Backup your Archivelogs to tape several times a day
- Generate a daily Datapump for logical recover, just in case...



- Reduce Risks
  - Will have your users happy when ask you to recover a table from last week...
- Always be proactive, use the "What if..." Methodology



A massive data outage for Sidekick handheld users has become a massive PR headache for Microsoft and carrier T-Mobile.

A massive data outage in Microsoft's Danger unit left many T-Mobile Sidekick users without access to their calendar, address book, and other key data. However, things got even worse as Microsoft said in a statement that data not recovered thus far [may be permanently lost](#). Microsoft and T-Mobile have not said how many of the roughly 800,000 Sidekick customers have lost data.

T-Mobile USA has, at least temporarily, [stopped selling all models of the device](#) as the company continues to investigate the recent problems.



# Separate Environments



- Yes, we have a Dev/Test/Prod. But they are in the same server...
- Everyone know what each one is doing...
- We are saving money to the company...

- One server for each environment (Think about OVM)
- Developers only need to have full access to Dev
- Transform Test and Prod in High Secure areas



- Reduce Risks
- Allow you to be really responsible for the Environments
- Protect System Performance and Availability
- Protect Business Continuity



# Have a Change Register



- It's an small change, no one will notice...
- It will not affect no one...
- It's better to say sorry than ask for authorization...

- Create your own promotion procedures
- Always create a Change Request
- Always try to involve all affected users
  - Always only promote changes after obtain all approvals (Share responsibility)



- Will allow you to document and review the process.
- Will allow others to review your process.
- Will contain all approvals and tests (for your safety and mental health)
  - In case a system is affected, will be easy to detect was changed!





## **What's an Incident?**

“An incident is always when something affects the business continuity or the business revenue”



# Incident is always a priority



- I will do it early in the morning when back to the office...
- It can wait a few minutes more, I'm on break now...
- It's lunch time, will take a look when back...

- Investigate and solve it as soon as possible
    - After solved, create an Incident report, it will help you to:
1. Detect the root cause of the problem
  2. Document how it can be prevented to happen again
  3. Document all steps to solve the problem



- Reduce Company Revenue losses
  - Will save your job
- Shows that you really care about your Employer

# Avoid Dead Locks



- Dead Locks are Developers fault...

- Create Index on Foreign Keys (Script on [oraclenz.wordpress.com](http://oraclenz.wordpress.com) )
- Check for Bitmap Indexes on OLTP Environment



- Improves DB Performance
  - Will help you to have a good relationship with Developers



# Automatic Processes



- I can do it by myself...
- I love to be involved on everything...
- I love to create users, extend tablespaces, change passwords...
- I love to run a checklist every day...

- If a process or work can be made automatic, do it!
- If it can't be made automatic, try to delegate it!



- You have more important stuff to do!



# Oracle Homes



- /u01/app/oracle/product/10.2/db\_1
  - Patches are applied to the same Oracle Home



- Reduce Risks
  - Allow an easy Rollback if necessary
  - All versions Catalog scripts will be preserved



- Use a different Oracle Home for each upgrade or Patching, example:
  - /u01/app/oracle/product/10.2/db\_02
- For the next patch, use a new Oracle Home
  - /u01/app/oracle/product/10.2/db\_03
  - /u01/app/oracle/product/10.2/asm\_02

# DB Init Parameters



Will change them only when required!

- Be proactive, set all parameters your environment will need now, specially the ones you can't not modify later using ALTER SYSTEM.
  - Remember to set `_trace_files_public = TRUE`, soon or later you will need to give access to some trace files to the developers.



- Will avoid inconvenient restarts of the DB.
- Will save you time and headaches
- Be proactive always will improve your DB performance and availability



# .LOG Extension



I always use .log for my redolog files... is the standard!



- Someone (including you) could delete it by mistake.

- Use a different extension for redo logs like .RDO



# Metadata Repository



I have all I need on my current DB.  
I use my Dev/Test as a DDL repository.



- Allow you to detect changes easily.
- Allow you to create your own Version Control.
- You never know when you will need it 😊



- Create your own metadata repository.
- Use datapump for this :

```
$ expdp user/password content=metadata_only full=y directory=datapump dumpfile=metadata_24112010.dmp  
$ impdp user/password directory=datapump dumpfile= metadata_24112010.dmp sqlfile=metadata_24112010.sql
```

# Non OFA Layout



Let's Oracle manage all using OFA, that way all will be standard on all environments.



- /oracle/(prod/qa/test/dev)/SID/\*
  - /u01/udump – for user files
    - /proddata/SID/\*
  - /prodbackup/SID/\*
  - /prodlogs/SID/\*



- Easy to manage and keep organized
- Allow you to use different mount points
- Reduce Risks

# Study, Study & Study



I know everything I need...



- Will keep you up to date
- You never know when you will need to use it
  - Will help with your professional development



- Read Manuals
- /Read the official documentation at <http://tahiti.oracle.com>
  - Read and practice OBE at OTN website
  - Help others at OTN Forums (Fantastic way to learn)
  - Participate at OUG Activities (If possible try to speak)

# Listen! Ask Question! Be involved



I just will do something when asked to do...  
If is working I don't need to care...

- Don't just sit back waiting for the create table requests.
- Learn more about your systems and users



- Know what to do before necessary
- Allow you to know who to contact in case of..
- Show how engaged you are with the company





# 3 Kind of DBA's

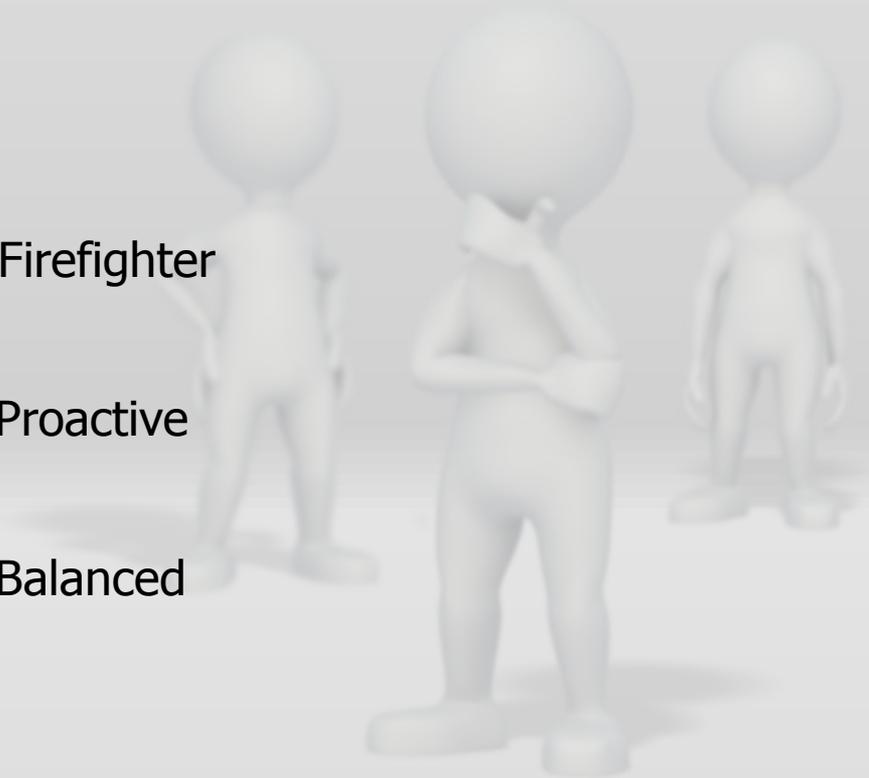


- 1
- 2
- 3

The Firefighter

The Proactive

The Balanced



# What kind of DBA are you?



# Questions? Comments?

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