

■ ■ ■ ■ Do you speak AWR?



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# Goal of this training



- You know which Oracle tools are available for collecting information about performance tuning
- You know which are the real important information you look at when analyzing a performance report
- You know how to “easily” analyze an AWR/Statspack report
- You know how to tune the most important database components like files, memory, etc.

# But!



- Don't forget the equally or even **more** important aspects like:
  - Problems with data modeling
  - Application tuning
  - OS tuning
  - SQL tuning

# Limitations



- We can't show you everything life. For this reason most of the important tuning information will be shown directly from generated **tuning reports** from **production systems**
- Main goal is the comprehension of tuning information not just exercise the collection of tuning information
- **Everyone can collect, just some are able to understand it!**

# Introduction



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# Table of contents: Day 1



## 0. Content

## 1. Introduction

- General concepts about tuning
- General concepts about monitoring

## 2. Performance information and tools

- Data dictionary tables and views
- Diagnose scripts
- AWR and advisories
- Wait events and Oracle statistics
- How to analyze a Statspack and/or AWR report

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## 3. Fast data access

- Index strategy
- Partitioning
- Parallel SQL
- Miscellaneous

## 4. Tuning memory allocation

- SGA (shared global area)
- Buffer cache
- Dynamic memory management
- Memory pools
- Automatic SGA management
- PGA (process global area)



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## 5. I/O optimization

ASM

Row chaining/row migration

Checkpoint optimization

Tuning LGWR I/O

Multiple DBWR's, I/O's slaves

Miscellaneous

## 6. Block contention

Freelist waits

Transaction entry slot wait

UNDO tuning

Latch contention

MTS/Shared server tuning

## 7. Undocumented features