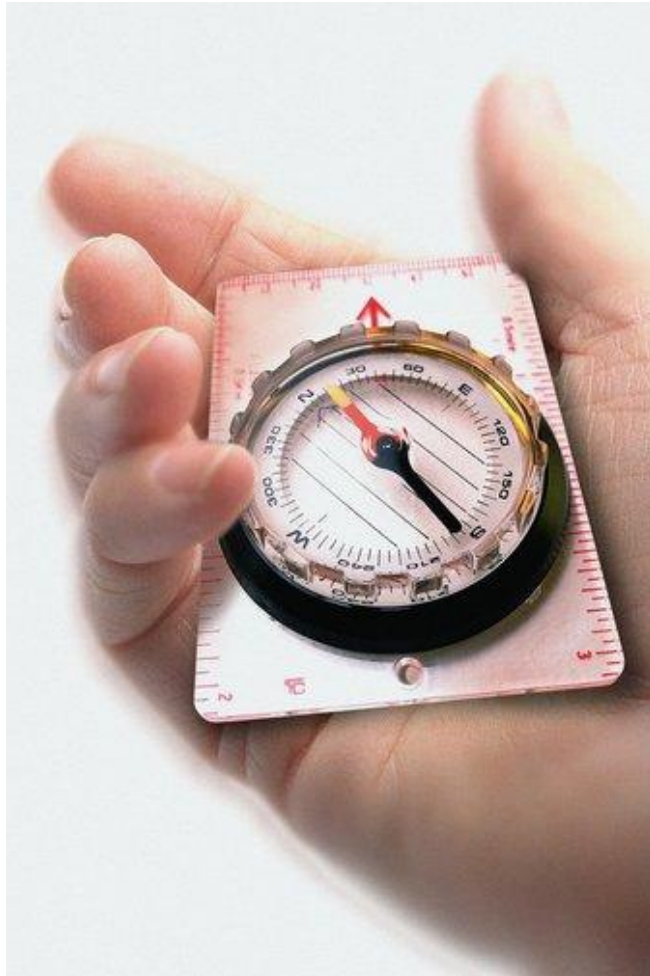# Oracle Database Administration

Course objectives

By completing this course, you will be able to:

- **Understand the goals of the DBA cursus**

- **Use the different tools used during this cursus**

Course topics

Course's plan:

- **Oracle Corporation**

- **DBA curriculum**

- **The DBA in the Company**

- **Labs: Starting with the Virtual Machine**

Oracle Corporation

Preview

These are the chapters that we will approach:

- **Oracle Worldwide Headquarter**

- **Oracle France**

- **Oracle Academy**

- **Oracle Certifications**

Oracle Headquarter

A big company

- **Created in 1977 by Larry Ellison, with his co-founders:**

    - **Bob Miner**

    - **Ed Oates**

- **3rd biggest company of the World (after Microsoft and IBM)**

- **Starts with databases**

- **Exclusive mix of SQL (Dr. Edgar F. Codd) and of relational database**

Oracle Headquarter

A big company

- **84,233 employees (09/14/08)**

- **Corporate Headquarters in Redwood Shores, in California**

- **Represented in 145 countries**

- **Revenue: $22.43B billion USD (05/2008)**

Oracle Headquarter

Oracle Board of Directors

- **Lawrence J. Ellison, Co-founder and CEO**

- **Jeffrey O. Henley, Chairman**

- **Safra A. Catz, President/CFO**
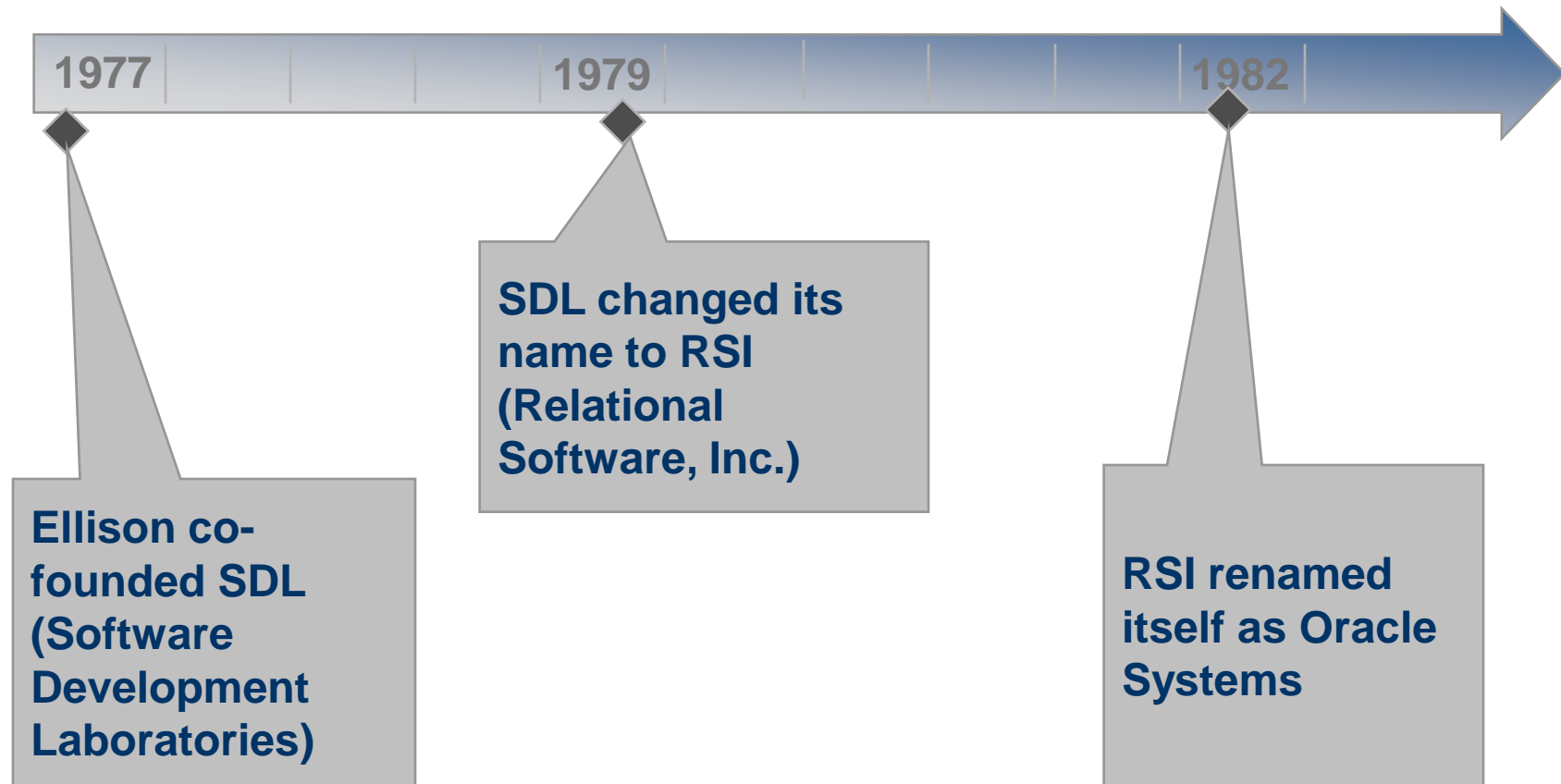
- **Charles Phillips, President**

Oracle Headquarter

Timeline

1977   **1979**   **1982**

SDL changed its name to RSI (Relational Software, Inc.)

Ellison co-founded SDL (Software Development Laboratories)

RSI renamed itself as Oracle Systems

Oracle France

- **Created in 1986**

- **President: Loic Le Guisquet**

- **Corporate Headquarters: 92 – Colombes**

- **Geographical implantation:**

  - **Lyon**

  - **Toulouse**

  - **Bordeaux**

  - **Aix en Provence**

  - **Nantes**

  - **Strasbourg**

  - **Lille**

Oracle Academy

- **Different Offers:**

  - **Introduction (for High Schools)**

  - **Advanced (used by SUPINFO for SQL, PL/SQL, Data Base Administration, Datawarehouse)**

    - **778 schools and Universities and 195 952 students (06/2009)**

  - **Enterprise (used by SUPINFO for ERP Course)**

    - **30 schools and Universities and 1 939 students**

- **Different Advantages:**

  - **40% safe on certifications**

  - **Access to products for development and trainings**

Oracle Certifications

- **SQL Certified Expert**

    - **Introduction to SQL (40€)**

    - **Program with PL/SQL (55€)**

- **OCA (Oracle Certified Associate)**

    - **Introduction to SQL (40€)**

    - **Oracle Database Fundamentals I (55€)**

- **OCP (Oracle Certified Professionnal)**

    - **Oracle Database Fundamentals II (55€)**

    - **Oracle on-Hand Course**

- **OCM (Oracle Certified Master)**

    - **Oracle Database Certified Master Exam**

        (12 people in France, 250 in the whole World)

ORACLE®
UNIVERSITY

ORACLE®
Certified Master

Part 1 Stop-and-think

Do you have any questions ?

DBA curriculum

Preview

These are the chapters that we will approach :

- **DBA course objectives**

- **SUPINFO cursus**

PL/SQL course objectives

After completing this course, you will gain hands-on experience with:

- Installing, creating, and administering an Oracle Database 10*g* Enterprise Edition database

- Configuring the database for an application

- Implementing a backup and recovery strategy

- Employing basic monitoring procedures

SUPINFO Cursus

Our curriculum

B1	**SQL 10*g***	**64 h**
B2	**PL/SQL 10*g***	**56 h**
B3	**Database Administration 10*g***	**68 h**
M1	**Datawarehouse 10*g***	**28 h**

SUPINFO cursus

Your curriculum this year

Duration	**68 hours**
ECTS	**5 credits**
Evaluation	**SOE : Two, 10 min, each 25%** **Graded exercises: One, 2 hours, 50%**
Certification	**1Z0-042: Oracle 10g: Administration I** **1Z0-043: Oracle 10g: Administration II**
Supports	**Shared on SUPINFO Courses**
Tools	**Virtual Machine (mandatory)**

Part 2 Stop-and-think

Do you have any questions ?

The DBA in the Company

Preview

- How DBAs Spend Their Time

- Introduction to the DBA common tasks

How DBAs Spend Their Time
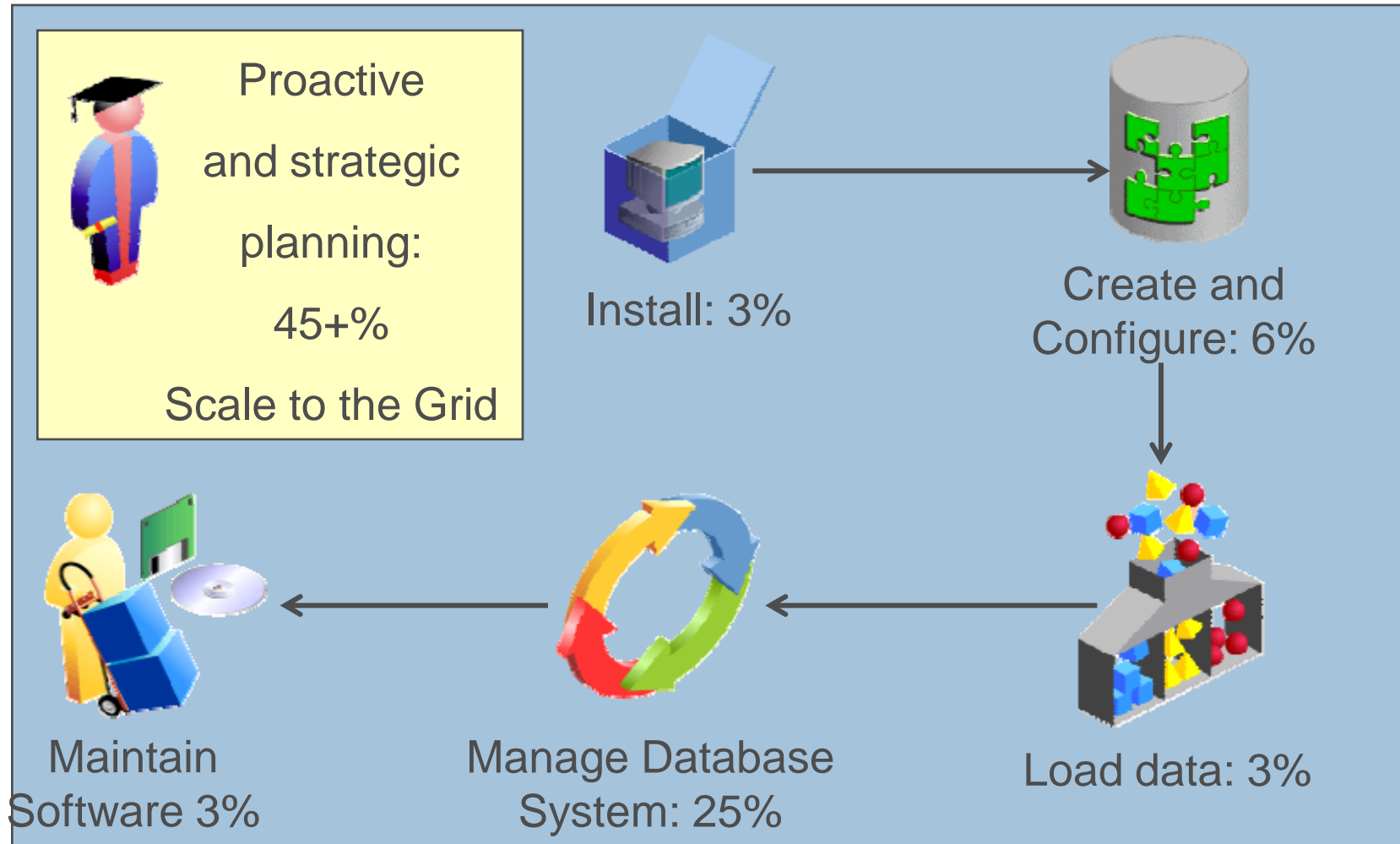
How DBAs Spend Their Time

Install: 6%

Create and Configure: 12%

Load and Archive data: 6%

Manage Database System: 55%

Maintain Software 6%
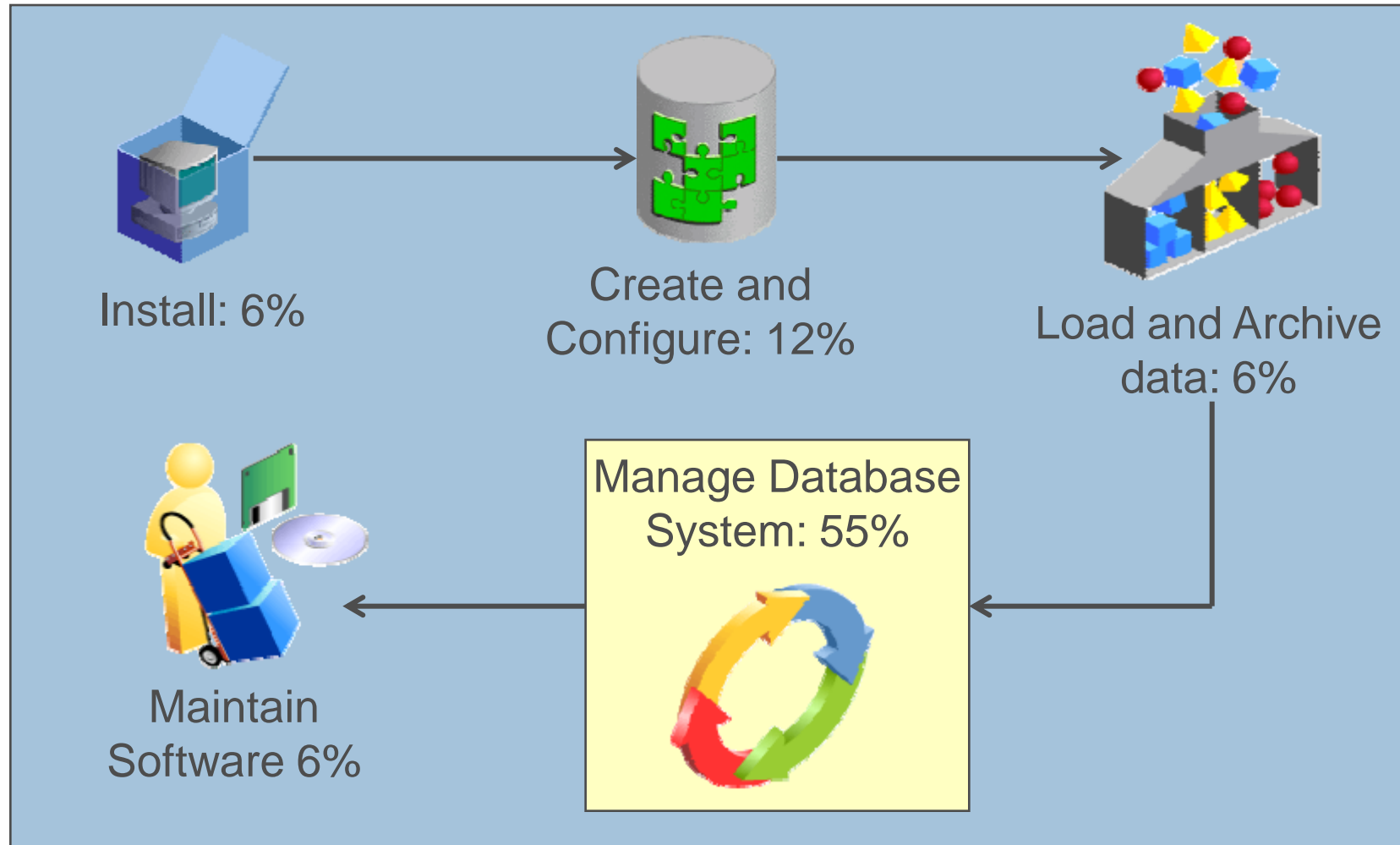
■ Source: Survey conducted at IOUG Live! 2001

How DBAs Spend Their Time

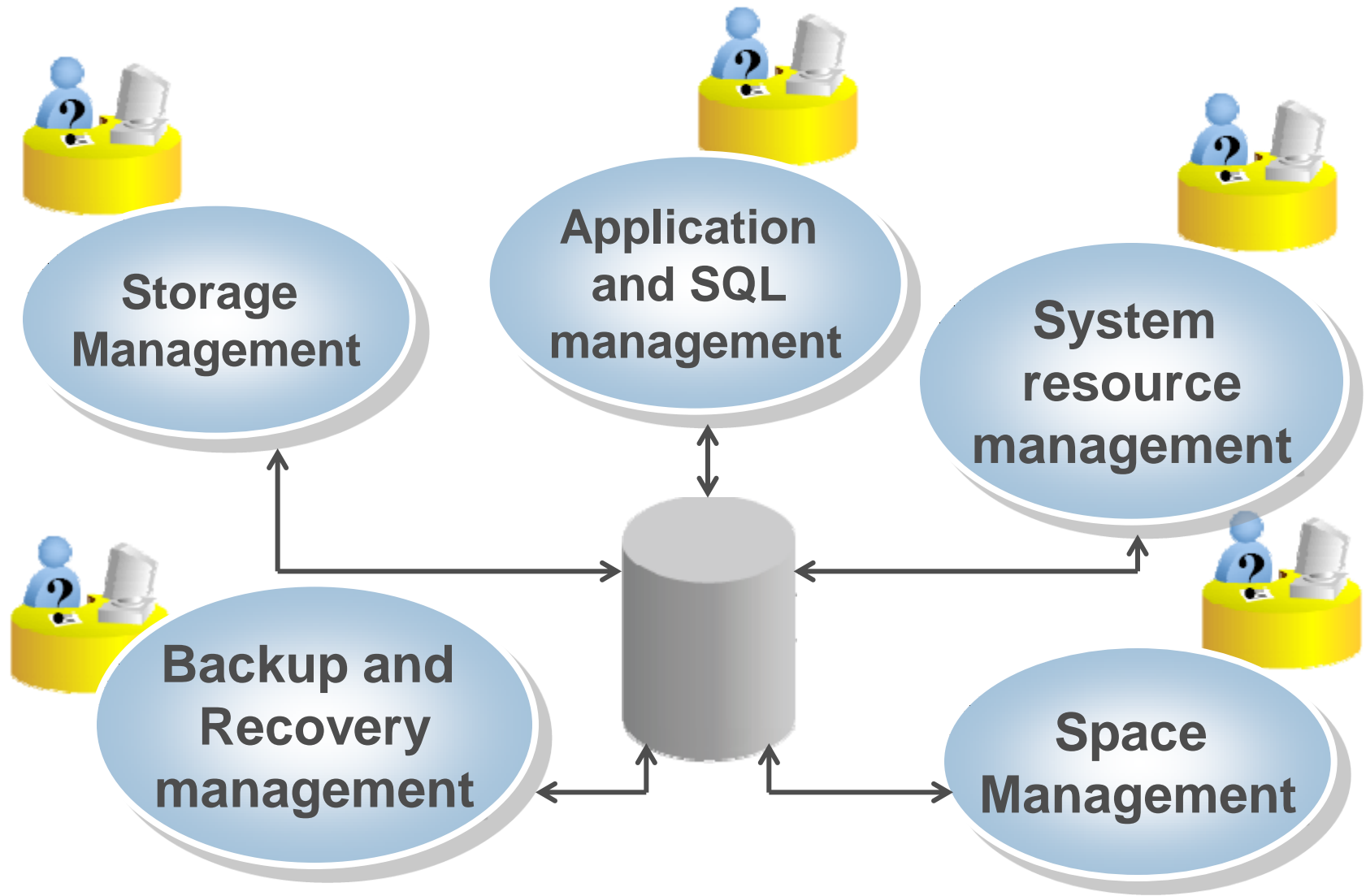## How Oracle Database 10g DBAs spend Their Time

Proactive and strategic planning: 45+% Scale to the Grid

Install: 3%

Create and Configure: 6%

Load data: 3%

Manage Database System: 25%

Maintain Software 3%

Introduction to the DBA Common Tasks

Oracle Database 10g Manageability Goals

Reduce administration costs →

- Automatic versus manual

- Intelligence versus data

Reduce capital expenditures →

- Adaptive versus oversized

- Integrated versus third-party

Reduce failure costs →

- Preventive versus corrective

- Act-and-succeed versus trial-and-error
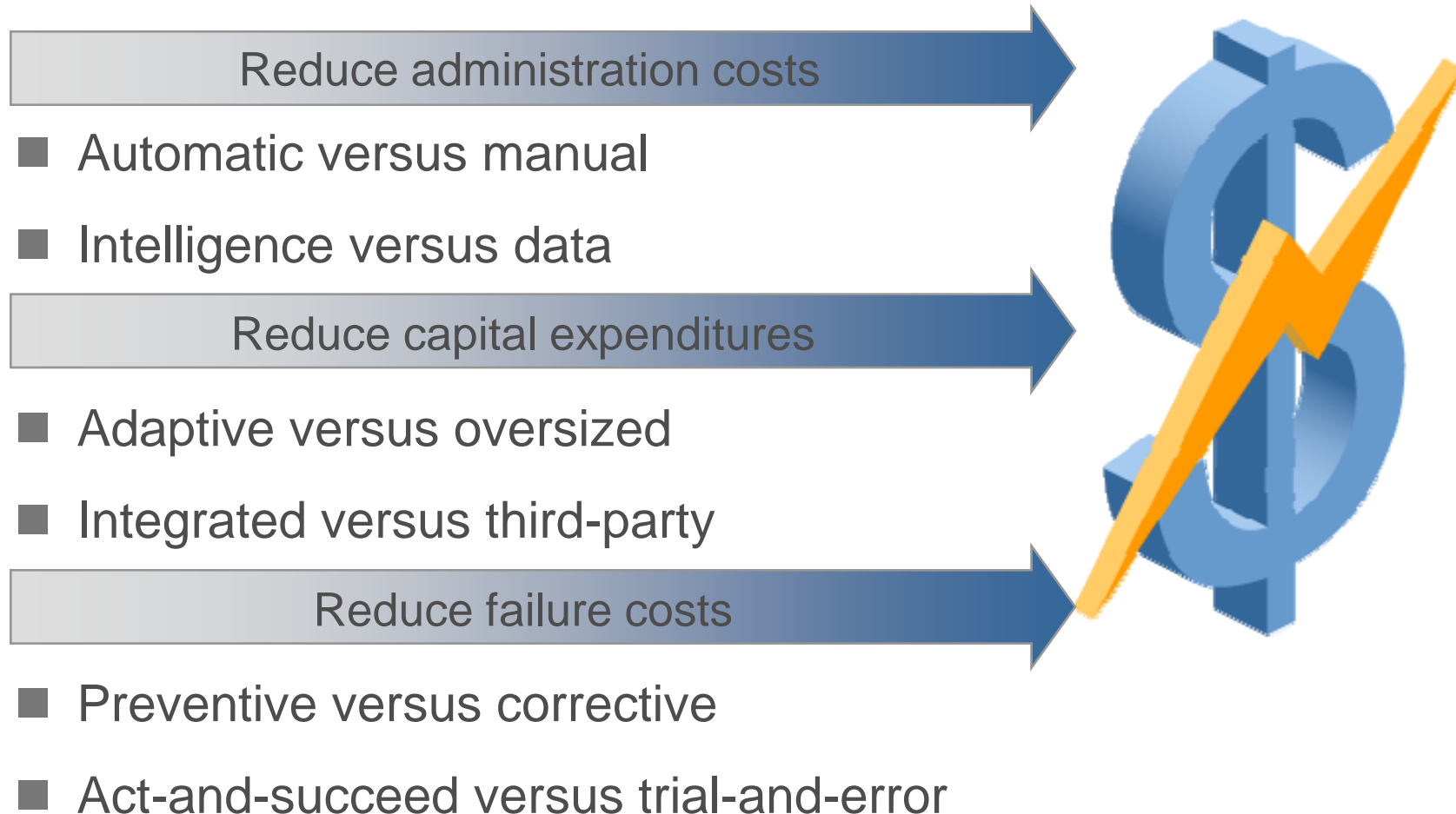
Introduction to the DBA Common Tasks

Database Management Challenges

Storage Management

Application and SQL management

System resource management

Backup and Recovery management

Space Management

Introduction to the DBA Common Tasks

Oracle Database 10g Solution: Self-Managing Database

Enterprise Manager 10*g*

Application and SQL management

Storage management

System Resource management

Monitor

Alert

Automatic management

Fix

Advise

Backup and Recovery management

Space management

Common Manageability infrastructure
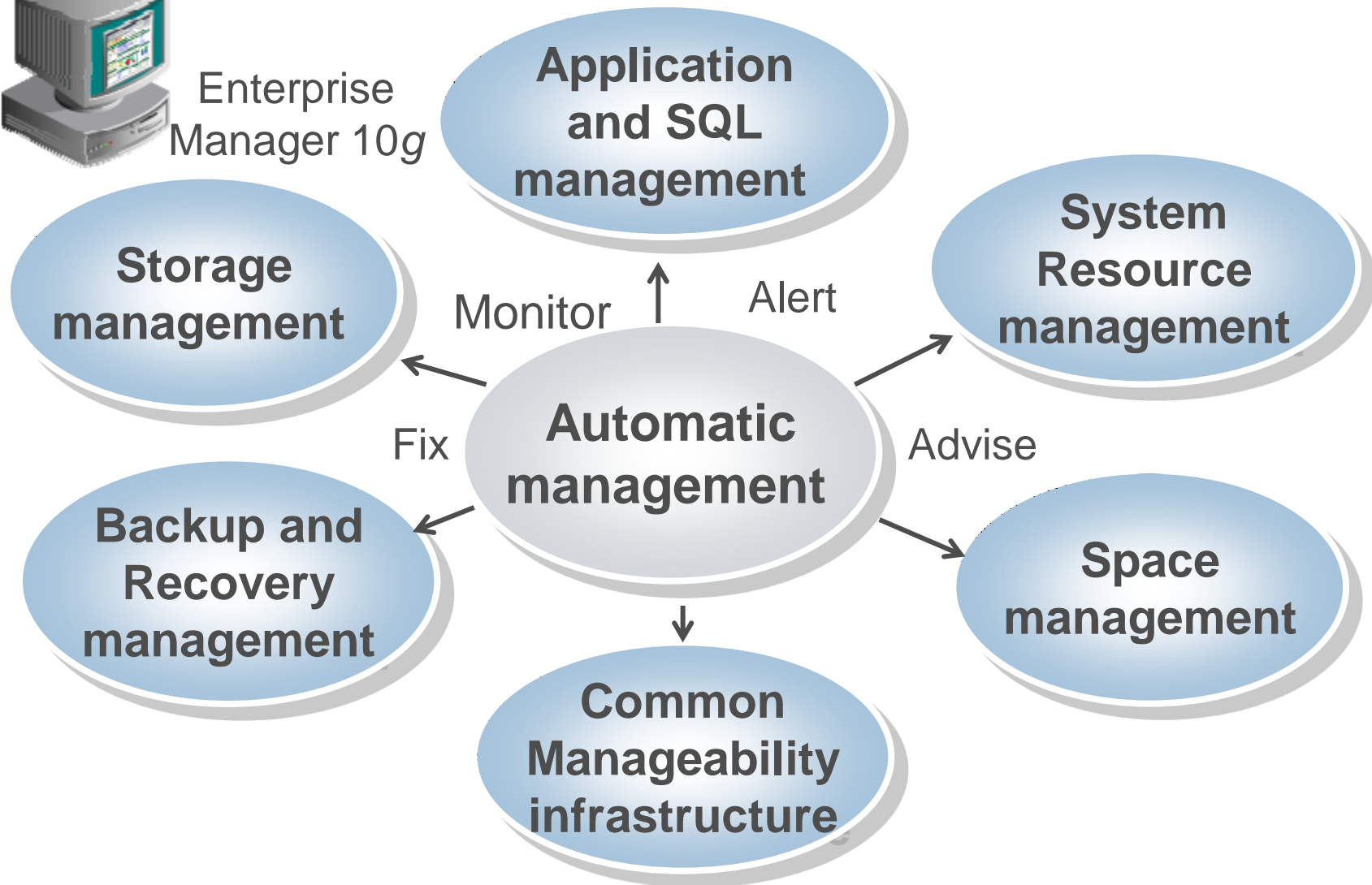
Introduction to the DBA Common Tasks

Student Preface

- Even if topics might not seem to be relevant to you now, your job functions may change due to:

    - New products or methods

    - Changes in your employment

    - Changes in corporate structure

    - Enhancements in applications
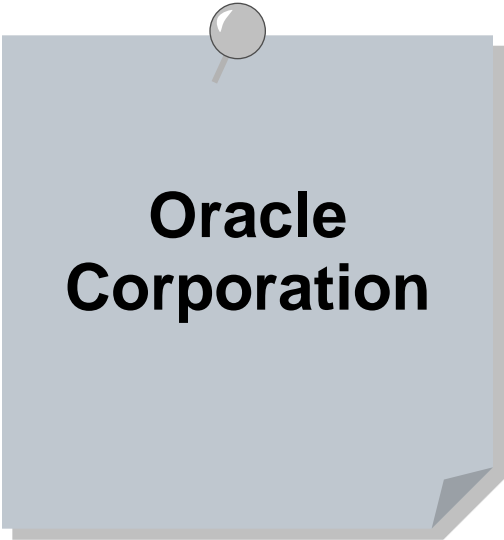
Part 3 Stop-and-think

Do you have any questions ?

Summary

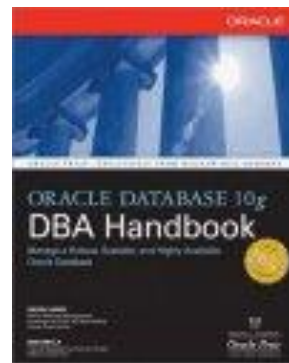**Oracle Corporation**
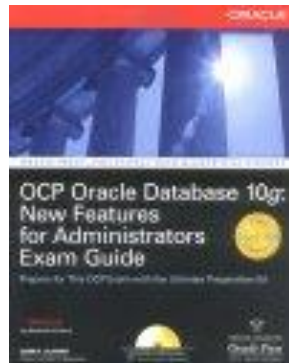
DBA introduction

Our Virtual Machine

For more

If you want to go into these subjects more deeply, …

Publications

http://www.oracle.../bookstore/

Courses

Cursus: Merise & SQL

Cursus: PL/SQL

Cursus: DBA1 & DBA2

Cursus: DWH, OAS & BIS

Web sites

http://www.labo-oracle.com

http://www.oracle.com

http://otn.oracle.com

Certifications

1Z0-042

1Z0-043

The end