
*A Database Object by Any Other Name -
Standards for Creating an Application
Database*

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Introduction

“Carrying a destination sign when hitch hiking is a lot like going to college. Even though deep down inside it may not mean a thing, it's a convenient way of explaining to people what you're up to.”

--Ken Hicks, *The Complete Hitchhiker*

Definition of Terms

DATABASE or Database

- Oracle Database
 - A Container for Data - Everybody's Data
- Application Database
 - The Oracle Database Objects that pertain to just one application

Roles and Responsibilities

- Database Administrator
- Project Manager
- Application Schema Manager
- Application Designers
- Application Developers

Database Objects

- Schemas
- Data Objects
- Procedural Objects

Creating Data Definition Language (DDL)

- Source Code
- File Names
- Commenting Source Code
- DDL and Version Control Systems

File Names

- Name the object being defined or its parent
 - This should often be a Table Name or Alias
- Name the principal DDL command
 - CR for CREATE
 - AL for ALTER
- Name the type of object
 - TB for Table
 - PK for Primary Key Constraint
- Add the proper extension for your execution environment

Comments for Version Control

- Header
- Revision Log
- Get the Revision Number into the Database
 - For Tables and Views use the **COMMENT ON TABLE** command.
 - For Procedural Objects, add a PL/SQL comment to the **BEGIN** section
 - This establishes a reference between the object and the DDL that created it.

Generating DDL for Data Objects

- System Architect
- S-Designer
- Oracle Designer 2000
- Oracle Database Designer

More Standards for DDL

- Storage Parameters for Data Objects
- Data Objects with Initial Values
- Access Control Scripts
 - Scripts to Create and Grant Access to Roles
 - Scripts to Grant Privileges to Users
 - Scripts to Revoke Privileges from Users

Naming Conventions

Why Naming Conventions?

“If you don't find it in the Index, look very carefully through the entire catalogue.”

-- "Consumer's Guide", Sears, Roebuck and Co. (1897)

Tables and Views

- Meaningful Names are the Goal
- Have a Short Table Alias (two or three characters)
 - This is useful in naming other things
- Column Names
- Sequence Names

Matters of Religion

- Singular or plural Table Names
- Prefixes on Column Names
- Naming Foreign Key and other Redundant Columns

Constraint and Index Names

- Primary Key and Unique Constraints
- Foreign Key Constraints and Non-Key Indexes
- Check Constraints

More Naming Conventions

- Database Triggers
- Stored Procedure Names
 - Packages
 - Procedures
 - Functions
- Role Names (new - not in paper)

Summary of Naming Rules

- All Objects:
- Tables and Views:
- Columns:
- Constraints and Indexes:
- Sequences
- Stored Procedures
- Roles (new - not in paper)

Conclusion

“If you don't know where you're going, how will you know when you get there?.”

-- Anonymous

About the Author

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