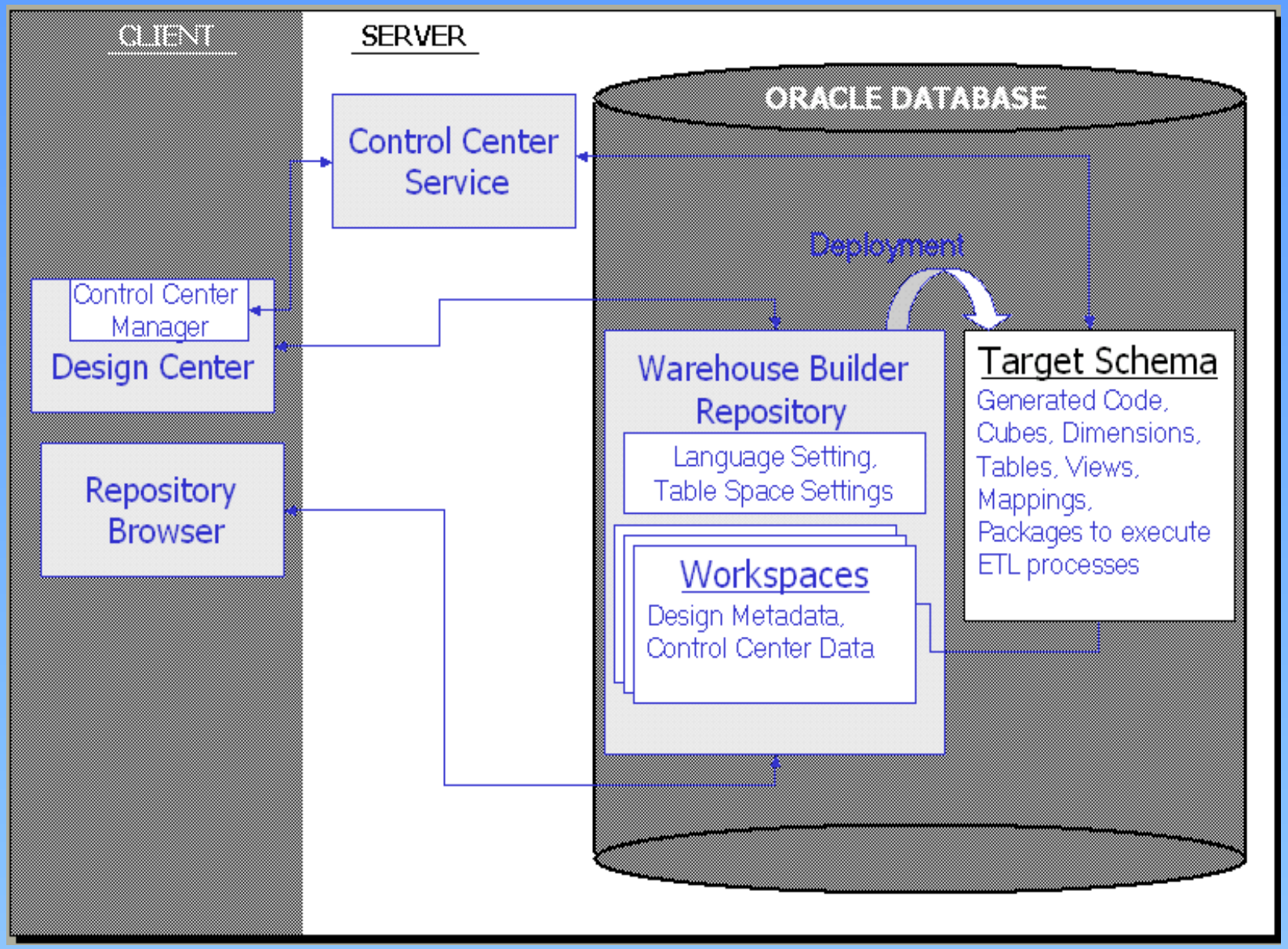
OWB Architecture and Components

Oracle Warehouse Builder is an information integration tool that leverages(controls) the Oracle Database to transform data into high-quality information. The Oracle Database is a central component in the Warehouse Builder architecture because the Database hosts the Warehouse Builder repository and the code generated by Warehouse Builder.

The **Design Center** is the user interface for designing, managing, scheduling, and deploying ETL processes for moving and transforming data.

All metadata associated with the work done in the Design Center is stored in the Warehouse Builder Repository.

The repository is hosted on an Oracle Database and you can use the **Repository Browser** to report on the metadata in the repository. Also hosted on an Oracle Database is the **Target Schema** to which Warehouse Builder loads data resulting from the ETL processes that you run through the **Control Center Service**.


CLIENT
SERVER
ORACLE DATABASE
Control Center Service
Deployment
Control Center Manager
Design Center
Repository Browser
Warehouse Builder Repository
Language Setting, Table Space Settings
Workspaces
Design Metadata, Control Center Data
Target Schema
Generated Code, Cubes, Dimensions, Tables, Views, Mappings, Packages to execute ETL processes

Design Center

The Design Center provides the graphical interface for defining sources, designing targets, and designing ETL and other data transformation processes.

As you create a design in the Design Center, you are working with logical designs only, not physical implementations.

Control Center Manager

The Control Center Manager is the console for managing deployment and job execution. Previously, in the Design Center, you created a logical design for transforming data. Your logical design may have introduced objects that do not yet exist, such as staging tables. Now in the Control Center Manager, you deploy the design. That is, you instruct Warehouse Builder to create the necessary physical objects such as the staging tables, for example. Subsequently, you execute the design. During execution, Warehouse Builder runs the code associated with extracting, transforming, and loading the data.

Target Schema

The target schema is the target to which you load your data and the data objects that you designed in the Design Center such as cubes, dimensions, views, and mappings.

The target schema contains Warehouse Builder components such as synonyms that enable the ETL mappings to access the audit/service packages in the repository.

The repository stores all information pertaining to the target schema such as execution and deployment information.

Notice that the target schema is not a Warehouse Builder software component but rather an existing component of the Oracle Database. As such, you can associate multiple target schemas with a single Warehouse Builder repository. You can have a 1 to 1 relationship or many target schemas to a single repository.

Warehouse Builder Repository

The repository schema stores metadata definitions for all the sources, targets, and ETL processes that constitute your design metadata. In addition to containing design metadata, a repository can also contains the runtime data generated by the Control Center Manager and Control Center Service.

Workspaces

In defining the repository, you create one or more workspaces with each workspace corresponding to a set of users working on related projects. A common practice is to create separate workspaces for development, testing, and production. Using this practice, you can allow users such as your developers access to the development and testing workspaces but restrict them from the production workspace.

Later in the implementation cycle, you also use the Repository Assistant to manage existing workspaces or create new ones.

Repository Browser

The Repository Browser is a web browser interface for reporting on the repository. You can view the metadata, create reports, audit runtime operations and perform lineage and impact analysis. The Repository Browser is organized such that you can browse design-specific and control center-specific information.

Control Center Service

The Control Center Service is the component that enables you to register locations. It also enables deployment and execution of the ETL logic you design in the Design Center such as mappings and process flows.