

# ORACLE DATABASE 11G ORACLE WAREHOUSE BUILDER DATA QUALITY OPTION

## KEY FEATURES AND BENEFITS

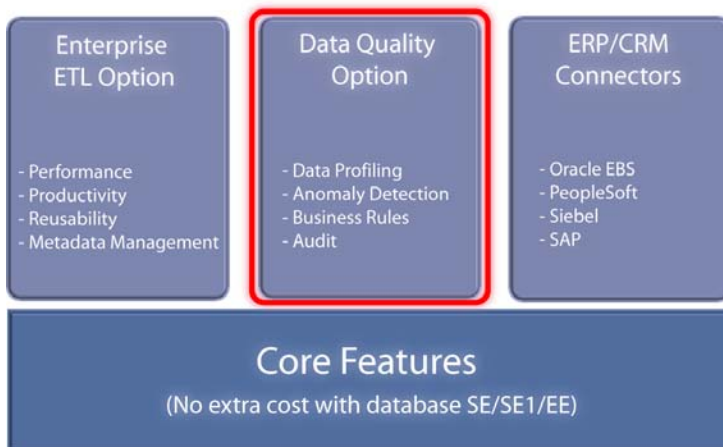
### WAREHOUSE BUILDER

- Providing extraction, transformation, and loading (ETL and E-LT are supported in a single tool)
- Consolidating data from disparate data sources
- Migrating data from legacy systems
- Data modeling of relational and dimensional structures
- Designing and managing corporate metadata
- Cleaning data to provide quality information
- Profiling and auditing data quality

*Oracle Warehouse Builder 11g Release 1 is a single, comprehensive tool for all aspects of data and metadata management. It provides data quality, data auditing, fully integrated relational and dimensional modeling, and full life cycle management of data and metadata.*

### Data Quality Option

The Data Quality option for Warehouse Builder is one of the options that can be purchased with Oracle Warehouse Builder as part of the Enterprise Edition of the RDBMS.

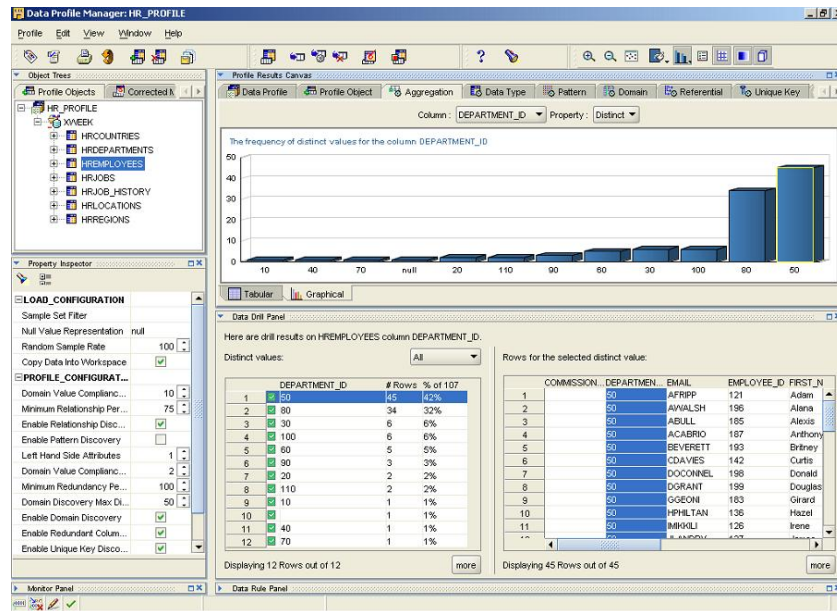


**Figure 1 Warehouse Builder Options**

This datasheet covers only the Data Quality option as shown in Figure 1.

### Data Profiling and Anomaly Detection

The big-ticket item regarding information quality in Warehouse Builder is the capability to assess the quality of your data within Warehouse Builder, commonly known as Data Profiling. The high-level data profiling results are shown in Figure 2.



**Figure 2. Data Profiling in Warehouse Builder**

Using these profiling results Warehouse Builder allows you to derive data cleansing rules, which you can apply to cleanse the data via Extract, Transform and Load routines (ETL) called correction mappings. This integration within the creation of the ETL process is a major differentiator between Warehouse Builder and the classic profiling solutions. The integration makes data profiling with Warehouse Builder much more effective, delivering improved data quality immediately to the business.

### Business Rules

With the right toolset and the right approach to data integration, developers can quickly produce integrated data of high quality. To stay flexible and avoid a lot of hard coding of logic, using metadata and business rules makes perfect sense.

Warehouse Builder, with its extensive business rule logic and embedding of this logic into the ETL process allows for both flexibility and powerful transformation capabilities.

By defining rules and attaching the rules to the data object (e.g. a table) you gain another thing. Error handling and data validation is done exactly the same, making both maintenance and changes easy.

The data rules can also be used in profiling to verify whether the rule is actually present in the data.

### Auditing and Compliance

To ensure your data quality in your target does not fall below your corporate thresholds, you can create a Data Auditor that (continuously) monitors the quality of your data during loads.

If the quality goes below a specified threshold (this can be measured in 6-sigma or %defects), the data auditor will warn you and you can undertake appropriate action. Warehouse Builder also stores this information in the runtime tables so over time

you can see the progress and start extracting this data to trend analysis on the quality of the data over time.

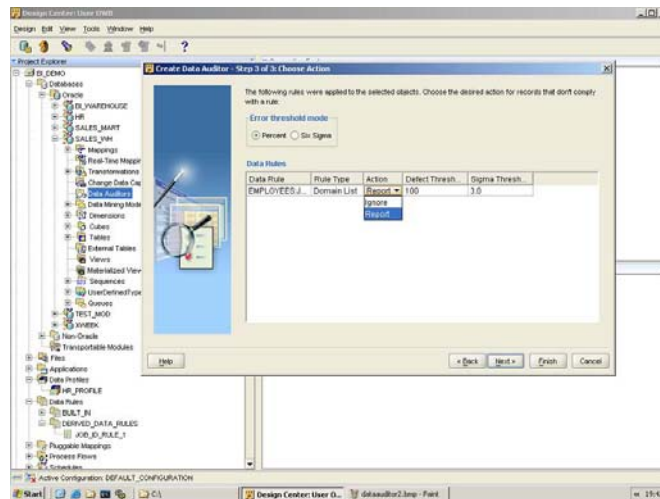


Figure 3 Creating a Data Auditor

### Integrated Information Quality and ETL

Imagine you can generate an entire schema based on what your data looks like, have that schema and the mappings generated, and then correct the data errors while it flows into the target schema? Sounds like science fiction? Well think again, because this is now reality with the correction modules in Warehouse Builder.

In a nutshell this is how it works. Based on the results from data profiling (your data), you can derive or design data rules that describe what the data should look like. Then you choose to generate correction mappings and a schema that will act as a target for these correction mappings. When generating the correction mappings, you can choose cleansing methods to ensure the data fits the data rules while you move it into its target schema.

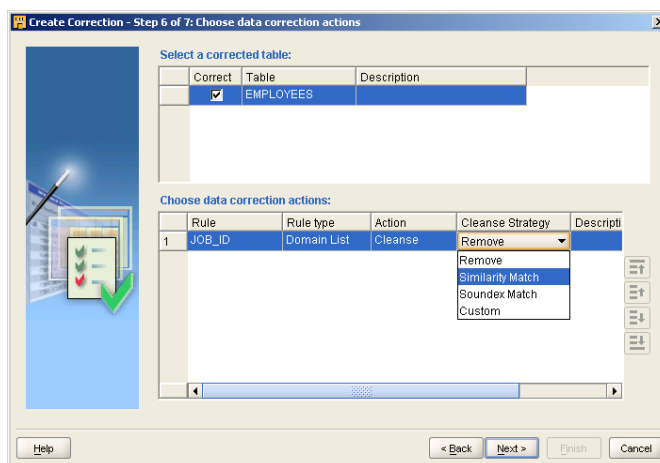


Figure 4 Choosing how to cleanse data

By guiding you through this process, Warehouse Builder speeds up the data integration process tremendously. But since the process is now generated from the

**DATA QUALITY OPTION****KEY FEATURES AND BENEFITS:**

- Data Profiling and Anomaly Detection
- Support for Business Rules
- Auditing and Compliance
- Integrated Information Quality and ETL

**RELATED PRODUCTS**

The following products are available from Oracle:

- Warehouse Builder Data Quality Option
- Warehouse Builder Connectors (SAP, PeopleSoft, Siebel and Oracle eBusiness Suite)
- Oracle Database
- Oracle Partitioning
- Oracle OLAP
- Oracle Gateways

data rules, recreating the process when rules change is going to save you even more time. No need to redevelop, simply change the rule's metadata and regenerate the process and schema and you are up and running again. This is not merely a productivity gain, this is a productivity turbo charger.

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