ORACLE ENTERPRISE DATA QUALITY PRODUCT FAMILY

KEY FEATURES

Oracle Enterprise Data Quality Profile and Audit

- Uncovers and quantifies hidden data problems with profiling
- Uses audit rules to measure the quality of data against your business rules
- Has an easy-to-use interface built for business-IT collaboration

Oracle Enterprise Data Quality Parsing and Standardization

- Transforms and standardizes data such as names, addresses, dates, and phone numbers
- Extracts structured information from free-form text
- Prepares data to optimize its value to business applications

Oracle Enterprise Data Quality Match and Merge

- Matches parties at the individual, group, and household levels
- Works for individuals and corporate entities
- Has fully flexible rules that are easily tuned using prebuilt templates

Oracle Enterprise Data Quality Product Data Parsing and Standardization

- Semantic-based recognition with auto-learning
- Ability to handle multiple product categories and extreme variability
- Item classification, attribute extraction, and standardization
- Standard descriptions in any language
- Governance Studio feature to review and resolve exceptions

Oracle Enterprise Data Quality Product Data Match and Merge

- Exact, similar, and related matches
- Ability to merge records based on survivorship rules
- Governance Studio feature to review and approve matches

The Oracle Enterprise Data Quality family of products helps organizations achieve maximum value from their business-critical applications by delivering fit-for-purpose data. These products also enable individuals and collaborative teams to quickly and easily identify and resolve any problems in underlying data. With Oracle Enterprise Data Quality products, customers can identify new opportunities, improve operational efficiency, and more effectively comply with industry or governmental regulation.

Purpose-Built Data Quality

Ever since there have been databases and applications, there have been data quality problems. All those problems are not created equal, and neither are the solutions that address them. Some of the largest differences are driven by the datatype, or domain, of the data in question. The most common data domains in data quality are customer (or more generally, party data including suppliers, employees, and so on) and product data. Oracle Enterprise Data Quality products recognize these differences and provide purpose-built capabilities to address each.

Quick to deploy and easy to use, Oracle Enterprise Data Quality products bring the ability to enhance the quality of data to all stakeholders in any data management initiative. The Oracle Enterprise Data Quality products are

- Oracle Enterprise Data Quality Profile and Audit
- Oracle Enterprise Data Quality Parsing and Standardization
- Oracle Enterprise Data Quality Match and Merge
- Oracle Enterprise Data Quality Product Data Parsing and Standardization
- Oracle Enterprise Data Quality Product Data Match and Merge

Each of these products is described in the following sections.

Oracle Enterprise Data Quality Profile and Audit

Oracle Enterprise Data Quality Profile and Audit provides a basis for understanding data quality issues and a foundation for building data quality rules for defect remediation and prevention. It provides the ability to understand your data, highlighting key areas of data discrepancy; to analyze the business impact of these problems and learn from historical analysis; and to define business rules directly from the data. This avoids preconceptions of how the data fields relate to each other and quickly identifies weaknesses in existing business processes and technology implementations.

Oracle Enterprise Data Quality Profile and Audit enables business teams to profile large volumes of data from databases, spreadsheets, and flat files with ease. *Phrase profiling*—Oracle's unique approach to understanding text data—helps you to identify key information buried in free-format text data fields. Providing a single staging area that holds gathered statistics, Oracle Enterprise Data Quality Profile and Audit leaves the datasource unaltered.

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Systematic audit reviews detect key quality metrics, missing data, incorrect values, duplicate records, and inconsistencies. When used in conjunction with Oracle Enterprise Data Quality Parsing and Standardization, it can deliver unprecedented understanding of your data.

Results of these profiling and audit processes are presented in easy-to-understand executive dashboards. Using a Web browser, workers and managers can monitor and review ongoing data quality against defined metrics. Data quality dashboards allow problems to be quickly identified and dealt with before they start to cause significant business impact. Graphical views show data quality trends over time, helping your organization protect its investment in data quality by giving visibility to the right people.

Oracle Enterprise Data Quality Parsing and Standardization

Oracle Enterprise Data Quality Parsing and Standardization provides a rich palette of functions to transform and standardize data using easily managed reference data and simple graphical configuration. In addition to functions for basic numeric, string, and date fields, functions for contextual data such as names, addresses, and phone numbers are provided. Users can also quickly configure, package, share, and deploy new functions that encapsulate rules specific to their data and industry without any coding.

Text data is very rarely available in a completely neat and ordered fashion. Typical problems include the following:

- Constructed fields, where a customer ID may be made up of a location code, a customer reference, and an account manager code
- Misfielded data such as names, comments, or telephone numbers in address blocks
- Poorly structured data such as addresses, where data can flow from one field to the next
- Notes fields that store information that the data structure doesn’t support, but that contain useful semistructured data that normally cannot be analyzed or extracted

All of these problems can be solved using Oracle Enterprise Data Quality Parsing and Standardization. Using a data-driven approach to rapidly tag or describe data, it can manipulate a single record by parsing it into multiple structured elements (and, if required, records) and standardize results according to predefined rules. Innovative parsing and phrase analysis technology uniquely allows you to find hidden knowledge within any text field and create rules to standardize it into structured data.

Oracle Enterprise Data Quality Parsing and Standardization can also be used to audit against defined business rules and transform data on the fly against those rules, providing a flexible and adaptable data quality firewall. In addition, it allows the entire assembled data quality process to be called as a real-time Web service. Results of the parsing and standardization processes can be viewed in graphical dashboards that provide a complete, accurate, and accessible view of your business world.

Oracle Enterprise Data Quality Match and Merge

Matching is a key component of many data quality projects and can be used to support different activities such as deduplication, consolidation, customer data integration (CDI), and master data management (MDM). Oracle Enterprise Data Quality Match and Merge provides powerful matching capabilities that allow you to identify matching records and optionally link or merge matched records based on survivorship rules. Flexible yet intuitive rule configuration

enables you to tune the rules to suit the task and support an iterative approach. A separate capability for simple reviews allows you to expose the match results for review, without access to the underlying rules configuration. Used in conjunction with the other members of the product family, Oracle Enterprise Data Quality Match and Merge becomes an extremely powerful and flexible solution that can be tailored to produce impressive results in any number of differing projects.

Oracle Enterprise Data Quality Match and Merge also includes a connector that enables you to easily access data in Oracle's Siebel CRM. Audit capabilities allow you to run data quality rules and flow-control within your data quality processes. Dashboard functionality presents results of the audit processes in graphical format, while real-time Web service functionality enables the whole assembled data quality process to be called as a real-time service.

Oracle Enterprise Data Quality Product Data Parsing and Standardization

In the world of data quality, product data provides some specific challenges. The rules governing product data are specific to the category of product being described. For example, the data quality rules for resistors are different from capacitors, which are also different from switches, fasteners, and any other product category. Each product category will have different vocabulary, terms, abbreviations, valid values, and standardizations. In addition, product information is typically communicated through nonstandard description fields that must be recognized and parsed. Compounding this problem, most data quality scenarios involving product data do not cover just one category but hundreds or thousands of product categories.

To handle this level of variability, Oracle Enterprise Data Quality Product Data Parsing and Standardization uses semantic recognition to quickly recognize the product category and apply the correct rules based on context. Based on the context, it can also make inferences about the meaning of a particular word or phrase and "learn" new rules and context as it goes along. Once properly recognized, product information can be transformed and standardized including classifications, attributes, and descriptions that can be generated in any language for consumption in downstream systems.

Oracle Enterprise Data Quality Product Data Match and Merge

Product data also presents specific challenges for matching and merging product records. Oracle Enterprise Data Quality Product Data Parsing and Standardization is typically used to create a standardized product record, while Oracle Enterprise Data Quality Product Data Match and Merge is able to identify exact, similar, and related records and optionally merge them based on defined survivorship rules.

Oracle Enterprise Data Quality Product Data Match and Merge can operate in any language and includes a connector to Oracle Product Hub, allowing clean, standardized, deduplicated product information to be loaded to the MDM hub.

Integration with Oracle Master Data Management

Data quality and MDM are highly interrelated. MDM hubs need to be loaded with high-quality, complete, and standardized information. Once a piece of data is transformed to conform to relevant data quality rules, that piece of information should be stored as reference data in a hub. Oracle Enterprise Data Quality products can be used with any MDM solution but come preintegrated with Oracle Customer Hubs and Oracle Product Hub.

Integration with Oracle Data Integration

When data is being moved between systems, there is a need to ensure the quality, consistency, and overall usability of that data. Conversely, one could question the value of integrating data that is of unknown quality and consistency. Oracle Enterprise Data Quality can be used with any data integration or ETL system but is preintegrated with Oracle's flagship product for data movement and transformation, Oracle Data Integrator. This integration enables customers to take advantage of Oracle Enterprise Data Quality products in their integration projects for simple and rapid deployment as part of a complete data integration solution.

Contact Us

For more information about Oracle Enterprise Data Quality products, visit oracle.com or call +1.800.ORACLE1 to speak to an Oracle representative.

Oracle is committed to developing practices and products that help protect the environment

Hardware and Software, Engineered to Work Together

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