

Oracle Data Integrator

ORACLE DATA INTEGRATOR

- E-LT architecture delivers highest performance.
- Active Integration platform enables comprehensive and evolutionary data integration.
- Declarative design improves user productivity.
- Knowledge Modules provide modularity, flexibility, and extensibility.

FUNCTIONALITY:

- Supports all transformations and data controls on disparate systems.
- Performs complex joins between tables, aggregations, and complex calculations.
- Controls data integrity on the fly while data is processing.
- Designs and deploys the integration infrastructure quickly and easily, with little or no programming.
- Standard Data Quality and optional Advanced Data Governance features
- Provides strong metadata features including dependency graphs, cross-referencing, and impact analysis reports.
- Automatically implements Changed Data Capture on the source systems.
- Accesses and integrates all database systems, ERPs and CRMs, B2B systems, flat files, LDAP repositories, and XML data sources.
- Integrates into a service-oriented architecture and provides automatically generated data services.
- Generates native code for distributed database engines and coordinates their work.
- Executes the complete integration process, from data transformation and transfer to error recovery and reporting.

In today's fast-paced, information-based economy, companies must be able to quickly integrate vast amounts of data from disparate systems. Oracle Data Integrator streamlines the high-performance movement and transformation of data between disparate systems in batch, real-time, synchronous, and asynchronous modes. Its innovative, modular design and built-in connectivity to all major databases, data warehouse appliances, analytic applications, and Service-Oriented Architecture (SOA) suites dramatically enhance user productivity.

Product Overview

Oracle Data Integrator is a comprehensive data integration platform that covers all data integration requirements—from high-volume, high-performance batches, to event-driven, trickle-feed integration processes, to SOA-enabled data services.

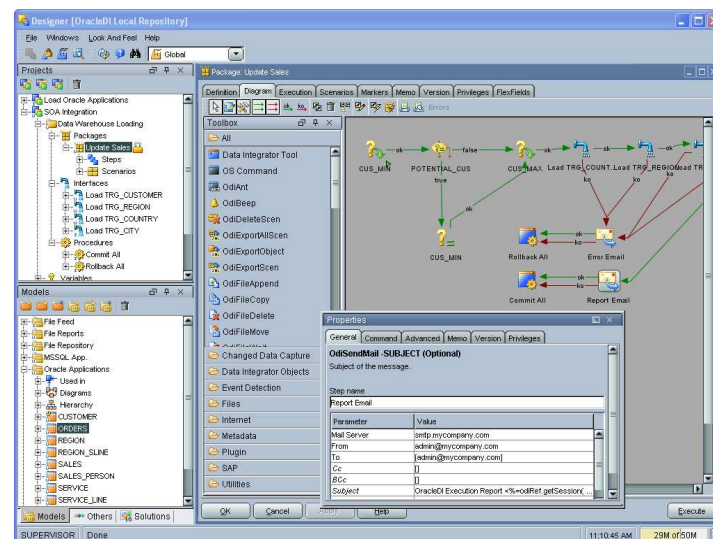


Figure 1: Oracle Data Integrator covers all data integration needs.

Oracle Data Integrator addresses multiple enterprise data integration needs.

- **Data Warehousing and Business Intelligence**—by executing high-volume, high-performance loading of data warehouses, data marts, On Line Analytical Processing (OLAP) cubes, and analytical applications. It transparently handles incremental loads and slowly changes dimensions, manages data integrity and consistency, and analyzes data lineage.

- **Service-Oriented Architecture**—by calling on external services for data integration and by deploying data services and transformation services that can be seamlessly integrated within an SOA infrastructure. It adds support for high-volume, high-performance bulk data processing to an existing service-oriented architecture.
- **Master Data Management (MDM)**—by providing a comprehensive data synchronization infrastructure for customers who build their own data hubs, work with packaged MDM solutions, or coordinate hybrid MDM systems with integrated SOA process analytics and Business Process Execution Language (BPEL) compositions.
- **Migration**—by providing efficient bulk load of historical data (including complex transformations) from existing systems to new ones. It continues to seamlessly synchronize data for as long as the two systems coexist.

E-LT Architecture for High Performance

Oracle Data Integrator's Extract, Load, Transform (E-LT) architecture leverages disparate relational database management systems (RDBMS) engines to process and transform the data. This approach optimizes performance and scalability and lowers overall solution costs.

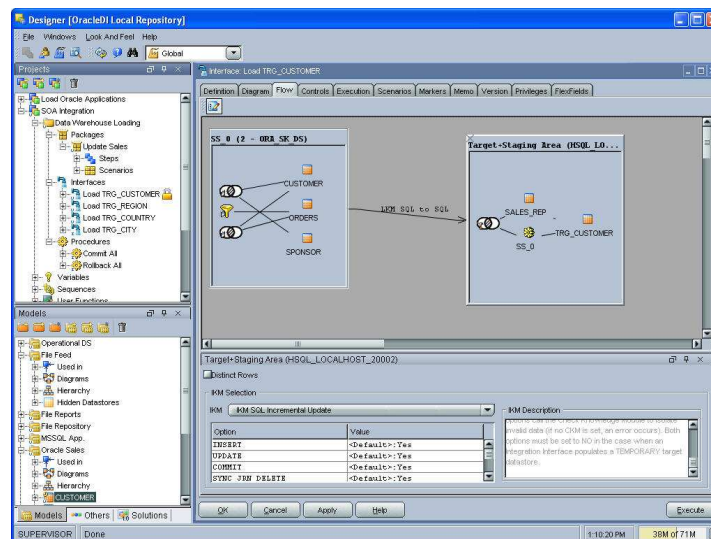


Figure 2: The E-LT architecture leverages source and target systems for data integration.

Instead of relying on a separate, conventional ETL transformation server, Oracle Data Integrator's E-LT architecture generates native code for disparate RDBMS engines (SQL, bulk loader scripts, for example).

E-LT architecture extracts data from sources, loads it into a target, and transforms it using the database power. By leveraging existing databases and database expertise, Oracle Data Integrator provides unparalleled efficiency and lower cost of ownership. By reducing network traffic and transforming data in the database containing the target tables, E-LT architecture delivers the highest possible performance.

Active Integration

Oracle Data Integrator turns the promise of Active Integration into reality by providing all key components required to enable real-time data warehousing and operational data hubs. Additional native hooks to Oracle SOA Suite provide comprehensive and hot-pluggable (working seamlessly with existing systems) data services integration.

Oracle Data Integrator combines three styles of data integration: data based, event based, and service based. Oracle Data Integrator unifies silos of integration by transforming large volumes of data in batch, by processing events in real time through its advanced Changed Data Capture, and by providing data services to the Oracle SOA Suite. All integration processes provide robust data integrity controls which guarantee the consistency and correctness of data on the fly.

Declarative Design Improves Developer Productivity

Oracle Data Integrator shortens implementation times with its declarative design approach. Designers specify *what* they want to accomplish with their data, and then the tool generates the details of *how* to perform the task.

Unlike conventional ETL design, with Oracle Data Integrator, the business user or the developer specifies the rules to apply to the integration processes. The tool automatically generates data flows, manages their complexity, and administers the correct instructions for the various source and target systems.

With declarative design, the number and complexity of steps is greatly reduced, which in turn shortens implementation times. Automatic code generation reduces the learning curve for integration developers and streamlines access by non-IT professionals to the definition of their integration processes and data formats.

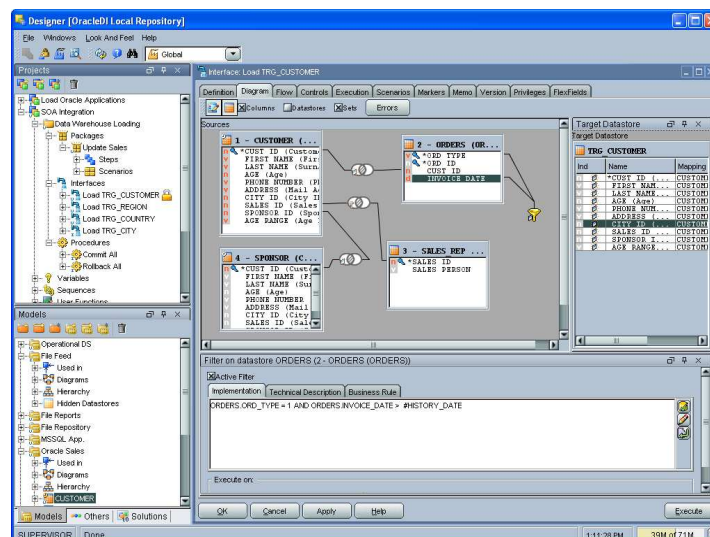


Figure 3: Users design data integration processes through a graphical, point-and-click interface.

ORACLE DATA INTEGRATOR**KEY BENEFITS:**

- E-LT architecture leverages diverse RDBMS engines to process and transform data, optimizing performance and scalability and lowering overall solution cost.
- Data Quality capabilities included inline with Data Integrator with optional advanced governance features from Oracle Data Quality for Data Integrator and Oracle Data Profiling
- Turns Active Integration into reality by providing all key components required for real-time data warehousing and operational data hubs, and by plugging into Oracle SOA Suite for comprehensive integration.
- Declarative design shortens implementation times by insulating the business rules from the data flow implementation and by accelerating maintenance.
- Knowledge Modules drive modularity, flexibility and extensibility of all integration processes.

RELATED PRODUCTS**AND SERVICES:**

- Oracle Data Quality for Data Integrator
- Oracle Data Profiling
- Oracle Business Intelligence Suite
- Oracle SOA Suite
- Oracle Data Hubs
- Oracle BPA Suite

Knowledge Modules Provide Flexibility and Extensibility

Knowledge Modules are at the core of the Oracle Data Integrator architecture. They make all Oracle Data Integrator processes modular, flexible, and extensible.

Knowledge Modules implement the actual data flows and define the templates for generating code across the multiple systems involved in each process. Knowledge Modules are generic, because they allow data flows to be generated regardless of the transformation rules. And they are highly specific, because the code they generate and the integration strategy they implement are finely tuned for a given technology. Oracle Data Integrator provides a comprehensive library of Knowledge Modules, which can be tailored to implement existing best practices (for example, for highest performance, for adhering to corporate standards, or for specific vertical know-how).

By helping companies capture and reuse technical expertise and best practices, Oracle Data Integrator's Knowledge Module framework reduces the cost of ownership. It also enables metadata-driven extensibility of product functionality to meet the most demanding data integration challenges.

Sample of available Knowledge Modules:

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|--------------------------|------------------------------------|
| • General SQL DB | • Teradata V2R5.0 |
| • Oracle DB 9i | • Teradata V2R6.0 |
| • Oracle DB 10g | • Teradata 12 |
| • Oracle DB 10g XE | • Netezza Performance Server 2.2.1 |
| • Oracle DB 11g | • Hyperion Essbase* |
| • IBM DB2/400 | • PostgreSQL 8.1 |
| • IBM DB2/UDB | • MySQL 4.0 |
| • IBM Informix SE | • MySQL 5.0 |
| • IBM LDAP Server | • Oracle BI Suite 10g |
| • MS SQL Server 2000 | • Oracle BAM 10g |
| • MS SQL Server 2005 | • Oracle Internet Directory 9i |
| • MS SQL Server 2005 SE | • OpenLDAP 2.3 |
| • MS Office Access 2000 | • Oracle Siebel CRM 7.8* |
| • MS Office Excel 2000 | • Oracle JD Edwards* |
| • MS Active Directory | • Oracle PeopleSoft* |
| • Sybase ASA 8.x & 9.x | • Oracle E-Business Suite* |
| • Sybase ASE 11.9 & 12.5 | • Oracle AQ 10g |
| • Sybase IQ 12.x | • Oracle SOA Suite / ESB 10g |
| • Sonic MQ v7.0 | • Salesforce.com AppExchange |

* Preview releases

Contact Us

For more information on the Oracle Data Integrator, call +1.800.ORACLE1 to speak to an Oracle representative or visit <http://otn.oracle.com/goto/odi/>

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