

## FUSION MIDDLEWARE

# ORACLE DATA INTEGRATOR ENTERPRISE EDITION

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### KEY FEATURES

- Out-of-box integration with databases, ERPs, CRMs, B2B systems, flat files, XML data, LDAP, JDBC, ODBC
- Knowledge module framework for extensibility
- In-database transformations and data integrity control on all databases
- Richest ETL for Oracle databases including Oracle Exadata, with complex dimension and cube loading support
- Integrates to Oracle GoldenGate for real-time data warehousing
- Metadata-driven data lineage and impact analysis
- Integrates with Oracle Enterprise Data Quality for advanced profiling, cleansing, matching and data governance needs

### KEY BENEFITS

- Leading Performance
- Improved Productivity
- Flexibility
- Lowest Total Cost of Ownership

### UNIQUE BENEFITS

- Cuts hardware costs through improved utilization and high-performance data integration
- Unifies data-based, event-based, and service-based integration in a single solution
- Lowers total cost of ownership and by maximizing designer productivity
- Open, 100% Java, SOA, Standards based
- Supports heterogeneous sources, targets, and applications

*Oracle Data Integrator Enterprise Edition 11g delivers high-performance data movement and transformation among enterprise platforms with its open and integrated E-LT architecture. With the emergence of new data trends and the inherent benefits to organizational agility, Oracle Data Integrator Enterprise Edition is critical to leveraging initiatives, such as Big Data as well as Data Warehousing, Service Oriented Architecture and Business Intelligence. With an easy-to-use interface combined with a rich extensibility framework Oracle Data Integrator Enterprise Edition helps improve productivity, reduce development costs and lower total cost of ownership among data-centric architectures. Oracle Data Integrator Enterprise Edition is fully integrated with Oracle Fusion Middleware, Oracle Database, and Exadata to put data at the center of your enterprise. In addition, Oracle Data Integrator Enterprise Edition is open and standards-based to work with 3rd party applications as well as Oracle's applications.*

### About Oracle's Data Integration Solutions

Oracle is a leader in the Data Integration market, with the industry's most comprehensive fully-integrated offering in data integration, including Oracle Data Integrator Enterprise Edition, Oracle GoldenGate and Oracle Enterprise Data Quality. Oracle's Data Integration solutions provide continuous access to timely, trusted, and heterogeneous data across the enterprise to support both analytical and operational data integration.

### What's new in 11g?

New capabilities included in Oracle Data Integrator Enterprise Edition 11g:

- High performance E-LT capabilities integrated with Oracle GoldenGate enable faster and more efficient loading and transformation of real-time data into a data warehouse. Customers can now deploy real-time data warehousing solutions without impacting source systems or batch window dependencies.
- Better productivity with new mapping wizards, quick-editor, generated code simulation and enhanced error table management.
- Improves usability and manageability with integrations to Oracle JDeveloper and Oracle Enterprise Manager.
- Support for online analytical processing (OLAP), SAP and extended APIs that can be embedded directly within custom applications.
- Direct integration into Oracle WebLogic and Oracle Coherence deployments, improving scalability and performance.

## Simplifying the Complexity of Data Integration

Oracle Data Integrator Enterprise Edition addresses multiple enterprise data integration needs.

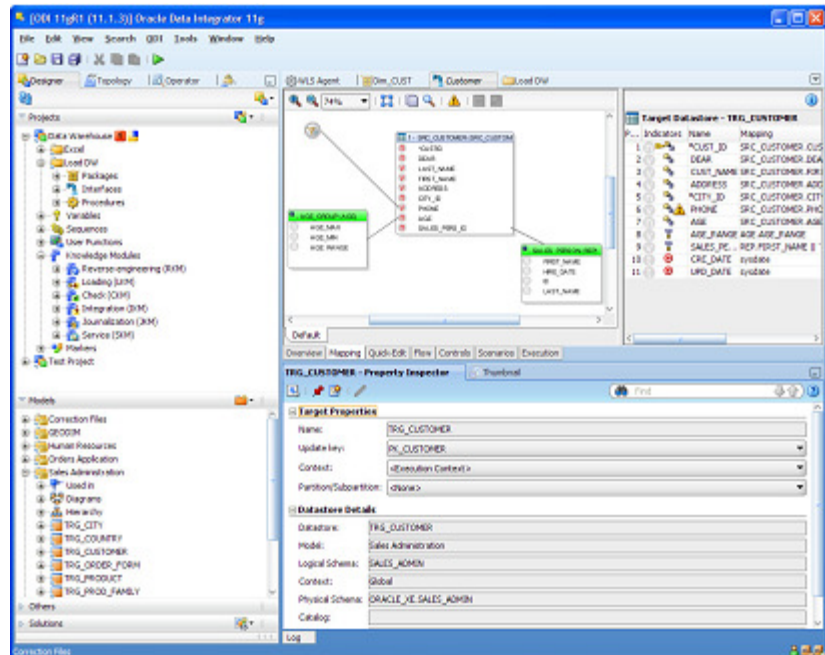
- **Data Warehousing and Business Intelligence**—by executing high-volume, high-performance loading of data warehouses, data marts, On Line Analytical Processing (OLAP) cubes, and analytical applications. Oracle Data Integrator transparently handles incremental loads and slowly changing dimensions, manages data integrity and consistency, and analyzes data lineage.
- **Big Data**—by providing prebuilt integration with Big Data technologies, such as HDFS and Hive, businesses can now leverage additional sources of data previously too large and unwieldy to gain benefits from. Oracle delivers integration for Big Data technologies leveraging a metadata driven process while enabling data integration resources to easily manage how Big Data is extracted, loaded and transformed.
- **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 Enterprise Edition'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.

Instead of relying on a separate, conventional ETL transformation server, Oracle Data Integrator Enterprise Edition'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 Enterprise Edition 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.



**Figure 1 - Oracle Data Integrator Enterprise Edition Studio**

### High-Productivity Designer for Data Integration

Oracle Data Integrator Enterprise Edition 11g introduces a new JDeveloper-based integrated development environment (IDE) called the Oracle Data Integrator Enterprise Edition Studio. This client is designed to dramatically increase the developer's productivity and make it easy to implement advanced features in data loading and transformation. New features like "quick-edit" support mass-updates, and intuitive and accessible keyboard navigation.

In addition, Oracle Data Integrator Enterprise Edition follows a declarative design model, which simplifies common data integration design and deployment use cases, shortening implementation times. Data integration designers describe source and target data formats and data integration processes. The business user or the developer can focus on describing what to do, not how to do it. Oracle Data Integrator Enterprise Edition generates, deploys and manages the code required to implement those processes across the various source and target systems.

### Enterprise Deployment for High Availability and Scalability

Oracle Data Integrator Enterprise Edition integrates to Oracle Fusion Middleware as a platform. Specifically, Oracle Data Integrator Enterprise Edition provides its run-time components as Java EE applications, enhanced to fully leverage the capabilities of the Oracle WebLogic and Oracle Coherence. Oracle Data Integrator Enterprise Edition components include exclusive features for Enterprise-Scale Deployments, high availability, scalability, and hardened security.

High-Availability (HA) and Scalability is fully supported via clustered deployments for Java EE components. Oracle Data Integrator Enterprise Edition components deployed in WebLogic Server benefits from the capabilities of clustering for scalability, including JDBC connection pooling and load balancing. In addition to the cluster-inherited HA capabilities, the run-time agent also supports a connection retry mechanism to transparently recover sessions running in repositories that are stored in HA-capable database engines such as Oracle RAC.

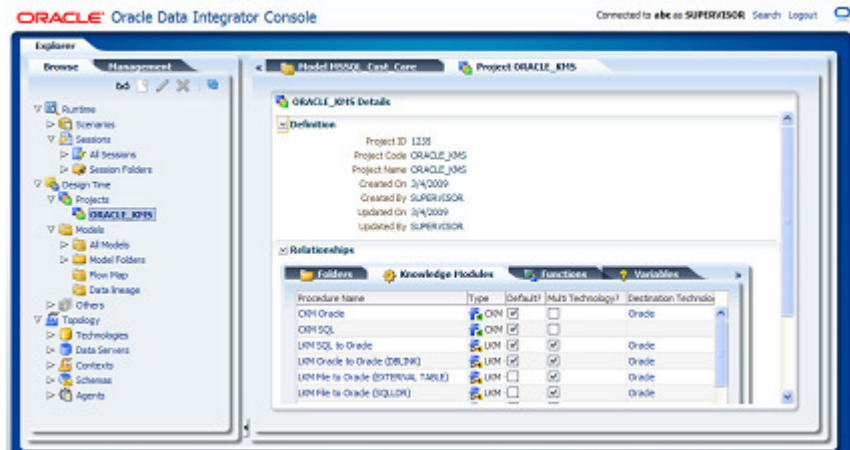


Figure 2: Oracle Data Integrator Enterprise Edition Console

### Unified Administration and Management

Oracle Data Integrator Enterprise Edition simplifies complex data-centric deployments by improving visibility and control for with a unified set of management interfaces.

The Oracle Data Integrator Enterprise Edition Console leverages the Oracle Application Development Framework (ADF) and Ajax Framework for a rich user experience. Using this console, production users can set up an environment, export and import the repositories, manage run-time operations, monitor the sessions, diagnose the errors, browse design-time artifacts and generate lineage reports.

In addition, this interface integrates seamlessly with the Oracle Enterprise Manager Fusion Middleware Control Console and allows administrators to monitor from a single screen not only their data integration components but their other Fusion Middleware components as well.

### Knowledge Modules Provide Flexibility and Extensibility

Knowledge Modules are at the core of the Oracle Data Integrator Enterprise Edition architecture. They make all Oracle Data Integrator Enterprise Edition 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 Enterprise Edition 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 Enterprise Edition'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.

**RELATED PRODUCTS AND SERVICES**

Oracle Data Integrator Enterprise Edition delivers unique next-generation, extract load and transform (E-LT) technology that improves performance, reduces data integration costs and improves productivity.

**RELATED PRODUCTS**

- Oracle GoldenGate
- Oracle Enterprise Data Quality
- Oracle Exadata
- Oracle Business Intelligence
- Oracle SOA Suite
- Oracle Database
- Oracle Data Warehousing
- Oracle Master Data Management

**RELATED SERVICES**

The following services are available from Oracle Support Services:

- Update Subscription Services
- Product Support Services

Sample of Available Knowledge Modules	
<ul style="list-style-type: none"> <li>• Oracle Database</li> <li>• Oracle Loader for Hadoop</li> <li>• Hadoop Hive Transformation</li> <li>• Oracle GoldenGate</li> <li>• IBM DB2/400</li> <li>• IBM DB2 UDB</li> <li>• Informix</li> <li>• JD Edwards Enterprise One</li> <li>• JMS</li> <li>• Microsoft Access</li> <li>• Microsoft Excel</li> <li>• Microsoft SQL Server</li> <li>• Netezza</li> <li>• Oracle Business Intelligence Enterprise Edition</li> </ul>	<ul style="list-style-type: none"> <li>• Oracle E-Business Suite</li> <li>• Oracle Service Bus</li> <li>• Oracle Hyperion Essbase, Financial Management, Planning</li> <li>• Oracle OLAP</li> <li>• Oracle PeopleSoft</li> <li>• Oracle Siebel CRM</li> <li>• SAP ABAP ERP</li> <li>• SAP ABAP BW</li> <li>• Sybase ASE</li> <li>• Sybase IQ</li> <li>• Teradata</li> <li>• Hypersonic SQL</li> <li>• Generic SQL</li> <li>• XML</li> </ul>

**Heterogeneous**

Oracle Data Integrator Enterprise Edition provides heterogeneous support for 3rd party platforms, data-sources, and data warehousing appliances. While Oracle Data Integrator Enterprise Edition leverages optimizations for Oracle Database to perform E-LT data movement, transformation, data quality and standardization operations, Oracle Data Integrator Enterprise Edition is fully optimized for mixed targets, sources and applications.

**Contact Us**

For more information about Oracle Data Integrator Enterprise Edition, visit [Oracle.com/goto/dataintegration](http://Oracle.com/goto/dataintegration) or call +1.800.ORACLE1 to speak to an Oracle representative.



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**Hardware and Software, Engineered to Work Together**