Hummingbird ETL™

Hummingbird ETL connects any data source to any target system throughout the enterprise, for populating a data warehouse, managing metadata or integrating diverse enterprise applications. Hummingbird ETL helps organizations leverage their data to make smarter and faster business decisions.

Getting at the mountains of raw data generated by most modern organizations from a variety of different hardware platforms, databases, and applications is a difficult task. Consolidating this data and converting it into accurate, consistent, and timely information is a key competitive advantage.

What is Hummingbird ETL?

Hummingbird ETL is a powerful data integration solution that spans the functional areas of data extract, transformation, and load (ETL) and enterprise application integration (EAI). Hummingbird ETL transforms, cleanses, enriches and directs information across the entire spectrum of decision support systems and corporate applications, for projects that might include:

- Data warehouses
- ERP systems
- Data marts
- CRM systems
- Mainframe systems
- e-Business platforms

A Universal Data Integration Solution, From Any Source to Any Target

Hummingbird ETL can carry out all vital data exchange operations regardless of data format, syntax, data source, or target, from XML support to mainframe connectivity, relational databases to multi-dimensional on-line analytical processing. Whatever the project, Hummingbird ETL enables tight integration with any enterprise environment, offering native support and connectivity — no programming or data staging is required. Enterprises can therefore leverage their existing heterogeneous IT environments.

Hummingbird ETL

Delivers a sophisticated procedural language, and a broker-based transformation engine with a hub-and-spoke architecture for centralized administration.

Uses the native power of source and target databases to delegate transformations, minimizing network traffic.

Supports the widest range of transformation complexity, replacing most custom language-based development.

Offers the flexibility to natively identify, extract and move records based on specific, user-defined criteria, bi-directionally between many sources and many targets.

Transforms data natively to multi-dimensional database management systems from any of its source environments.

Provides reporting and change management functions, event-driven scheduling, and automatic change propagation.

Allows users to choose their loading strategy, providing greater control while populating a target.

Provides functionality to integrate data from multiple sources.

Employs an open and scalable metadata repository that integrates seamlessly with a company’s policies and heterogeneous environment.
Quick Installation and Easy Deployment
Hummingbird ETL is designed to make life easier with quick set-up and deployment, and minimal training. Hummingbird ETL’s highly graphical user interface simplifies mapping source data to target structures. With minimal time and resources required to get Hummingbird ETL up and running, businesses can realize an immediate return on their investment.

Flexibility, Control and Superior Performance
Hummingbird ETL’s powerful engine controls the flow of data from various sources in a hub-and-spoke data exchange architecture, eliminating the need for custom, point-to-point data exchange processes and manual coding of data transformations. Moreover, Hummingbird ETL maximizes data exchange through different exchange modes — leveraging native database transformation capabilities, and the Hummingbird ETL Engine to perform data integration tasks. The result — Hummingbird ETL minimizes network traffic, reduces bottlenecks and accelerates decision-making.

Streamlined Maintenance to Optimize Resources
Hummingbird ETL reduces operating costs associated with data exchange projects. The maintenance of data integration environments is greatly simplified by the unified procedural scripting language of Hummingbird ETL. This means a major reduction in resource requirements, allowing developers to take advantage of work that has already been done with reusable and independent components that can be deployed from project to project.

Hummingbird ETL offers enhanced features such as impact analysis and change tracking to help users understand the consequences of changes before making them.

Hummingbird ETL includes:

• **ETL Repository**: An object-oriented, open and intelligent repository, residing on any major RDBMS.

• **ETL Designer**: A multi-user graphical development environment for designing data transformation and exchange processes.

• **ETL Engine**: A high-speed, multi-threaded broker-based transformation engine.

• **ETL Scheduler**: A sophisticated time-and-event-based scheduler.

• **ETL MetaLink**: A suite of metadata bridges, embedded in ETL Designer that enables the extraction and transformation of data and metadata from ERP applications and repositories.

• **ETL DataLinks**: A set of links that provide native connectivity to most relational and multi-dimensional database systems and flat files.

Hummingbird ETL represents a new generation of data integration solution that transforms, cleanses, enriches and directs information across the entire spectrum of decision support systems and corporate applications, for an immediate return on investment.

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**System Requirements and Supported Platforms**

<table>
<thead>
<tr>
<th>ETL Engine Platforms:</th>
<th>Bi-directional Connectivity with File Formats:</th>
<th>Mainframe Connectivity (Native, ODBC):</th>
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</thead>
<tbody>
<tr>
<td>- Windows NT Server 4.0 or Win2000</td>
<td>- Delimited Text files, Fixed Text files</td>
<td>- IBM DB2 AS400</td>
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<tr>
<td>- Sun Solaris 7, 8</td>
<td>- AS-400 Flat files</td>
<td>- IBM DB2 MVS — OS/390</td>
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<tr>
<td>- IBM AIX 4.3.x</td>
<td>- XML files</td>
<td>- IBM IMS</td>
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<tr>
<td>- HP-UX 11</td>
<td>- Standard Flat files (Cobol)</td>
<td>- IDMS</td>
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<tr>
<td>ETL Metadata Repository Platforms:</td>
<td>- Palm OS compatible JFile, JfilePro</td>
<td>- Adabas C Versions 6.2 and 7.1</td>
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<tr>
<td>- Informix 7.3, 2000</td>
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<td>- VSAM (KSDS and ESDS)</td>
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<tr>
<td>- MS SQL Server 7, 2000</td>
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<td>- MVS Tape</td>
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<tr>
<td>- Oracle 8, 8i</td>
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<td>- AS/400 logical files</td>
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<tr>
<td>- Sybase Anywhere 6.x, 7.x</td>
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<td>- C- VSAM</td>
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<tr>
<td>- Sybase SQL Server 11.x</td>
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<tr>
<td>- Sybase Adaptive Server 11.x, 12.x</td>
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<td>- IBM UDB Version 6.x, 7.x</td>
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**Native, Direct Population of Multi-dimensional Databases:**

- Hyperion Essbase 4.x, 5.x, 6.x
- IBM DB2, DB6, DB7 (Native SQL, ODBC)

**Mainframe Connectivity (Native, ODBC):**

- IBM DB2 AS400
- IBM DB2 MVS — OS/390
- IBM IMS
- IDMS
- Adabas C Versions 6.2 and 7.1
- VSAM (KSDS and ESDS)
- MVS Tape
- AS/400 logical files
- C- VSAM

**ETL MetaLink Supports:**

- SAP R/3 (3, 4)
- SAP BW 1.2, 2.0
- SAP IDOC
- Sybase PowerDesigner 6.x, 7.x, Sybase Warehouse Studio
- Computer Associates Erwin 3.5