ERWIN MODELING

Top 10 Reasons to Select ERwin® Modeling

As a trusted name in data modeling for over twenty years, ERwin® understands the needs of the data management professional.

Top 10 Reasons to Select ERwin Modeling

1. Business Agility through Model-Driven Collaboration
2. Communicate with Business &Technical Audiences – via the Web or Desktop
3. Reusable Enterprise Standards & Model-Driven Data Governance
4. Personalization, Flexibility & Automation
5. Integration & Open Architecture
6. Visualization of Large Volumes of Data
7. Extensive Compare and Merge Functionality
8. Data Model Governance
9. Support for a Broad Range of Data Sources: from Relational to Big Data, to the Cloud
10. Market-Leading Solution & Extensive User Community

Introduction

There is a good reason the majority of the Forbes Global 2000, as well as government organizations and thousands of companies in diverse industries worldwide, trust their enterprise data assets to ERwin - *we get the hard stuff right.* From enterprise data standards, to data governance authoring and control, to flexibility and customization, to data model governance, to web-based publication and reporting, see why organizations trust ERwin to manage their enterprise data. With a variety of tools to help manage multiple data sources used by disparate users and roles, ERwin helps foster collaboration - by governance and design.

"Our biggest business benefit has been the documenting and publishing of metadata to our end users."

Nikitas Gogos,
Data Architect, AmeriCredit Corp.

1. Business Agility through Model-Driven Collaboration

Do you have a growing number of disparate data sources that live in silos across the organization? Is it difficult to have a clear understanding of where key information resides, and what the definitions around this data are? Do you have fears about security, privacy, and loss of control over your data? Using a data model as a "roadmap" for your data infrastructure, you can have a single visual interface providing a centralized view of all data sources, based on a common repository of standard data assets. With a clear understanding around the context and location of your data, you can begin to leverage information as a strategic asset, rather than overhead or liability.

With the ERwin® Data Modeler Workgroup Edition, models and metadata can be managed in a common repository to help ensure consistency and security. Services such as version control, access management, sub-modeling, cross-model impact analysis and reporting, conflict resolution and model change management help increase modeler productivity and independence while providing a platform for overall control and reuse. Once you have a centralized store of your model assets, you can publish them to a wide range of stakeholders via the ERwin® Web Portal, which provides a feedback loop for comments and changes.

2. Communicate with Business & Technical Audiences – via the Web or Desktop

ERwin provides a variety of ways to share information with multiple roles across the organization. The ERwin Web Portal provides a simple, customizable, web-based interface that allows both business and technical users across the organization to easily visualize the important metadata information that is stored in ERwin Data Modeler. While only certain users will want to view or create data models, many more users need access to the information in those models, but would like this information presented in an intuitive and easily-accessible way. The ERwin Web Portal allows easy access to information via the web, with a variety of presentation and search formats to cater to a wide range of user types in the organization, and a feedback mechanism for proposed changes.

Within ERwin Data Modeler, the Report Designer's intuitive point-and-click interface can create HTML and text-based reports for both diagrams and metadata. You can create detailed metadata reports that include a wide range of object types-tables, columns, UDPs, and more. Reports can be published via HTML, exported to Excel, or viewed within ERwin via an intuitive grid browser, and graphical diagrams can be generated that users can drill-into to view detailed metadata.

Customers can use out-of-the-box reports, or create their own for individual models or across multiple models when managed in the ERwin Data Modeler Workgroup Edition. For customers who use other reporting tools, a generic ODBC interface is available which provides an easy way to query ERwin metadata from a variety of tools and interfaces.

"The new Report Designer makes it easy to share important metadata with the disparate teams in my organization, with HTML-based diagrams that can be used to drill-down into detailed reports."

Gonzalo Vallejo,
Chief Data Architect,
Banco Estado, Chile

3. Reusable Enterprise Standards & Model – Driven Data Governance

As a data management professional, you know that enforcing enterprise data standards is a balancing act – combining strong enforcement with the flexibility to integrate with existing implementations. ERwin offers comprehensive and customizable functionality for enterprise standards and reuse -- including naming standards, data type standards, model templates, and more. These standards and reusable objects help reduce maintenance development costs, while at the same time increasing data quality in your organization. Specific features include:

Naming Standards: allow modelers to expand abbreviated physical names into full-word, business-friendly logical names in a reverse engineered model (and vice-versa), with a full range of options for class words, prime words, modifiers, and more.

Data Type Standards: provide the ability to create user-defined data types and mapping information to convert logical & physical data types for converting models from the logical to physical layer, or for converting physical models from one DBMS to another.

Active Model Templates: create a starting point for new models containing reusable objects such as: entities, tables, domains, naming standards, formatting options, etc. Templates help enable standardization and reuse, and speed up the development and maintenance of models/databases.

Data governance is a managed set of rules, standards, processes and controls that help ensure that enterprise data assets are consistent, transparent and of the highest quality. It is a key enabler for reducing the costs and risks associated with strategic data management while increasing the return on the opportunity that these data assets represent to any data driven organization. With the proliferation in the volume and variety of today's enterprise data, data governance is an imperative for successful data management to act as a driver for an organization's the top and bottom line. ERwin® Modeling provides a model driven data governance solution that will allow your organization to implement and manage these business critical rules, processes and controls effectively across a broad array of data architectures and supporting infrastructure . ERwin Web Portal Data Governance Edition features include:

Business Glossary: ERwin Web Portal provides an ISO 11179 based Business Glossary to capture, define, maintain and implement an enterprise Business Glossary of terminology, data definitions, code sets, domains, validation rules, etc.

Semantic Mapper: This capability facilitates the classification of business terms and/or the connection of design layer metadata from conceptual through logical to physical data models. This permits users to view semantic data usage and to perform impact analysis not only on term usage but also based on data flow lineage.

Data Mapper: Allows users to define a data flow mapping specification for their modeling metadata, including a data movement specification and full visualization of both source and target models with "drag and drop" ease enabling users to create a holistic picture for lineage and impact analysis.

Data Model Documenter: Connects directly to existing databases and Big Data sources which then may be documented and mapped in real-time over the web

"What I like best about ERwin is how it makes much of my job easier and allows me to customize how I do my work. Between the API and the Forward Engineering Templates, I can customize my output to what the other groups within my company are expecting and they don't have to change things to accommodate me."

Craig Boyd,
Senior Data Modeler, Citigroup

4. Personalization, Flexibility & Automation Data Governance

ERwin Modeling provides a customizable solution so that you can personalize your environment to suit your company's individual needs - helping make your job easier and more efficient. From customizable database definition language (DDL) templates on the back-end to custom display themes and reporting on the front-end, ERwin Modeling allows you to create a work environment suited to your needs. Specific functionality includes:

Display Themes: Display Themes allow you to create reusable formatting themes for reuse among teams and projects-adding a common look and feel to cross-model efforts. You can customize colors, fonts, backgrounds, borders, and more to give your data modeling diagramming the flexibility of a drawing tool, without sacrificing data modeling functionality. **Forward Engineering Templates:** allow customization of the DDL for generating database structures. From formatting to syntax, you have the power to modify every aspect of the DDL that is created using these flexible and reusable templates.

User-Defined Properties (UDPs): give the flexibility to add custom properties to model objects, such as data stewards, document attachments, and more.

Custom Data Types: allow you to modify the way data types are mapped for specific DBMS data types, and to create custom, reusable standards across your organization.

Diagrams: provide a mechanism for customizing how models are shown for various user groups-hiding or showing levels of detail as appropriate to the audience (e.g. business vs. technical).

Macro Language: provide triggers and stored procedures you can tailor to your business needs.

API: automates common tasks and facilitates integration with other applications.

5. Integration & Open Architecture

The ERwin Modeling team understands that customers want to be able to choose the market-leading solution while still being able to integrate with the wide variety of other tools and solutions in their environment. A benefit of being a market leader in data modeling is that many applications have developed interfaces themselves to integrate with ERwin Modeling products. In addition, ERwin Modeling provides a wide variety of integration options out of the box, as well as an open architecture to allow customization and integration with other tools. Specifically:

Out-of the box Metadata Integration Tools: ERwin Modeling provides integration for over 130 tools (MDM, BI, ETL, other modeling tools, etc.) as part of the ERwin Data Modeler product offering.

API: facilitates programmatic integration with other tools

"When ERwin Data Modeler was enhanced adding the Meta-Integration bridges for model import and export, it gave us the ability to send models to and receive models from other software that we desperately needed to communicate with. As a result we gained a great deal of productivity in our work as well as a huge improvement in management's regard of the ERwin product."

Steve McMahon,
Modeling Global User Community (GUC)

64 Bit Architecture: ERwin Data Modeler is built on a 64 bit architecture that provides superior performance across modeling tasks and interoperability with the latest operating systems and desktop architectures.

Industry Integration: Since ERwin is so commonly used in data management environments, there are many industry standards models and data interchange options that have been developed by third parties to integrate with ERwin Modeling.

6. Visualization of Large Volumes of Data

"A picture is worth a thousand words". Especially when you're presenting to a business or non-technical audience, look-and-feel is important. This is why ERwin Data Modeler has added powerful drawing, navigation, and layout tools-giving you the flexibility of a drawing tool with the power you've grown to expect from the ERwin Data Modeling solutions.

As data volumes continue to grow, data models in today's organizations can grow to include hundreds or even thousands of database objects. As a data professional, you are continually challenged with managing the organization of large and growing amounts of data. ERwin Data Modeler offers a number of features to help with the management, layout, and display of large quantities of data objects including: auto-layout options, a diagram overview window for easy navigation, full-page drawing palette, color and font options, and more.

The ERwin Web Portal provides numerous graphical data lineage options to visualize the complex inter-relationships between data assets-from conceptual-logical-physical design layers to source-to-target-mappings for data warehousing. The ability to see how data assets and models relate to one another is a core strength of this web interface.

"I am extremely impressed with the visualization enhancements in the new ERwin Data Modeler. The autolayout options are great for organizing my model diagram-especially the fact that I can select a subset of objects to layout. I also think that the on-demand UI functionality is a great improvement where I get a full screen to manage large volumes of database objects."

- Robby Robinson, Senior Bay Area Enterprise, Modeling User-Group

7. Extensive Compare and Merge Functionality

ERwin Data Modeler's single pass, flexible target and semantically "live" Complete Compare is comprehensive yet easy to use. These features are designed to result in greater efficiency and effectiveness, higher productivity and more accurate modeling solutions. ERwin Data Modeler's powerful Complete Compare automates bidirectional synchronization of models, scripts and databases – not just models. It compares one item with the other, displays the differences and permits modelers to select which differences are moved and in which direction. If model changes are moved to a database, ERwin Data Modeler can automatically generate a database ALTER script, if desired.

"What I like about ERwin: Working with complex data marts with numerous dimensional keys, I have found that ERwin has helped to reduce the rate of design and deployment errors and increased the ease of validation.
The Complete Compare is worth twice the price!"

Kenneth Osmond,
Sr. Application Architect,
CIBC Mellon

8. Data Model Governance

Trust and accountability of information is a key driver for data modeling projects. ERwin supports a number of features that support data governance including:

Robust Repository: The ERwin Data Modeler Workgroup Edition provides a robust repository that provides auditing, security, versioning, and more.

Business and Technical Metadata: ERwin's Design Layer Architecture supports the creation of both business and technical models, with the ability to provide lineage between them.

Naming Standards: Naming standards help provide accountability and traceability between core business terms and their physical implementations.

Action Log: ERwin Data Modeler's Action Log offers full, multi-level undo/redo functionality enabling you to reverse a single transaction, multiple transactions, and even a group of transactions that happened several steps back. Many other modeling tools limit undo/redo to a single step. ERwin understands that a real-world modeling environment has a number of unknowns, and gives you the flexibility to control the reversibility of your actions.

Lineage and Traceability: The ERwin Web Portal provides a wide range of lineage reporting, from business-to-technical implementations, source-to-target mapping, "where used" and more.

9. Support for a Broad Range of Data Sources: from Relational to Big Data, to the Cloud

As today's information infrastructure becomes more diverse, with new technologies to manage and new roles needing access to information, ERwin's model-driven metadata exchange can share core business concepts across BI tools, Big Data platforms, Cloud databases, and more. Need to integrate Big Data sources into your environment? ERwin supports the creation of logical and physical models for leading Big Data platforms such Google BigQuery and Apache Hadoop Hive "Native" import bridges for Cloudera Impala, Hortonworks, MapR, and more. With these bridges, you can integrate both Big Data and relational sources into your information infrastructure, for data warehousing projects, enterprise architecture initiatives, and more.

Not all metadata resides in databases. Many data-centric tools such as BI tools, ETL tools, MDM hubs, and more need to integrate with the metadata stored within the ERwin environment. ERwin Data Modeler has over 130 import/export bridges with leading tools on the market so that you can leverage the core data assets you've created in ERwin with other projects and initiatives across the organization.

"Today there are entirely new, non-conventional sources of information, such as Big Data, that factor into the business analysis equation, but determining the relevance and relative value of a given data element is exceptionally difficult. ERwin enables organizations to quickly and easily connect the dots between their disparate data sources, giving them meaningful context that is critical to the success of their data management efforts."

Al Hilwa,
Program Director, Application Development Software, IDC.

10. Market-Leading Solution & Extensive User Community

When data management professionals choose a data modeling tool, it's most often ERwin. ERwin Modeling (formerly CA ERwin Modeling) is the worldwide market share leader in data modeling tools, according to IDC. There are numerous independent validations of ERwin Modeling as the leader in data modeling tool capabilities and popularity available for your analysis at http://erwin.com/resources/analyst-reports and http://erwin.com/resources/news. See it for yourself – check the job postings for data architecture and data modeling positions and you'll see ERwin Data Modeling skills listed as a requirement again and again.

ERwin Modeling has a rich and vibrant community worldwide of data modeling experts, who actively share their knowledge and expertise through the ERwin User Community, which has over 2,500 user group members worldwide. The Online Community at erwin.com offers a way to share both knowledge and camaraderie through web-based discussion forums, user-submitted best practices, and even a photo album library. ERwin has over 20 years of experience in data modeling – why trust your data to anyone else?

"In my circles and perhaps the industry, ERwin is the Data Modeling tool of choice. Data Modelers who use ERwin are fiercely loyal and the first question often asked of consultants considering new assignments is, "Are you using ERwin?" Clearly ERwin's loyal following is related to its capacities, such as forward and backward engineering of the many databases it supports, and why other tools engage ERwin with reverence. Yes engage, almost every other data modeling program will import ERwin models. How is that for confirmation?"

– Francine Adams, CDMP, CBIP, Director, Silotech Group Inc.

Connect with ERwin, Inc. at ERwin.com

ERwin, Inc. is a trusted leader in data management for heterogeneous data environments, with a focus on data modeling and governance. Its solutions have been valued by leading companies around the world for more than 25 years, supported by trusted partners and a team of expert people.

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