CA ERWIN® DATA MODELER (CA ERWIN DM) IS AN INDUSTRY-LEADING DATA MODELING SOLUTION THAT ENABLES YOU TO CREATE AND MAINTAIN DATABASES, DATA WAREHOUSES AND ENTERPRISE DATA RESOURCE MODELS SO THAT YOU CAN SUCCESSFULLY MODERATE DATA COMPLEXITIES, EFFECTIVELY MANAGE DATABASE TECHNOLOGIES AND PROPERLY ALIGN YOUR INFORMATION DELIVERY INFRASTRUCTURE.

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<td>Maintaining a competitive edge in any market requires faster, better decisions based on accurate data. Companies must manage and maintain their data while facing increasingly complex challenges such as mergers and acquisitions, budget reductions and evolving technologies. In order to build high-performance business applications, data marts and data warehouses, organizations need to build a solid database foundation while simultaneously controlling the total cost of ownership over the entire data lifecycle.</td>
<td>It’s all about reducing deployed defects and redundancies in your information infrastructure. CA ERwin DM enables you to visualize complex data structures, inventory information assets and establish enterprise-wide standards for managing data. Modeling intelligently streamlines the design process by providing an easy-to-use graphical environment that simplifies database design and maintenance, automates many time consuming tasks and enhances communication across your development organization.</td>
<td>CA ERwin DM is the culmination of more than fifteen years of CA data modeling experience and the insightful expertise on loan from our many thousands of user organizations worldwide. This solution has a well known track record for being an industry-leading best-of-breed data modeling product and it is a key component of Enterprise Database Management. Integrated within our Enterprise IT Management (EITM) strategy to simplify and unify IT management, CA ERwin DM is the natural choice when it comes to managing your information assets.</td>
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CA ERwin Data Modeler Promotes Successful Information Management by Facilitating Optimal Database Design

Optimal database design is a key component of any application development effort. A well aligned information architecture is just as critical and can only be realized with clearly documented metadata. CA ERwin DM addresses both requirements by allowing you to visualize your organization’s complex data structures, inventory your information assets and establish enterprise-wide standards for managing data. Regardless of whether you are a Data Architect, a Database Developer or a DBA, you can easily use this product to design, generate and manage your organization’s transactional systems, data marts and data warehouses.

CA ERwin DM increases productivity by providing an easy-to-use graphical environment that simplifies database design and automates many time consuming tasks, accelerating the creation of high-quality, high-performance transactional and data warehouse databases. CA ERwin DM also reduces the risks normally associated with the development of complex database structures. This is accomplished by creating a low-cost collaborative graphical design environment that assists modelers to visualize requirements, promotes effective communications between the various stakeholders and enables database developers to address design issues and concerns prior to any significant resource investments. CA ERwin DM helps your organization respond faster to evolving business needs by highlighting the impact of change on information assets and allowing you to quickly implement changes.

DESIGN LAYER ARCHITECTURE  CA ERwin DM has the flexibility to generate data models that meet your needs. Separate logical and physical models are supported, along with the traditional, combined logical/physical model. Knowledge of the relationships and a record of design decisions are maintained, allowing you to quickly resolve the impact of changes from one design layer to the next. (See Figure A.)

**FIGURE A**  With CA ERwin DM, you can create separate logical and physical data models, as well as new models based on existing models and structures.
TRANSFORM TECHNOLOGY  Rarely does a physical database design match the original logical data design. Business constraints dictate the need to denormalize tables to meet the performance requirements of today's business applications and Service Oriented Architectures (SOAs). Transform technology facilitates the implementation of these changes while maintaining the integrity of the original design.

STANDARDS DEFINITION  The definition and maintenance of standards is supported through the Domain Dictionary, Naming Standards Editor and Datatype Standards Editor. The Domain Dictionary contains reusable attributes to help ensure consistent names and definitions across the model. The Naming Standards Editor lets you create a glossary of valid words, abbreviations and naming rules that can also be reused across the model. The Datatype Standards Editor enables you to define the standards for mapping both user-defined and default data types to specific database management system data types.

LARGE MODEL MANAGEMENT  CA ERwin DM helps you manage large enterprise models through Subject Areas and Stored Displays. Subject Areas provide a focused view for individual modelers, dividing the model into smaller, manageable subsets. Stored Displays offer multiple graphical views of the model or its Subject Areas, facilitating information exchange between specialized groups of users.

COMPLETE COMPARE  This powerful feature automates complete bidirectional synchronization of models, scripts and databases. It compares one item with the other, displays the differences and permits you to select which differences are moved and in which direction. If model changes are moved to a database, CA ERwin DM can automatically generate a database ALTER script if desired.

DATABASE DESIGN GENERATION  CA ERwin DM includes optimized referential integrity trigger templates and a rich cross-database macro language, allowing you to customize triggers and stored procedures. Customizable templates facilitate the generation of a model's complete physical design and full definitions (as appropriate for the target database).

DATA WAREHOUSE AND DATA MART DESIGN  The performance, usability and value of a data warehouse are determined by its underlying design. CA ERwin DM supports data warehousing-specific modeling techniques (such as Star Schema and Snowflake dimensional modeling), thereby optimizing the data warehouse for your performance and analysis needs. It also captures and documents a rich set of information about the warehouse, including data sources, transformation logic and data management rules.

REPORTING AND PRINTING  Visualization and publication are key to the communication and collaboration in data modeling. CA ERwin DM provides flexible, customizable reporting and printing capabilities. Reports may be generated in a variety of formats, including HTML, PDF, RTF and TXT. (See Figure B.)
The value proposition of CA ERwin DM can be extended in unique and valuable ways through the use of tightly integrated CA ERwin® Modeling Suite companion products or third party metadata integrations.

- **Metadata Integration and Exchange**  CA ERwin DM provides guided wizard import and export capabilities for out-of-the-box exchange of model metadata with more than 70 industry standard modeling, design and metadata management formats including: UML, OMG, CWM, XML, ETL, EII, BI and various metadata repository solutions.

- **CA ERwin® Saphir® Option**  This solution extracts and stores detailed metadata from cryptic packages such as SAP R/3, SAP BW, Oracle PeopleSoft Enterprise, Oracle JD Edwards Enterprise One and Oracle Siebel. Modelers may then search, browse and subset this metadata prior to creating CA ERwin DM models. These ERP-specific CA ERwin DM models can then be utilized to support numerous initiatives such as ad-hoc reporting, data warehousing, meta management as well as package customization and management.

- **CA ERwin® Data Model Validator (CA ERwin DMV)**  This valuable add-in allows modelers to automate the validation of their database design thus allowing them to perform this task quicker, more accurately and earlier in the development lifecycle. The CA ERwin DMV provides the user with the choice of over 80 ranked diagnostics to be applied against their data models. CA ERwin DMV provides a knowledge base, design tips, corrective suggestions as well as generating scripts to be applied against the model and associated database.

- **CA ERwin® DM — Application Program Interface (API) and Add-In Manager**  Using the CA ERwin DM API and Add-In Manager, you can work with additional software applications supplied by third parties to perform specific tasks outside the boundaries and offerings included in CA ERwin Modeling Suite.

*The mark of Saphir is used with the consent of Silwood Technology, Limited*
What’s New in r7.2?

ENHANCED DATABASE CURRENCY AND SUPPORT Organizations must leverage their critical IT investments in order to successfully support the informational requirements of the business. Tight integration and value-added support for multiple RDBMS’ comprise the foundation for CA ERwin DM to optimize an organization’s analysis and design efforts. In the ongoing support of our customers’ priorities, CA ERwin DM now delivers enhanced out-of-the-box full relational support for SQL Server 2008, and support for new database targets MySQL, DB2 UDB v9 and Sybase IQ. Database currency and support encompasses Forward Engineering (FE), Reverse Engineering (RE), Complete Compare (CC) and User Interface (UI) improvements.

VISUAL STUDIO INTEGRATION The integration of CA ERwin DM with Microsoft’s Visual Studio Team System 2008 Database Edition (VSTS Database Edition) brings together the industry’s leading heterogeneous database design solution with a focused SQL Server 2008 development and lifecycle management environment. This provides a rigorous platform from which organizations can manage and assure the development and deployment of their critical SQL Server 2008 applications.

• Modelers can visually design, define and generate VSTS Database Edition managed objects.
• Reverse engineer existing ERwin DM models into VSTS Database Edition managed objects including extraction of schema information from databases other than SQL Server 2008.
• Forward engineer VSTS Database Edition managed objects into CA ERwin DM for visualization and metadata reporting purposes.

COMPLETE COMPARE IMPROVEMENTS CA ERwin DM r7.2 introduces several improvements to further simplify our single-pass Complete Compare (CC) functionality and greatly improve the overall usability and ease-of-use of our new CC feature.

GLOBAL FIND-AND-REPLACE Model metadata, which is complex to begin with, is greatly influenced by the features a user employs when developing a data model (for example, calculated values, inheritance, macros and overrides). Despite all the complexity and modeling exceptions, users still require the ability to effectively and easily manage change across large enterprise models. This includes the ability to globally search model metadata for specific information in order to assess the impact of proposed model changes, as well as the ability to globally update model objects to ensure consistent metadata change management. CA ERwin DM r7.2 provides a new contextual-based global Find-and-Replace feature.

ACTION LOG FILTERING The Action Log captures all changes made to a model during a modeling session. This is integral to enable CA ERwin DM to provide unequaled modeling action UNDO/REDO and reversal. In addition, the Action Log is a key feature in assisting users to assess the impact of change (or planned change) and helps to document what changes are made to models from a compliance perspective. New in CA ERwin DM r7.2, is the ability to filter the Action Log, permitting users to dynamically limit the amount of metadata displayed and thereby improving the ease with which the log information may be used.

SUBTYPE DISCRIMINATOR UI CHANGE In an effort to fully comply with and support the IDEF1x modeling specification, CA ERwin DM now allows users to select attributes from other than a supertype entity for use as a subtype relationship discriminator.
Simplify and Extend Your Database Design Capabilities

The visual schema design paradigm (data modeling) is an industry accepted method for ensuring effective creation and maintenance of database structures. Organizations that employ data modeling benefit from higher ROI, reduced risk due to defects and improved resource consumption across the entire database lifecycle. In addition, CA ERwin DM allows you to share your data modeling object metadata with other complimentary and competitive products used within your organization. Our simple point-and-click, graphical interface and robust feature list are the key ingredients that help your organization consistently deliver high-quality databases, on-time and within budget.

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<td>SQL Server 2008 Database Currency</td>
<td>Enhanced out-of-the-box full relational support for SQL Server 2008.</td>
<td>Optimizes an organization’s analysis and design efforts by providing up-to-date support for one of the industry’s principle RDBMS products.</td>
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<td>Sybase IQ and MySQL Database Support</td>
<td>New selectable database targets for FE (schema generation) and RE.</td>
<td>Improves an organization’s analysis and design efforts by providing support for new target environments.</td>
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<td>MS Visual Studio Visual Studio Team System 2008 Database Edition</td>
<td>Provides robust visual analysis and design capabilities across the entire development and maintenance lifecycle for Microsoft’s new SQL Server 2008 collaborative development and deployment environment.</td>
<td>Optimizes and streamlines the VSTS Database Edition environment with a proven design visualization paradigm that facilitates the creation and maintenance of managed database schema objects.</td>
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The CA Advantage

CA ERwin Data Modeler is part of a focused, best-of-breed modeling and database design solution. This approach of providing the right tools for the right job and seamlessly integrating them for exponential value allows users to benefit from a simplified modular approach while leveraging the value of an enterprise focused toolset.

The Enterprise IT Management Vision

As a key component in the CA Database Management (CA DBM) solution, CA ERwin Data Modeler is also an integral part of CA’s Enterprise IT Management (EITM) vision to unify and simplify enterprise IT management. Maximizing the performance, reliability and efficiency of your overall IT environment means tightly integrating the control and management of additional functions, including operations, storage, security, lifecycle and services management. CA’s comprehensive portfolio of modular IT management solutions helps the enterprise unify, simplify and secure IT to better manage risk, costs and service — helping ensure that IT meets the business needs of the enterprise.
Next Steps

When you are ready to embrace the enhanced database currency, unequalled product integrations and improved data modeling features found in CA ERwin DM r7.2, you may choose one of the following methods of ordering:

• Download your copy by visiting the CA ERwin Modeling Suite support web page on CA Support Online. This is the preferred method.

• Note: When you log in to CA Support Online, you must select your licensed product which is located under Product News. The Solution & Patches section houses the order form that is necessary to receive this product update. Keep in mind that the order form for r7.2 will not be posted until the new inventory is in Distribution; two-three weeks after the Gold master date.

• Call the CA Orders Department at 1-800-637-5858.

• Contact your local Customer Advocate.

For customers outside North America, contact your local CA Support Center to determine general availability of this new maintenance release.

To learn more, and see how CA software solutions enable organizations to unify and simplify IT management for better business results, visit ca.com/products.