

Sybase® PowerDesigner® 12.5



What is PowerDesigner 12.5?

Sybase® PowerDesigner® 12.5, a model-driven approach to aligning business and IT, is an enterprise modeling and design solution that helps you implement effective enterprise architecture and brings powerful analysis and design techniques to your development lifecycle. PowerDesigner uniquely combines several standard data modeling techniques (UML, Business Process Modeling and market-leading data modeling) together with leading development platforms such as .NET, WorkSpace, PowerBuilder®, Java™, Eclipse, etc., to bring business analysis and formal database design solutions to the traditional software development lifecycle. And it works with over 60 RDBMS.

COMMON FEATURES

Requirements Management: Detailed requirements analysis linked to all models for traceability. Import and synchronization with Microsoft® Word places the business users directly into the analysis and design lifecycle.

	2.1 Scenario 1	2.2 Scenario 2	2.3 Scenario 3
3.1.2 Item requested		✓	
3.2.1 Recipe viewer		✓	✓
3.2.2 Category management			✓
3.3.2 Prepare purchase	✓	✓	✓
3.3.3 Frequently used	✓		
3.4.1 Internet access	✓		

Document Generation: Wizard driven list, multi-model RTF and fully hyperlinked HTML document reporting provides any non-modeling user direct, controlled access to metadata. This fosters greater communication among all members of the project team.

Impact Analysis: Models are fully integrated using unique Link and Synch technologies. Models integrate across all model types for complete enterprise-wide or project-wide impact analysis. From requirements to business processes to UML™ and the data that supports it, impact analysis streamlines communication and collaboration to dramatically increase the entire organization's responsiveness to change.

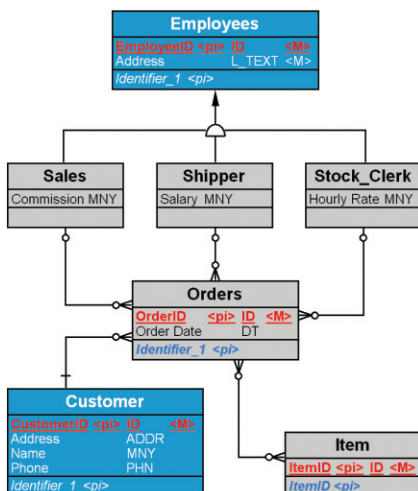
Information Mapping: Drag-and-drop mapping editor allows for easy, fast and accurate dependency documentation. Simply drag to or from any supported source to target model pair and create comprehensive mapping definitions used in impact analysis, persistence code generation and warehouse ETL documentation.

Open Support: All major platforms are supported together in one tool, including over 60 RDBMS as well as all leading development and process execution languages.

Customizable: Optimize productivity by controlling everything from the user interface to the way PowerDesigner manages modeling tasks and generates code. Model-driven development is achieved through advanced support for UML profiles, automatic transformations and customizable code generation based on patterns, templates and scripts.

Integrated: Plug into Eclipse, Microsoft Visual Studio® and PowerBuilder for seamless integration to leading development environments and synchronize models and code automatically. Plug-in supports all modeling techniques and requirements management. Requirements integrate with Microsoft Team System.

Enterprise Repository: A fully integrated design-time repository, hosted by your choice of relational database. As a highly scalable, WAN friendly centralized metadata management facility, the Enterprise Repository offers capabilities like: Role-based security on models and sub-models, version control configuration management, difference reports between models and versions, and comprehensive search capabilities. The repository may also store and manage any documents important to your projects.



MODELING TECHNIQUES

Business Process Modeling: PowerDesigner supports intuitive, non-technical business process hierarchy and flow diagrams with Simulation (via Simul8®). PowerDesigner allows analysis level business models to generate more detailed designs. Generation and reverse-engineering of Service Oriented Architectures (SOA) is supported through BPMN™, ebXML and BPEL4WS capabilities.

Data Modeling: Conceptual, logical and physical data models based on Information Engineering (IE) or IDEF 1/x notation. Conceptual and logical models provide database independent analysis, fully linked to multiple physical models for true multi-level design. Physical models document, generate and reverse-engineer structures for over 60 RDBMS (including the latest Oracle®, IBM®, Microsoft, Sybase, NCR Teradata®, MySQL® and many more). Support includes all database artifacts and new techniques such as Java, XML and Web Services in the database, security modeling, advanced techniques for views and more.

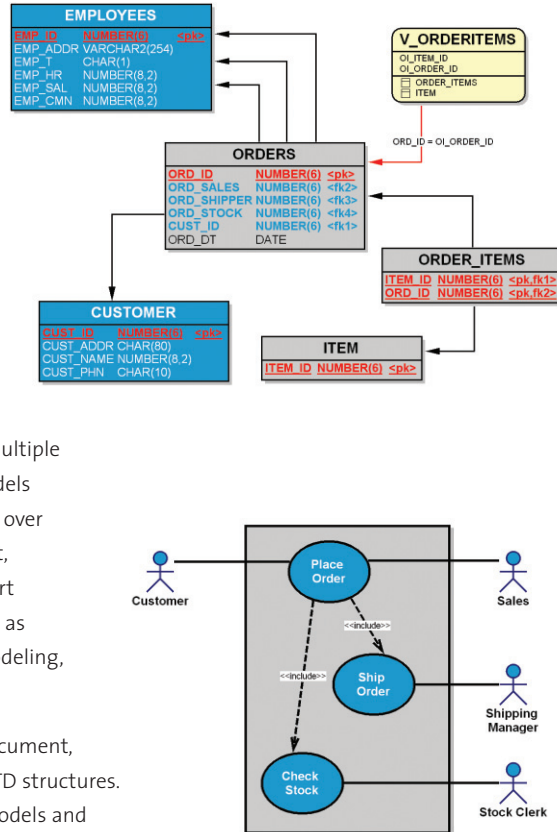
XML Modeling: XML specific modeling techniques to document, generate and reverse engineer XML Schema and XML DTD structures. The XML models are mapped to process models, UML models and data models to document XML use throughout the enterprise.

Application Modeling with UML 2.0: PowerDesigner supports Unified Modeling Language (UML) 2.0 and offers advanced data mapping for persistence implementation. A model driven approach allows analysis-level models to generate more detailed designs. PowerDesigner supports Java J2EE™, C#, VB.NET, web services and PowerBuilder. Round-trip engineering, directly or through optional Eclipse, PowerBuilder and Visual Studio plug-ins, ensures models and code are never out of synch.

Data Movement Modeling: A PowerDesigner exclusive, the Information Liquidity Model (ILM), documents all aspects of information movement. Source data stores, target data stores, multiple transformations, publication and subscription serve to document any ETL, EII or replication process.

Enterprise Modeling: PowerDesigner's unique Link and Synchronize technology allows users to document all dependencies from Requirements to UML, Data and Business Process.

All dependencies are tracked automatically through inter-model generation and synchronization techniques. All external deliverables are 100% synchronized to their respective models. Measure the complete impact of a change made anywhere in the development lifecycle and streamline the management of that change across the enterprise.



POWERDESIGNER BENEFITS

The safe choice

PowerDesigner's market proven commitment to innovations in Data, UML and Business Modeling make it the safe choice for all modeling requirements. PowerDesigner is a standard in many organizations worldwide.

Graphical ease of use

PowerDesigner's highly customizable user interface makes common tasks easy while empowering advanced users rapid access to all features.

Align business and IT

PowerDesigner facilitates Business and IT alignment through team collaboration techniques, Link and Synch technology between all Requirements, Business, UML and Data models.

Improve individual productivity

PowerDesigner's model-driven approach features a series of customizable code and DDL generators, reverse-engineering and of code synchronization capabilities that significantly reduce manual code creation, maintenance and re-engineering efforts.

Improve team productivity

PowerDesigner provides all modelers the ideal team-sharing environment with the only complete and secure metadata repository for all modeling types.

Document existing systems

PowerDesigner fosters greater enterprise collaboration through flexible, wizard driven list based or multi-model RTF and fully hyperlinked HTML document based reporting.

Open support

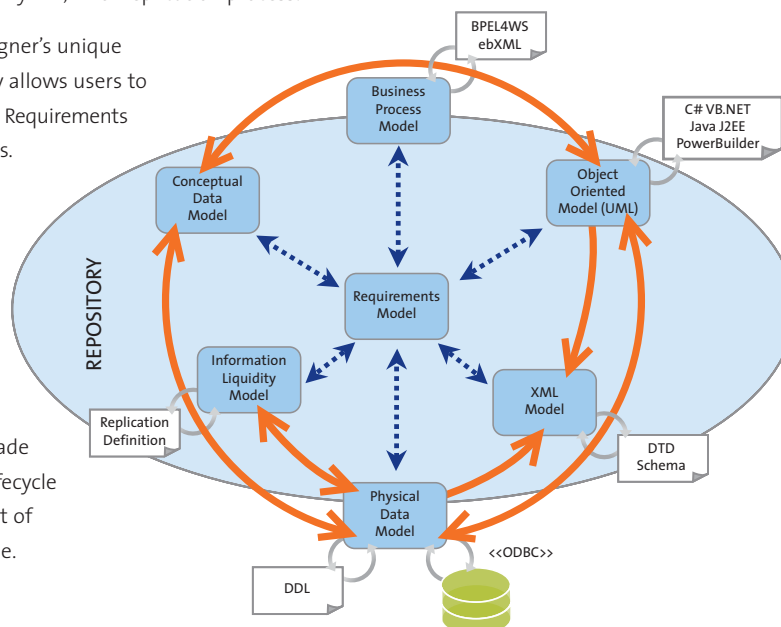
PowerDesigner benefits heterogeneous systems understanding by supporting all leading development, XML, database and process language standards within a single tool and framework.

Highly customizable

PowerDesigner can be easily "programmed" to enforce corporate or regulatory standards and practices through embedded VB Scripting, a fully scriptable COM interface, customizable metamodel and fully documented API.

Reduce the impact of change

PowerDesigner significantly reduces the cost and time when implementing any change through a fast and accurate bi-directional multi-model impact analysis view integrating all requirements, analysis, detailed database and application models.



POWERDESIGNER 12.5 MODULAR PACKAGING

PowerDesigner is available in the following modular configurations:

- **DataArchitect™** – Addresses the needs of the most discriminating Data Modelers and DBAs. DataArchitect offers requirements management and full data analysis and comprehensive multi-level design techniques with round-trip engineering and detailed design capabilities for nearly 60 RDBMS vendor versions.
- **Developer** – Addresses the needs of the Object Modeling community with requirements management and full analysis and design support for the Unified Modeling Language (UML). PowerDesigner Developer includes features to improve developer productivity for Java (and J2EE), C#, VB.NET, XML and PowerBuilder users. Developer can plug into popular development tools for tight model-to-code synchronization.
- **Studio** – Addresses the needs of the Enterprise Modeling community (IT Management and Business Management) that needs to maintain a single center of control over all metadata. Studio offers a model driven approach to align business and IT. Combining all the technical modeling in DataArchitect and Developer and extending into Business Modeling, Studio streamlines communication and collaboration across the enterprise.
- **Viewer** – Addresses the need for documentation teams, higher-level technical managers or other users to access all of the PowerDesigner tools without requiring a full PowerDesigner license. Viewer is a read only tool that can access any PowerDesigner model, retrieve any model from the Enterprise Repository, print models, and create reports. Viewer is available free of charge from www.sybase.com/products/powerdesigner
- **Enterprise Editions (DataArchitect Enterprise, Developer Enterprise, Studio Enterprise)** – Includes one Enterprise Repository connection for each user. Purchase or upgrade to an “Enterprise” version of any of the modules for each seat you want to have collaborate as part of a connected team.

MINIMUM SYSTEM REQUIREMENTS

- Windows® XP, Server 2003, Vista™
- Pentium® CPU 500MHz
- 256 MB Available RAM
- SVGA Display (800 x 600 or better)
- CD-ROM (to read shipped media)
- 500 MB Available disk space

ENTERPRISE VERSION REQUIREMENTS

- Supported RDBMS with client connection
- Supported RDBMS includes Sybase, Microsoft, IBM and Oracle databases

POWERDESIGNER 12.5 HIGHLIGHTS

Industry leading database analysis and design is combined with powerful technology for business modeling and leading edge UML object modeling providing complete coverage of all modern techniques in a single tool. With metadata management, impact analysis features and a true enterprise Repository, PowerDesigner 12.5 defines enterprise-modeling tools for effective enterprise architecture.

Common Features:

- **Requirements Management** – Collect, link, manage, store and report on requirements with hierarchy, user allocation and traceability matrix views with Microsoft Word import and synchronization
- **Impact Analysis** – Examine the up-stream and down-stream impact to change. Easily and accurately visualize, document and report on impact before changes are made to production
- **Documentation Generation** – Comprehensive wizard driven and powerful drag-and-drop report writers with List (Excel), HTML and RTF output
- **Highly Extendable** – Customizable GUI, profiles, MDA, scripting
- **Data Mapping Editor** – Drag-and-drop complex Object/Relational, XML to database and warehouse source mappings
- **Service Oriented Architecture** – Service orchestration at business and technical levels

Modeling Techniques:

- **Business Modeling** – Business Process Modeling with links to simulation with BPMN support
- **Data Modeling** – Multi-level Conceptual, Logical, Physical and Warehouse Data Modeling with support for modern techniques like Java, XML and web services in the database, with IE and IDEF1/x notation
- **XML Modeling** – Unique physical paradigm supports XML DTD and Schema artifacts
- **Object Modeling** – Highly extendable UML 1.x and 2.0 modeling
- **ETL, EII and Replication Modeling** – Document all stages of data movement for any implementation strategy
- **Enterprise Modeling** – Comprehensive Link and Synch technology for ultimate metadata management and complete, project and enterprise wide impact analysis

Supported Platforms:

- **Process Execution** – BPMN, ebXML, BPEL4WS, Service Oriented Architecture support
- **RDBMS** – Full round-trip engineering for nearly 60 RDBMS, including the latest Oracle, IBM DB/2, Microsoft SQL Server, Sybase, MySQL, NCR Teradata and many more
- **Object Languages** – Full round-trip engineering for Java J2EE, C#, VB.NET, PowerBuilder, XML, C++, Web Services and more
- **Integration with Development** – Eclipse, PowerBuilder and Visual Studio plug-ins with model to code synchronization

Enterprise Repository:

- **Team Solution** – Enable multiple modelers to work on the same model at the same time
- **Metadata Management** – Store, manage and version PowerDesigner models and all other documents in a single location
- **Cross-model Impact Analysis** – Store and maintain cross model dependencies for complete impact analysis across the enterprise
- **Software Asset Management** – Find and reuse objects across all models and projects
- **Secure** – Role-based security with logging capabilities and comprehensive permissions that limit access and visibility to models and sub-models
- **Open** – RDBMS hosted tables fully documented for SQL-based reporting