



## **Universal Data Models Repository For Professional Services**

*Save tremendous amounts of time and cost while increasing the quality of your data model and data warehouse design efforts.*

Universal Data Models offers a comprehensive best-practice data model repository for the professional services industry, providing best practice models and saving modelers and designers thousands of hours.

The models covered within professional services are:

- Professional services roles and relationships
- Professional service products
- Product components
- Professional service requirements
- Professional service RFP, RFQ and RFI
- Professional service quotes
- Professional service engagements
- Professional service agreements to engagements
- Professional service entries
- Engagements and work efforts
- Professional service invoicing
- Professional service time entry star schema

Additionally, the generic Universal Data Models that apply to the professional services industry are included and customized in this repository. These include models for:

- People, organizations, parties, roles, relationships and contact management
- Products, goods, services, inventory control, pricing and costing
- Orders, agreements, requirements, quotes and RFPs
- Shipments, receipts, inventory issuances, routing, shipping documents and logistics
- Work requirements, work efforts, project management, time and expense tracking
- Invoicing, accounts receivable, accounts payable and banking
- Accounting, budgeting, asset management
- Human resources, position fulfillment and tracking, compensation, benefits, payroll, skills tracking, performance and termination
- Star schemas for sales analysis, human resources, financial analysis, work effort analysis, logistics analysis, purchase order analysis and inventory analysis

These models have full documentation not only in the repository but also in the best selling "The Data Model Resource Book, Volumes 1 and 2" (Wiley, 2001), enabling people using this repository to understand the data model design choices, alternatives and example data that could be used to populate the models. In a very short period of time, over 20,000 of these books have been sold worldwide and the industry model book is being translated into Chinese. The

models in the repository are very similar to the models in the best selling book, except that they have been enhanced and improved over time as Universal Data Models continues to implement these models.

This repository has proven data model and data warehouse constructs which Len Silverston, lead author of the best-selling 'The Data Model Resource Book', has personally developed together with some of the leading data model experts in the industry.

Universal Data Models, LLC has successfully implemented these models in a great variety of small, medium and large organizations, helping them to build solid data architectures and saving tremendous amounts of money in the process.

Data objects stored in the repository include entities, entity definitions, attributes, attribute definitions, attribute characteristics (size, types, constraints, etc.), unique identifiers, relationships, domains, entity to table mappings, tables, table definitions, columns, column definitions, column characteristics (size, type, constraints), primary keys, indexes, and database constraints.

The Universal Data Model Repository has all the required elements to generate SQL immediately for the models included in the repository. Alternatively, one can make modifications to the data objects contained in the repository and generate new SQL, customized for your own organization.

The repository has 106 comprehensive, re-usable entity-relationship diagrams, 509 entities, 2048 attributes, with corresponding tables and columns for these entities and columns with definitions as well as domains and database constraints defining these data objects.

The current repository is maintained in Erwin software so that it can easily be maintained and/or transferred to other case tool formats.

For additional information, please contact:

Len Silverston  
Universal Data Models, LLC  
303.688.1412  
Fax (303) 688-1413  
[www.univdata.com](http://www.univdata.com)  
email: [info@univdata.com](mailto:info@univdata.com)

*The information in this document is proprietary and copyrighted information of Universal Data Models and is not to be distributed to unintended recipients and should only be used to evaluate licensing the UDM Repository.*