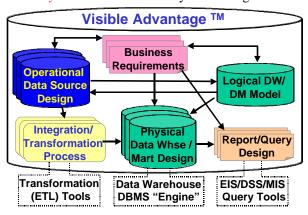
Visible Data Warehouse Architecture & Design Benefits

- Increase Success Rate through integrated requirements traceability and multiple data source analysis.
- Enables Strategic Information to be consistently and accuratel derived from operational (and external) data.
- Facilitates Impact Analysis by linking strategic requirements to data models and designs of operational data sources.
- Visual Analysis of Transformation Process to design the data extraction from the best of all redundant data sources.
- ◆ Supports Data Mart Integration allowing phased, cost-effective Data Warehouse development.
- Database Creation for all the major data warehouse "engines," with reverse engineering from almost any DBMS.
- Supports Star and Snowflake Schema allowing for optimized end user business query and reporting access, and improved guery performance.

The *Only* Data Warehouse Analysis & Design Tool Set



Comprehensive Analysis – Building your data warehouse is as easy as 1-2-3 once you have completed your analysis and design in Visible Advantage Data Warehouse Edition!

- 1) Automatically build the database in your preferred DBMS engine.
- 2) Analyse potential data sources and then build the transformation processes in your selected Extract Transform and Load (ETL) tool.
- 3) Now that you have quality data available, deliver business intelligence using your chosen query tool is easy.

Visible Advantage^{1M} Data Warehouse Edition

Automating the data warehouse critical success factors to help your project succeed.

Visible Advantage has been used to develop and implement Executive Information Systems (EIS) and Decision Support Systems (DSS) for over fifteen years. Visible's real-world experiences are distilled in the new Visible Advantage Data Warehouse Edition.

Your 5 Steps to Data Warehouse Success:

- Define the Business Requirements: The DW edition starts by automating your definition of business requirements, which should be your first step in a data warehouse project.
- 2. Identify Operational Data Sources: The DW Edition can scan your existing databases and reverse engineer models of those diverse systems. Once imported, the structures of the various databases can be analyzed and cross referenced to identify redundant data.
- 3. Analyze and Resolve Multiple Data Sources: The Data Warehouse design is modeled at the logical data level and linked to the candidate data sources. Your selection of the optimal Operational Data Sources can then be made from the multiple potential sources.
- 4. Design the Data Warehouse: The logical Data Warehouse model can be implemented as a fully normalized structure, a denormalized and/or summarized star schema structure, even one or more of each structure. The logical model is traced to all of its implementations automatically, allowing you to map all of the implementations of a particular attribute.
- 5. Specify Transformation Processes: Once you have all of the potential sources defined and the data warehouse designed, you can now choose between the redundant potential sources to design the transformation and integration processes based on the very best data source.

Once your warehouse is designed, built and populated, delivering quality business data that meets your defined needs is a snap using your choice of Ouer, or DSS tools

Visible Advantage DW Edition

Visible's Data Warehouse Architecture toolset will help successfully deliver consistent, high-quality, strategic business intelligence to the right people, in the right place, at the right time.

Visible's highly sophisticated product, **Visible Advantage Data Warehouse Edition**, is uniquely suited to support developing data warehouse architectures and designing strategic data warehouses and data marts.

Visible Advantage allows quick reaction to changes in environment, policy, or customer requirements. It is the **only** integrated tool that allows enterprise needs and measures to be linked directly to a strategic information model, enterprise data dictionary, legacy data base models, data integration and transformation process models, and data warehouse and data mart database design models -- all in a single relational repository.

Visible Advantage is also the **only** tool that allows multiple physical database designs to be linked to a logical enterprise data model while allowing every element to be linked to business requirements in a collaborative multi-user repository.

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Visible Advantage™ Data Warehouse Edition

Successful Data Warehouse Engineering

Many data warehouse projects fail because they did not deliver the information needed by the business or the information delivered was of poor quality, *not* because of the implementation technology that was selected (DBMS, Transformation tool, Query tool, etc.). Others fail because they deliver all of the information the data warehouse builders could find in a huge database, making it difficult to find the "diamonds" among the millions of "rocks". The Visible Advantage Data Ware-house Edition allows the data warehouse engineer to virtually eliminate these common causes of failure by automating the critical success factors of a Data Warehouse in a single, integrated toolset.

Data Warehouse Architecture

Linking an enterprise's strategic information requirements with its information architecture, application architecture, and technical architecture results in a Data Warehouse Architecture. A well-documented architecture is a logical organization of information pertaining to the following corporate-level, enterprise-wide elements:

Key Features of Visible Advantage DW Edition

- Business Requirements Traceability Unique ability to define and manage complex business requirements (including goals, objectives, business rules, metrics, and strategies) and to trace them to the data warehouse design.
- Corporate Information Standards Definition Identifies the standard data structure for
 the data warehouse, allowing it to be cross referenced to reverse engineered operational data
 source designs, the Corporate Data Warehouse, and to all of the Data Marts in the
 organization. Data structures can be denormalized for performance differently in any design
 while keeping traceability links to the corporate information standard.
- Visual Design Graphical analysis of transformation processes from the operational source to the data warehouse design using our exclusive Data Warehouse Design diagram.
- Seamless Links To and from: operational datastores, business requirements, logical
 enterprise architectures, and physical data warehouse or data mart designs. And since they are
 all integrated, changes in any one design are automatically reflected in all other designs and in
 cross-phase links.
- Central Data Repository Allows collaborative update of any of the objects managed by the toolset by anyone in your organization, eliminating update problems and enabling collaborative design.
- Automated Recovery of Operational Data Source Design -- Existing data sources can be scanned via native DBMS connections, ODBC or via SQL scripts to recover the designs of legacy data sources.
- Redundant Data Identification -- Multiple sources are identified so the optimal data source for the warehouse can be determined, increasing data quality.

The Visible Advantage

Visible's highly sophisticated product, Visible Advantage Data Warehouse Edition, provides a practical, integrated set of effective tools for designing, developing, and documenting a data warehouse architecture -- and ultimately engineering the warehouse.

Visible Advantage is a support system that can be a valuable asset to any enterprise involved in data warehouse development. *Visible Advantage* includes an integrated repository, extensive reporting capability, and state-of-the-art modeling, charting, analysis, matrixing, and information system design tools.

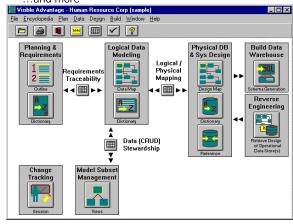
Visible Advantage provides the capability to document an enterprise's multilevel strategic business plans, and link them to appropriate performance measures. More importantly, it also allows information requirements that support an enterprise's strategic plans and performance measures to be modeled and translated into database, data mart, data warehouse, decision support system (DSS), and executive information system (EIS) models and designs.

System Requirements Visible Advantage DW Edition requires a minimum Intel 80486 processor and Microsoft Windows 3.1 (or later) with at least 8MB RAM. Windows 95 or Windows NT 4.0 requires a minimum of 16MB RAM. At least 50MB of available hard disk storage space is recommended.

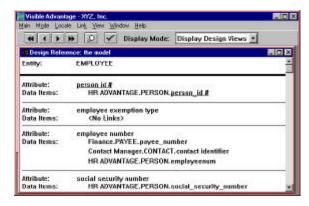
Database Types Supported

Teradata Sybase Informix
Redbrick MS SQL Server Ingres II
Oracle DB2 MS Access

...and more



Main Menu - The Visible Advantage DW main menu gives a good overview of the features and benefits. The business drivers, goals, objectives and requirements of the warehouse/mart are captured, traced to the information needs in the logical model, then mapped to the data sources from reverse engineered systems. The logical model can be developed independently from data sources or can be derived from the available data sources.



Identify All Potential Data Sources – Visible Advantage DW makes it easy to find the best source for any data that is put into the warehouse. In this example, we want to put "Employee" in our data warehouse but need to identify the source of data. Above, we see that data is available from a variety of sources. After you identify the potential data sources, then you can select the chosen field in the transformation process specification.

Pricing: Contact our sales department for current pricing.

Call: 1-800-6VISIBLE

Tel: (781) 778-0200 or Fax: (781) 778-0208 Visit us on the Internet at www.visible.com

