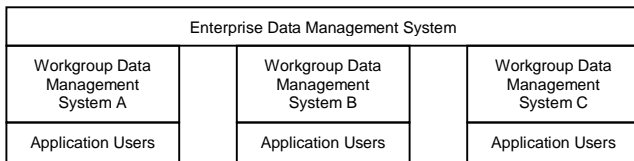


DMLink delivers the peer to peer revolution to the engineering data management world by integrating data management systems, so that they can manage their own native data and share it with other same, similar, or foreign systems. DMLink accomplishes this by providing a web-based interface that is a single portal into any data management system in the enterprise.

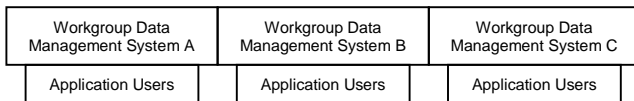
Philosophy

Many Computer Aided Design (CAD) titles on the market today incorporate proprietary workgroup data management systems that enable a team of users to concurrently work on a design. If many of these systems exist in the enterprise, the sharing and analyzing of data between systems is often tedious at best. Enterprise data management systems attempt to interface with these application specific workgroup data managers by incorporating a "tiered" architecture, which typically adds a tremendous amount of overhead that directly affects the end user's productivity.



Enterprise Tiered Architecture

The philosophy behind DMLink is to allow the workgroup data managers do what they were designed to do - manage their native data. When the need arises to locate or share data on one or across multiple workgroup managers, DMLink will enable this via its interactive web-based interface.



DMLink's Workgroup Peer to Peer Architecture

DMLink also provides a single point of entry to view the contents of any data management system in the enterprise. DMLink can do this in real time or by using its internal indexing system that is automatically updated on command.

Architecture

DMLink was designed as an open system using popular Open Source software such as Perl, Apache, and MySQL. The complete source code of DMLink's core and its data manager specific modules are accessible. DMLink is not an over-generalized system that requires months or years to customize and implement. DMLink's core provides the mechanism for peer to peer communication and its modules enable access to any specific data manager. The modules will most likely need some level of configuration, given that the data manager has been configured per the way your business and processes work. Since each module is written as a template for a data manager, this configuration is accomplished easily and maps exactly to your current data model and process.

Capabilities and Features

Searching and Browsing:

- Search in *Real Time* by name and/or attributes.
- Browse in *Real Time* using a data management view tree structure.
- Indexed searching against a central database.

Data Sharing and Other Actions:

- Share data across multiple remote data managers on a corporate WAN or the Internet.
- Modify item attribute data within any data manager.

Viewing:

- View 2D CAD Drawings and 3D models from any data manager using the viewer of your choice.

Administration and Security:

- Automate the administration of any data manager.
- A comprehensive and flexible permission scheme provides security across all data managers.

Incorporated Technologies

DMLink implements established Internet protocols to bridge systems together. HTTP and XML are used as the messaging medium to provide a neutral ground between systems. The Perl programming language is used for the core of DMLink as well as the fully customizable modules to interface with the data managers. Apache is used as a customized HTTP server to provide the web-based interface and remote programmatic access. MySQL is incorporated to provide a centralized database for administrative and indexing needs.

Example Applications

Two or more I-DEAS Team Data Managers (TDM)

The TDM is the workgroup data manager for the I-DEAS CAD package. Many companies who use I-DEAS have multiple TDM's for many reasons, one being that the TDM does not support usage over a WAN. Typically, data is transferred from one TDM to another using I-DEAS package files, which can be a tedious process, involving many steps and different people.

DMLink automates the data transfer process from one TDM to another using its interactive web-based interface, providing data movement in a fraction of the time and effort typically spent performing the manual steps. DMLink also provides the capability to search and browse one or more TDM's in real time and against an indexed database. When working in a multiple TDM enterprise, the sharing of data across multiple TDM's can lead to duplicate data being revised on separate TDM's. DMLink assists in minimizing this risk, so users can search multiple TDM's in real time and find out where the latest changes are taking place. DMLink also allows users to view 2D I-DEAS drawings and 3D models from any TDM using the viewer of your choice.

PTC's Optegra Vault and I-DEAS Team Data Manager (TDM)

Parametric Technology's Optegra Vault is an established enterprise data management system that is capable of managing a wide range of application file formats. A common use of Optegra Vault is to distribute released viewable images of CAD drawings and related documents. Once an I-DEAS assembly and/or part is approved and released in the TDM, DMLink can automatically generate the required viewable drawings and import them into Optegra Vault, so they can be distributed throughout the enterprise.

Sharing Released Data on Network Drives

Since the introduction of PC based networking, mapped network drives have become a common way for companies to distribute documents. In environments where only the latest revision of a document is used, a read-only network drive can be used to share this data. Once the data is approved and released, DMLink can export the data from its native data manager and update the shared networked repository, so all users will receive the latest information. On a corporate WAN, mapped drives may not be a viable solution. In this case DMLink can distribute the data to other remote sites so that local users there can also access the latest information.

Data Manager Interfaces

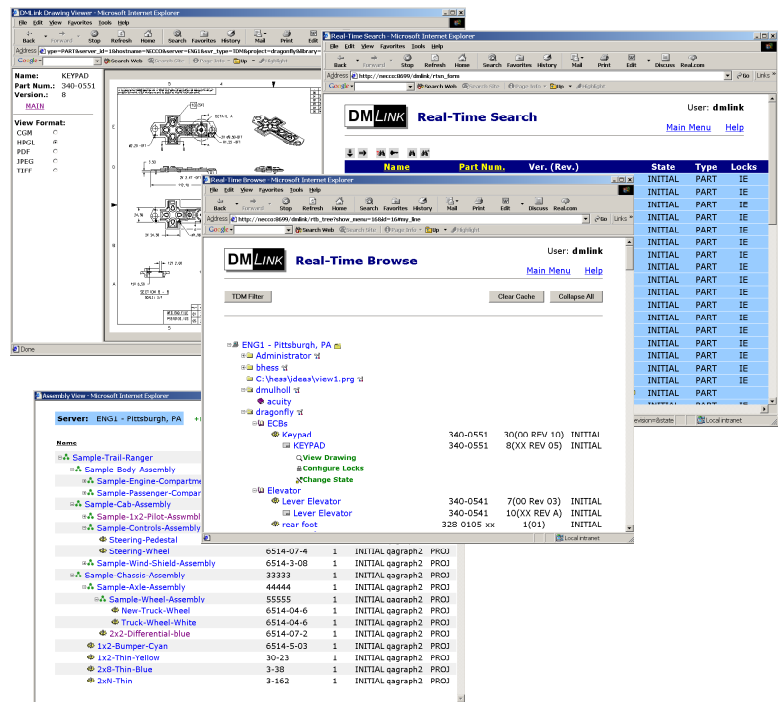
- I-DEAS Team Data Manager – EDS-PLM
- Optegra Vault – Parametric Technology Corporation
- UNIX File System
- Windows File System

Viewable Drawing Generation

- I-DEAS – EDS-PLM
- Unigraphics – EDS-PLM
- Pro Engineer – Parametric Technology Corporation
- Catia – Dassault Systemes
- AutoCAD – Autodesk
- CADD5 5 – Parametric Technology Corporation
- Medusa – Parametric Technology Corporation

Web Browsers Supported

- Internet Explorer
- Netscape Navigator



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