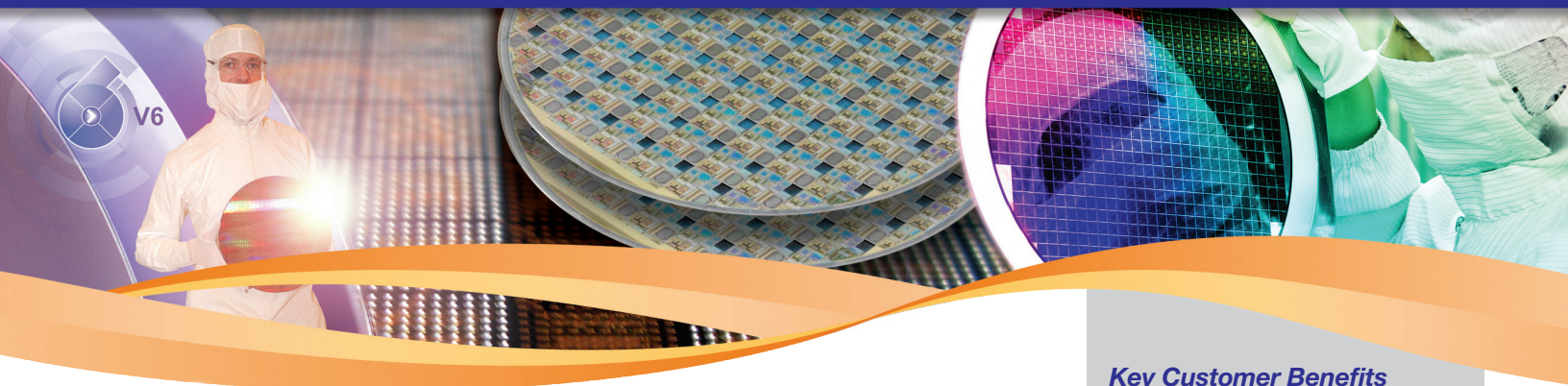




ENOVIA Synchronicity DesignSync Data Manager

Product Overview

The creation of complex electronic products is not an easy proposition, and is becoming increasingly complex with the proliferation of globally dispersed teams. Since 1998, integrated circuit (IC) design teams have relied on ENOVIA® Synchronicity® DesignSync® Data Manager to help manage the hardware and software data in their products. Today, over 120 development organizations, including 13 of the top 15 semiconductor companies, take advantage of ENOVIA Synchronicity DesignSync Data Manager to boost design productivity. ENOVIA Synchronicity DesignSync Data Manager was designed specifically for DDM (Design Data Management) of complex IC design, and continues to evolve as challenges facing the semiconductor industry evolve as well.

Product Highlights

Client/Server Architecture

The Client/Server architecture allows for design work to proceed without connection to the server. Communication occurs for data management operations or status reporting only. The architecture is uniquely suited to support geographically dispersed design teams. Servers may be globally distributed, and accessible from client applications anywhere.

Multisite Version Control

A "single source of the truth" is maintained, and made available to designers regardless of their physical location.

Distributed Data Storage

Data repositories (SyncServers) can be hosted at any design site for maximum local efficiencies. Data from multiple servers can be automatically aggregated in a workspace.

Data Replication

Sophisticated caching mechanisms support data replication and minimize disk space usage by creating workspaces using symbolic links to shared read-only data files. Static and dynamic caching mechanisms are supported. If a workspace is constructed using a static cache, updates are controlled by the user. If a dynamic cache is used, updates occur automatically, so the workspace is always up to date. Caches make efficient use of disk space, because workspaces consist of links to read-only copies of shared files. Physical copies need only be fetched for edit operations.

Module Linkages via Mcaches

The Mcache is an efficient data sharing mechanism that enables copies of modules to be shared by local teams. This greatly reduces file storage requirements as well as providing a tremendous savings in terms of development time over fetching individual copies. The Mcache provides version context directly in the user's local workspace, making it easier and quicker to determine that one is working with the correct module versions.

Foreign Configuration Management Modules

In many organizations, circumstances mandate that design data is managed in a variety of systems. ENOVIA Synchronicity DesignSync Data Manager provides the ability to integrate data from other Configuration Management systems and allows developers to easily retrieve a complete design hierarchy across all the systems managing data for project-wide functions such as system test or tape-out.

Key Customer Benefits

- Connect and manage your entire design chain with a unified Design Data Management system
- Significantly boost design productivity for a rapid payback and strong ROI
- Maximize your ability to reuse existing designs and embedded software
- Manage your design hierarchy as part of the design process
- Utilize an intuitive built-in Submit, Integrate, Test, and Release (SITaR) workflow
- Reduce time-to-market by increasing collaboration efficiency
- Win the first-to-market advantage
- Manage complex data types from a variety of EDA tool vendors
- Manage software projects using the Microsoft Visual Studio Plug-in

Security

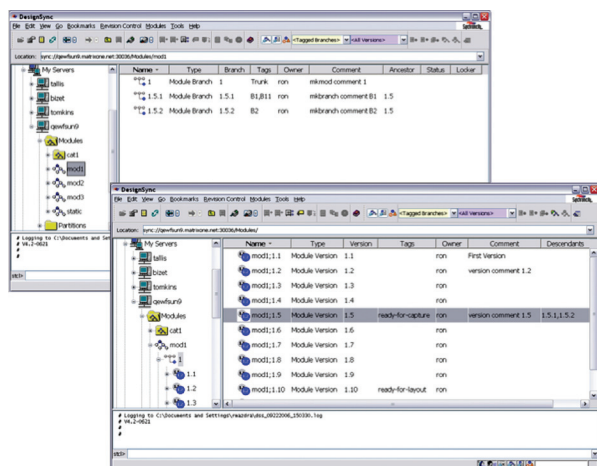
Whether transferring data internally or externally, security is ensured using commercial grade 128 bit SSL encryption.

Internet Based Transfer Protocols

Data transactions use standard internet protocols and work seamlessly with existing firewalls.

Audit Trails

Detailed revision control activity is captured in a database which may be queried using a standard Web browser.



Sophisticated Access Controls

Protection of valuable design data is ensured by a configurable Access Control System. Data access is controlled in the server, and does not rely on UNIX permissions. Access to data can be controlled based on a user's identity, the data the user wishes to access, and the command the user wishes to run to operate on the data.

Sophisticated Workspace Management

Sophisticated workspace management
Multiple methods are provided for the creation and maintenance of designer workspaces supporting differing work styles. For example, workspaces can be configured to incorporate changes made by others either on demand, or automatically.

Configurable Use Models

Both the “locking” model and the “non-locking” model are supported to suit either design team or individual preferences. An intuitive built-in SITaR workflow facilitates design collaboration, and increases quality by ensuring that all design work is performed in the context of a stable project, or system, baseline.

Built-in SITaR Workflow

A standard workflow in which all design work proceeds in the context of a stable system baseline is included. SITaR (Submit, Integrate, Test, and Release) facilitates project setup and collaboration by providing a simplified and intuitive command set for use by both designers and integrators. SITaR enables design teams to leverage the power of modular design, while minimizing the learning curve. This is because SITaR wraps underlying DM commands in the context of a well defined work flow.

Where Used Capability

A “whereused” command traces design hierarchy from the bottom up, providing answers to the question “Where has this design block been used in other design blocks, or products?”

Version History Reporting

Version History Reporting
Brief or detailed reports of the version history of an entire module, or an individual design object, provide a complete genealogical record.

Diff and Merge Tools

Both graphical and command line diff and merge tools are provided, including TkDiff.

Comparison Utilities

Sophisticated utilities allow for the comparison of module versions, releases, hierarchies and workspaces. A workspace can be compared with a known configuration, or even with another workspace.

Graphical User Interface

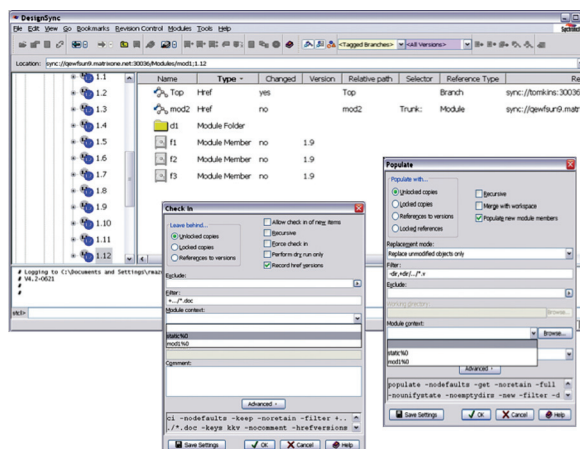
The ENOVA Synchronicity DesignSync Data Manager GUI allows for the navigation and manipulation of data at both the detailed file level and at the more abstract module level. Comparison utilities, diff tools and a command line interface are included in the GUI.

Command Line Interfaces

Two command line interfaces are provided. The “dssc” shell runs ENOVIA Synchronicity DesignSync Data Manager commands. The “stcl” shell is a Tcl interpreter, into which the ENOVIA Synchronicity DesignSync Data Manager commands have been linked, providing programmatic capabilities and access to other utilities.

Extensible Architecture

The command set can be easily extended by creating aliases or autoloaded Tcl procedures.



Client Side Triggers

You can easily introduce process automation to increase efficiency and decrease errors by creating Tcl procedures which are registered to intercept operations and perform other operations. For example, if a layout object is checked in, a Design Rule Check procedure could be automatically run, and if clean, the checkin operation is allowed to proceed.

C-API

ENOVIA Synchronicity DesignSync Data Manager can be easily integrated with other tools using a fully documented C-API.

Plug-in for Source Code Control for Software Components

ENOVIA Synchronicity DesignSync Data Manager includes a plug-in for the Microsoft Visual Studio IDE (Integrated Development Environment.)

Integrations with EDA Design Tools

Integrations for EDA tools provided by Cadence and Synopsys are available as add-ons to ENOVIA Synchronicity DesignSync Data Manager. For detailed information, please see product information for ENOVIA Synchronicity DesignSync DFII Add-On (Cadence integration) and ENOVIA Synchronicity DesignSync MW Add-On (Synopsys integration).

Integrations with Software Development Environments

Integrations for the popular Eclipse and Microsoft Visual Studio SW development environments are provided as part of ENOVIA DesignSync Data Manager. These integrations allow developers to quickly and easily interact with DesignSync to manage design data without leaving their editing environment.

EDA Tool integration API

ENOVIA Synchronicity DesignSync CTS (Custom Types System) Add-On provides an API for creation of custom complex data types. ENOVIA Synchronicity DesignSync CTS Add-On is used to enable EDA data awareness for arbitrary data types in ENOVIA Synchronicity DesignSync Data Manager. Using ENOVIA Synchronicity DesignSync CTS Add-On, one can enable EDA data awareness for any EDA tool, whether developed in house, or commercially available.

The Role of ENOVIA V6 and PLM 2.0

ENOVIA Synchronicity DesignSync Data Manager supports PLM 2.0, product lifecycle management online for everyone, and the ENOVIA V6 values: global collaboration innovation, single PLM platform for intellectual property (IP) management, online creation and collaboration, ready to use PLM business processes, and lower cost of ownership..

About ENOVIA

ENOVIA is the recognized leader in delivering collaborative PLM solutions. We enable companies from a broad range of industries to dramatically accelerate innovation, time-to-market and revenue generation by collaboratively developing, building and managing products. Our solutions facilitate the sharing of concepts, content and context across product lifecycles and throughout value chains of employees, customers, suppliers and partners.

ENOVIA collaborative PLM solutions help global enterprises bring together people, processes, content and systems to achieve a compelling competitive advantage. Our interoperable solutions unify and streamline processes across the product lifecycle, enabling companies to easily and cost-effectively work on projects within and outside of their enterprises. Our adaptable, scalable technology is built to accommodate the ever-changing marketplace.

About Dassault Systèmes

As world leader in 3D and Product Lifecycle Management (PLM) solutions, the Dassault Systèmes group brings value to more than 90,000 customers in 80 countries. A pioneer in the 3D software market since 1981, Dassault Systèmes develops and markets PLM application software and services that support industrial processes and provide a 3D vision of the entire life cycle of products from conception to maintenance. Our offering includes integrated PLM solutions for product development (CATIA®, DELMIA®, ENOVIA®, SMARTEAM®), mainstream product 3D design tools (SolidWorks®), 3D components (Spatial/ACIS®) and SIMULIA®, DS' open scientific platform for realistic simulation. Dassault Systèmes is listed on the Euronext Paris (#13065, DSY.PA) stock exchange. For more information, visit 3ds.com.

For additional information, contact us at:
Dassault Systèmes Enovia Corp. • 900 Chelmsford Street, Lowell, Massachusetts 01851
978 442 2500 • ENOVIA.com • 3DS.com

