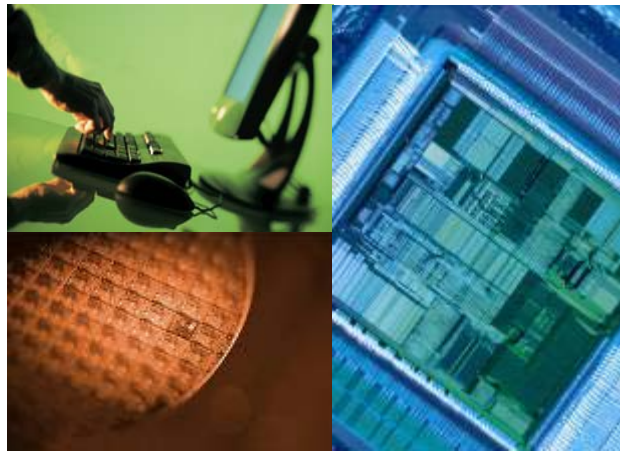


Synopsys MAP-inSM Program Update

EDA Interoperability Developers' Forum

May 17, 2006

Laurence Brevard
SMD Alliance Manager



Agenda

- Milkyway overview
- MAP-in program overview
- MAP-in releases
 - 2004.06
 - 2005.09 – current
 - 2006.06 – coming Fall 2006
- Call for participation

Milkyway™

Key Features and Benefits

- Production-proven database for all Galaxy Design Platform tools
- Capacity that supports the largest designs
- Eliminates the need for large design exchange files
- Includes physical library preparation
- Supports designs in the latest technologies including 90, 65, and 45nm
- Precludes design intent mismatches from faulty semantics of exchange files
- Open to 3rd-parties (C-API, Tcl, Scheme) through the free MAP-in program
- Also provides 3rd-party data input to the Galaxy Platform through LEF and DEF

Galaxy Design Platform



- Includes best-in-class tools
- Is built on foundation of PrimeTime® and Milkyway
- Ensures convergent flow via consistent timing and common engines
- Addresses key challenges including timing, signal integrity, test and power management
- Proven for 90 nanometers
- Provides fastest path to the best results

MAP-inSM – Milkyway Access Program

- **Free and open to all EDA vendors**
 - 40+ licensees
 - Products available today
- **Comprehensive environment**
 - GUI, viewer, editor, translators
 - Scheme and TCL scripting
 - Fast C-API access to read, modify, and/or create
- **One Milkyway code-base**
 - Simultaneous releases
 - Forward and backward compatibility

MAP-in Membership

- **Basic Membership Requirements**

- Commercial software tool vendor that needs access to Milkyway-based data
- Agree to MAP-in license

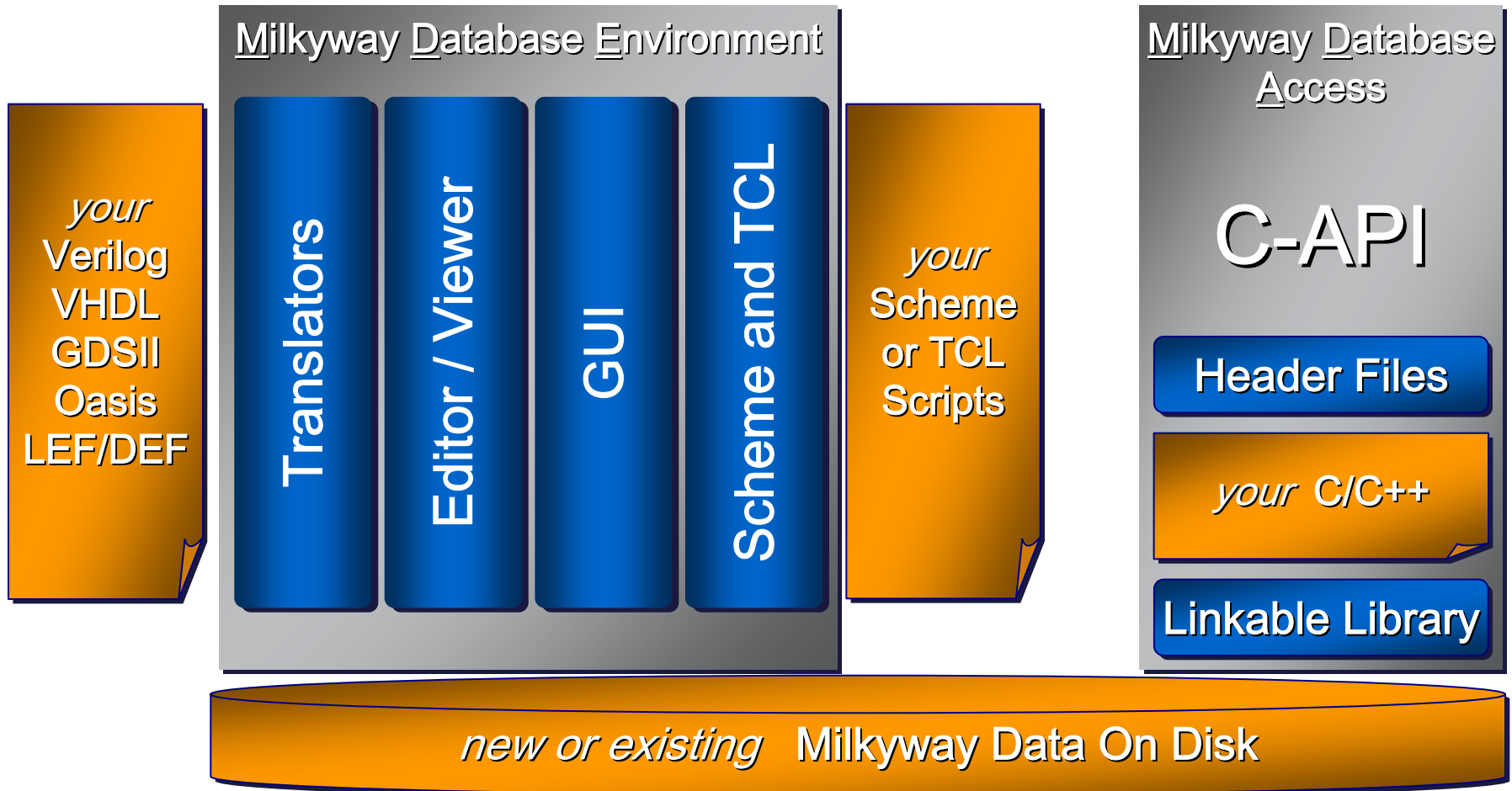
- **No Membership Fee**

- 1st copy of Milkyway Database Environment (MDE) and Milkyway Database Access C-API at no charge.
 - Additional copies of software available for modest annual fee
- Access to SURF on available/approved basis
- MAP-in web forum for community support

- **Synopsys offers optional support contract**

MAP-in Components

Documentation and Examples



Web Based MAP-in Access

- MAP-in program is at the Synopsys web site:
www.synopsys.com/partners/mapin
- Extensive program information
- Access to discussion forums
- Simple click-through membership registration
 - immediate access to MDE
 - request form for MDA C-API

Synopsys MAP-in - Mozilla Firefox

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http://www.synopsys.com/partners/mapin/

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MAP-inSM Program

MAP-in to Milkyway
Become a MAP-in Member

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17th EDA Interoperability Dev Forum
REGISTER NOW →

The Milkyway™ Access Program (MAP-inSM) gives access to the widely used Milkyway design database for the integration of commercial EDA tools into the Milkyway database and Environment. The goal of MAP-in is to improve customer design flows through more efficient sharing of design data and increased interoperability. Any EDA vendor that wishes to integrate their products with Milkyway can join MAP-in.

MAP-in Overview
[About MAP-in](#)
[MAP-in Process Diagram](#)
[List of MAP-in Members](#)
[What People Are Saying](#)
[Events](#)
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Discussion Forums
Milkyway

Milkyway Developers' Forum Presentations
[Apr 2004](#)
[Oct 2003](#)
[Apr 2003](#)

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Web Based MAP-in Access – Login

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http://www.synopsys.com/cgi-bin/mapin/login1.cgi

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MAP-in - License already accepted, access the downloadable products page.
- Please read and accept the license agreement to proceed.

Welcome Administrator!

Your application data reports are waiting for you at the following links:

[Combined Log Files Summary Report with Counts](#)
[Registered Users Report](#)
[Download Attempt Usage Report](#)

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Comments? Email your comments about Synopsys documentation to doc@synopsys.com

Select a Product to Download

The Milkyway Database Environment (MDE) is the full Milkyway runtime environment which includes the GUI, Scheme and Tcl scripting environment, a basic editor and the file translators for Verilog, VHDL, LEF/DEF, GDSII and PDEF.

Synopsys Installer:
The 2005.09 MDE release is packaged to use the Synopsys Installer 1.1.1.

[Download Synopsys Installer](#)

MDE Documentation:

- [Installation Guide Version 2005.09](#)
- [MDE Readme Version 2005.09](#)
- [MDE MAP-in Extension Language Manual Version 2005.09](#)
- [MDE MAP-in Data Preparation User Guide Version 2005.09](#)

MDE Common Code Needed for All Platforms:

- [MDE Common Files Version 2005.09](#) Platform Independent (19 MB)

Done

- MDE Installer

- MDE documentation

- MDE common files

Download Page *cont'd*

- Milkyway Database Environment (MDE) binary files

- Current version
- Previous versions

- Milkyway C-API (MDA)

- Reference manual
- Download request

- License key request

Synopsys MAP-in Product Selection - Mozilla Firefox

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[MDE Platform Specific Binary Code:](#)

- [MDE for AMD.64 Version 2005.09](#) RedHat Enterprise Linux v3 – 64 bit (41 MB)
- [MDE for HP.64 Version 2005.09](#) HP UX 11.0 – 64 bit (64 MB)
- [MDE for IA.64 IPF-2 Version 2005.09](#) RedHat Enterprise Linux v2.1 – 64 bit (65 MB)
- [MDE for IA.32 x86 Version 2005.09](#) RedHat Enterprise Linux v3 – 32 bit (41 MB)
- [MDE for SUN.64 Version 2005.09](#) SUN Solaris 8 – 64 bit (59 MB)
- [MDE for SUN.32 Version 2005.09](#) SUN Solaris 8 – 32 bit (44 MB)
- [MDE for SUSE.32 Intel EM64T 32-bit Version 2005.09](#) SUSE Linux Enterprise Server 9 – 32 bit (33 MB)
- [MDE for SUSE.64 Intel EM64T 64-bit Version 2005.09](#) SUSE Linux Enterprise Server 9 – 64 bit (32 MB)

[Archived Versions](#)

Milkyway Database Access C-API Standalone Libraries
The Milkyway Database Access (MDA) C-API Standalone libraries include the linkable runtime object code and the source header files with the C-API function signatures and definitions. This does not include a GUI, interpretive environment, editor or file translators.

[MDA MAP-in C-API Reference Manual for Version 2005.09](#)

Request C-API Libraries Download Instructions
Synopsys will process your request and upon approval send you instructions on how to download the Milkyway Database Access C-API Standalone libraries within three business days.

Click the button below to request download instructions.

License Key Request
To get started right away, register to receive a Milkyway license key. Synopsys will process your request and upon approval send you one 60-day license within three business days. The MAP-in administrator will follow up with your one year license within the 60-day period.

Click the button below to submit a request for a license key.

Done

Web Forum for Support

powered by Infopop - Mozilla Firefox

Milkyway Linkable Libraries C-API - Forum Powered by Infopop - Mozilla Firefox

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http://synopsys.com

http://synopsys.infopop.net/1/OpenTopic?a=frm&s=7741942603&f=1321951516&ORIGINAL_REFERRER=

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Milkyway Linkable Libraries C-API

» Hello LBrevard [logout] » » Milkyway Linkable Libraries C-API

Forum	Topic	Topic Starter	Replies	Views	Rating	Last Post
Milkyway PL	Is argument MWXDb_Get_WireMasterId(layer) argument redundant	Voom	1	19		January 06, 2006 03:41 PM
Milkyway Li	Enumeration of layers within MW data base	abramov	3	34		August 25, 2005 03:57 PM
Milkyway FA	Is it possible to get the CLF definePad orientation?	Voom	0	3		June 10, 2005 11:59 AM
MAPin Milky	How to access the global routing grid	Voom	0	3		June 07, 2005 10:09 AM
	Functions for global routing not accessible	Voom	0	1		June 07, 2005 09:41 AM
	Cell subType values in mwx.h are not correct	Voom	0	3		May 19, 2005 05:10 PM
	Cannot find __ctype_b et al. when linking using gcc 3.2.3	Voom	0	1		May 01, 2005 04:20 PM
	How to free memory	abramov	1	17		April 06, 2005 11:00 PM

All times are PST

Icon Key

- New Posts Since Y
- No New Posts Since
- A Read Only Forum

Done

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2004.06 Release Highlights - PREVIOUS

- **Platform QSC-V**
 - Added RHEL v3 on AMD.64
 - IA.32 was still Red Hat Linux 7.2
- **MDE (GUI, Editor, Scripting, Translators)**
 - Added TCL /CCI scripting language in addition to Scheme
 - New Translators
 - LEF 'read_lef' w/ direct creation of Milkyway database
 - OASIS
- **MDA (C-API)**
 - 50 functions added to C-API
 - Driven by MAP-in partner and customer requests
 - Additional data management
 - Additional design editing functions

2005.09 MAP-in Release – **CURRENT**

- **Moved to tighter synchronization with product releases**
- **Based on 2005.09 Astro Product Family**
- **Available as of December 2005**

2005.09 MAP-in Platforms

- IA.32
 - Red Hat EL v3 x86 32-bit
- AMD.64
 - Red Hat EL v3 x86_64 (AMD Opteron, Intel EM64T)
- SUSE.32, SUSE.64
 - SLES 9 x86_64 (Intel EM64T, AMD Opteron)
- SUN.32, SUN.64
 - Solaris 8/9 Sparc
- HP.64
 - HP-UX PA-RISC
- IA.64
 - Red Hat EL v2.1 Intel Itanium 2 / IPF-2

2005.09 MAP-in – MDE

- **Milkyway Database Environment**
 - GUI, layout editor, scripting, menu development
 - Translators: VHDL, Verilog, LEF*/DEF, GDSII, Oasis, PDEF
- **Updates – see readme.pdf documentation**
 - Scripting: Tcl collections, display control, command shell w/o GUI, new nullDisplay
 - Translators: Verilog 2001, DEF support, Oasis, PDEF
 - Database control: locking, hierarchical archive
 - Attached file management

2005.09 MAP-in – MDA

- **Milkyway Database Access - C-API**
 - Header files and linkable library
 - Milkyway database access for user-written programs
- **Updates**
 - New C-API functions
 - Support for hierarchical netlist

2005.09 MAP-in – Documentation

- HTML documentation no longer available for MAP-in
- One consistent set of navigable PDF
 - Better match to the specific MAP-in capabilities

2005.09 MAP-in Release – Issues

- **X Window System stubs**
 - Separate version of MDA is available
 - General technique for stripping stubs developed
- **C++ throw / catch on IA.32**
- **Attached file conversion of symbolic links to file copies**
 - STAR filed
 - Fixed for 2006.06

2006.06 MAP-in Release - **COMING**

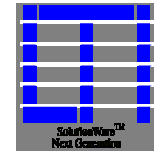
- **Synchronized with 2006.06 Astro Product Family**
- **Available in August – September 2006**
- **Specific contents still being decided**
 - 👉 *Give us your input!*

2006.06 MAP-in Platforms - **COMING**

- IA.32
 - Red Hat EL v3/v4 x86 32-bit
- AMD.64
 - Red Hat EL v3/v4 x86_64 64-bit
- SUSE.32, SUSE.64
 - SLES 9 x86_64 32-bit and 64-bit
- SUN.32, SUN.64
 - Solaris 9/10 Sparc 32-bit and 64-bit
- HP.64
 - HP-UX 10/11.11 PA-RISC 64-bit
- IA.64
 - Red Hat EL v2.1 Itanium-2 64-bit

MAP-in Members 5/06

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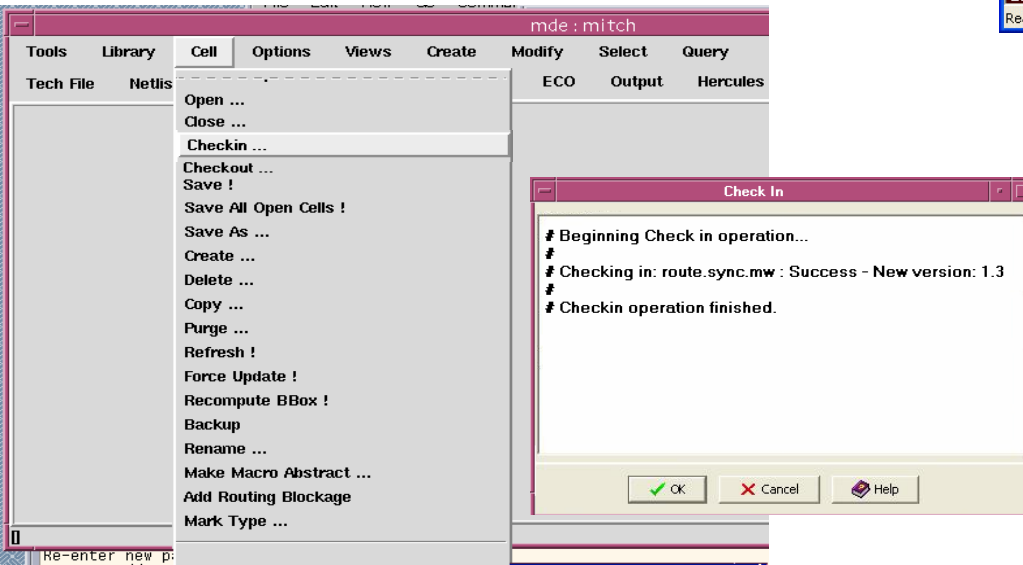
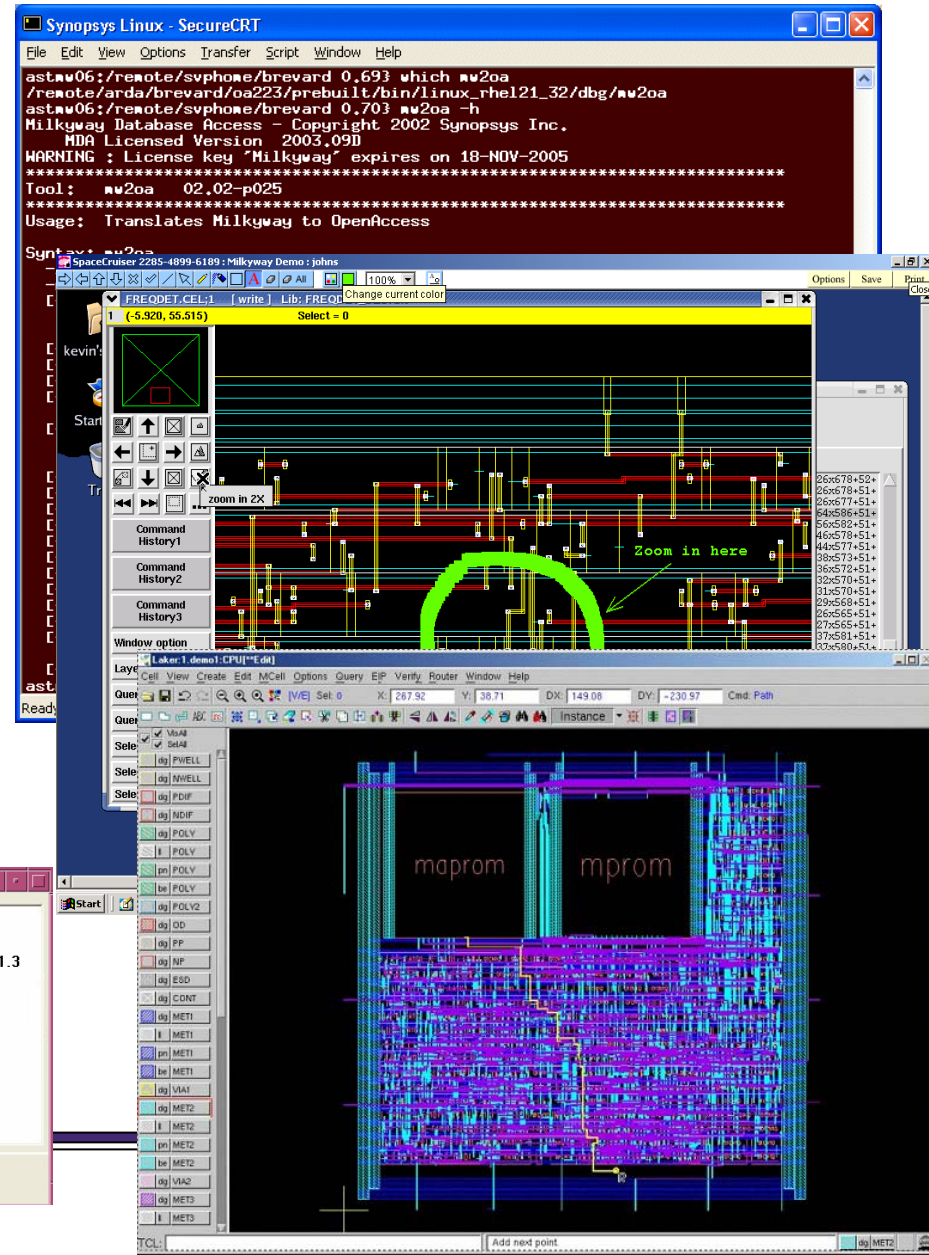


Lizotech



Real 3rd-Party Integrations

- MatrixOne Digital Developers Suite
- SiliconCanvas Laker PnR
- Oridius
- Golden Gate WG bridge



Summary

- MAP-in provides free access to Milkyway for all EDA vendors
- Milkyway C-API offers high-performance access to large amounts of existing physical design data
- MAP-in enables the bridge to OpenAccess
- Synopsys continues to be the interoperability leader

