

# The GoldenGate Working Group



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Jim Wilmore  
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# OpenAccess... defined in one slide or less...



- The OpenAccess Coalition is a consortium of 18 EDA vendor and user companies
- The OpenAccess DB technology supports design data containing hierarchical connectivity with associated physical details; it includes:
  - Information Model and C++ API
  - Reference Implementation
    - Available free as compiled libraries and as source code



<http://www.si2.org>

# GoldenGate Working Group Charter



OAC Council, December 2002:

- Define the IM mapping and the technical linkage between OA and MilkyWay so that both DBs can be used effectively in a CAD user's production design flow  
**and to Synopsys**
- Recommend to the OAC how to build this bridge and define the stages of its implementation



# GoldenGate Working Group Membership



- Participants include:  
Cadence, HP, IBM,  
Intel, LSI Logic, Motorola, Philips,  
Renesas, Si2, ST Microelectronics, and *Synopsys*
  - *Synopsys brings unique technical knowledge of Milkyway to OA's GGWG for accurate mapping of Information Models and APIs*

# How do we get there from here



- While the two Information Models represent very similar design data with many similar use models, there are many misalignments due to history, usage, language...

...and the detailed mapping is not entirely straight forward.



- Without the GoldenGate there could be half a dozen bridges, each with its own twists and turns.

# GoldenGate Mapping of Information Models and APIs



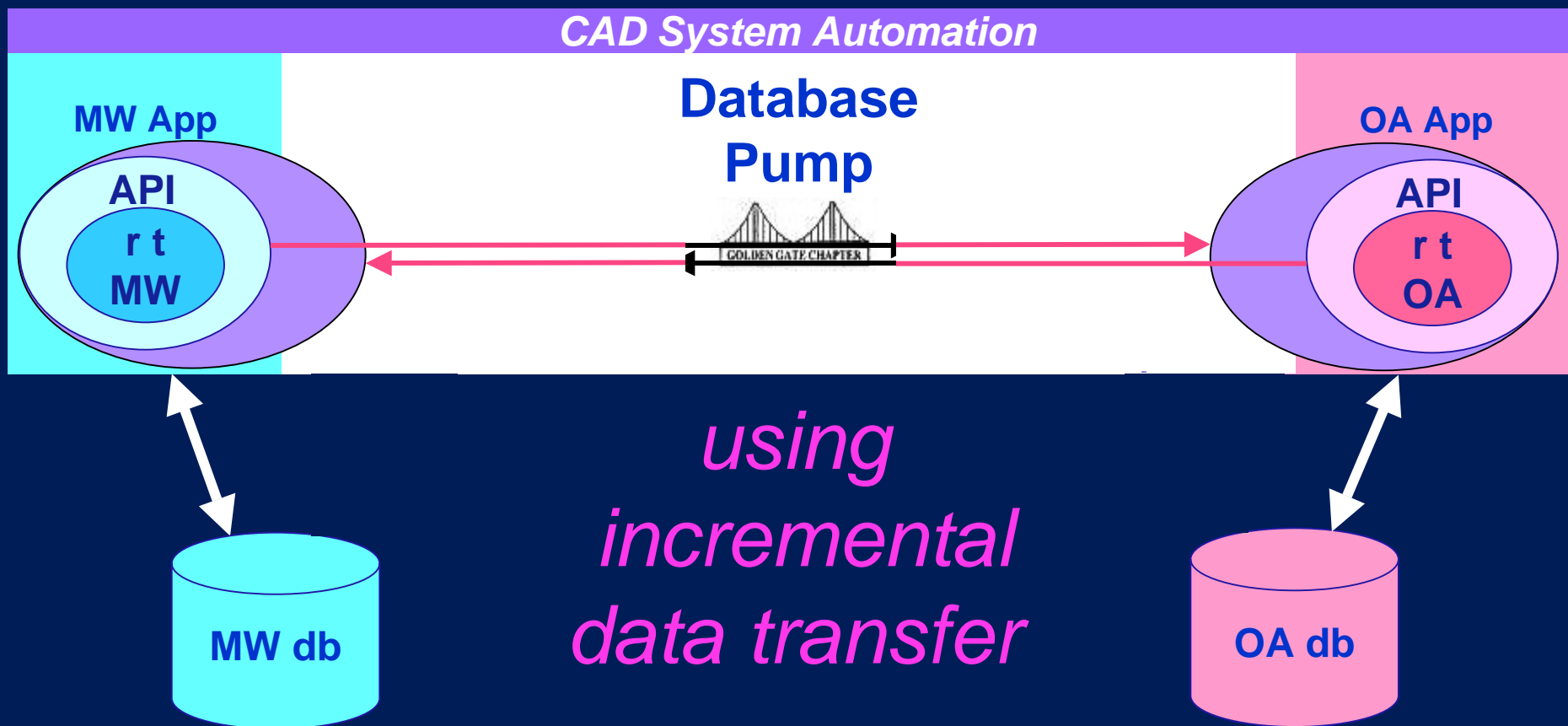
- The first step -- identify the correspondence of a *useful* subset of the objects which is *common* to the two IMs
  - Hierarchical connectivity with geometric details – placement and detailed routing
  - Child interface – pins and figures
- The next step -- identify the methods essential to support data exchange



# GoldenGate Data Exchange Usage ...and its implementation



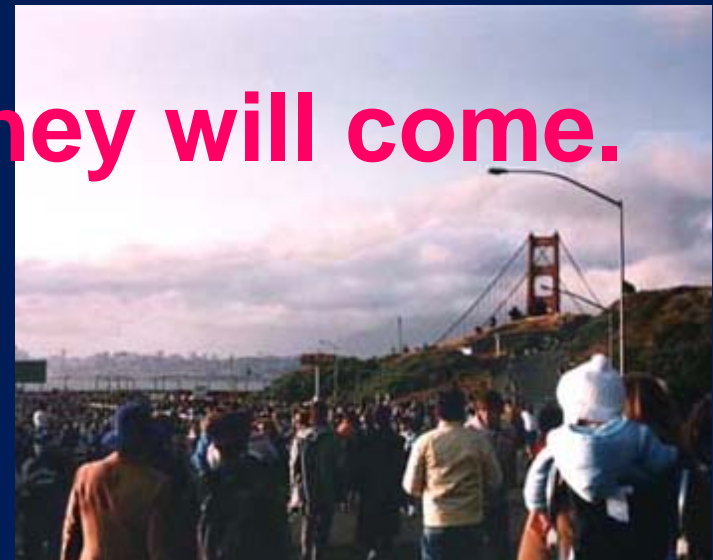
## ...and its performance benefits



# If you build it...



...They will come.



# GoldenGate Working Group Status



- Mapping document (spread sheet)
  - Identifies focused subset of *common* objects
  - Specifies primary mapping relationships
- Ready for prototyping data exchange technology on focused subset of data objects
  - Working with real code and real data will shake out details
- LSI Logic is seriously considering contributing their existing GG technology to the WG
  - This technology is in use in LSI Logic and is expected to be released soon as a component of the RapidWorx™ design system.