

New to The OpenAccess Coalition?

Here's How It Works?

OpenAccess is not open source software. It is "open" to members of the OpenAccess Coalition who develop and maintain it, ensuring compatibility with the industry EDA tools. Most recently, Data Model Six was introduced to support cloud-based design environments, where multi-process applications capitalize on the performance of huge cloud machines.

The *OpenAccess Coalition* is a group of member companies that collaborates on an industry solution: the OpenAccess database, which enables more than one EDA supplier's products to be used within a design flow. OpenAccess provides a common database that enables tools from different EDA suppliers to act upon the same design data. This database sharing is called "interoperability."

Other OpenAccess Benefits

Interoperability is just one OpenAccess advantage. It also serves as a real enterprise, stand-alone database with lock management for simultaneous editing and compression features for transferring the entire database. OpenAccess gives new EDA tools the ability to instantly plug-and-play with any design flow. This is major advantage to startup EDA companies, since investors see it as a way to help enter new markets.

The *OpenAccess API* (Application Program Interface) creates a window from your applications into the details of the design, even when the design uses multiple EDA tools from different suppliers. The lock management ensures the application will not "step on" someone else's work. Your application is directly tied into the design flow. The API contains a rich set of classes so applications can quickly act upon the design data. The primary API development in C++ is called the "reference implementation."

In addition to using the reference implementation, OpenAccess working groups have added scripting APIs in all popular languages and function from other sources. Shell-level scripting languages allow fast development of prototypes and point of application tools ("point tools"). Users can access

the design directly from a shell environment. There's no need to open and close tools.

Working groups also address specific needs, like our OpenAccess Debugger. This gives developers a peek into the database as the application is running. This feature is currently under development.

OpenAccess Coalition Governance

The OpenAccess Coalition is self-governing, with a board of directors that oversees its activities. The board is made up of the primary financial contributors to the OAC, called "director-level members." Each of these companies has one vote on decisions requiring board action.

The Change Team and the Extensions Steering Group both report to the OAC board. Each has its own operating rules, which are approved by the board.

Two architects lead the *Change Team*: an integrator company and a non-EDA supplier company. Cadence Design is the integrator and contributes API development to the OpenAccess Coalition. API changes and the roadmap are reviewed twice monthly in the Change Team meetings.

The *Extensions Steering Group* provides ways to create extensions for concepts not integrated into the reference implementation. Any OpenAccess user can develop an extension though extensions developed within the ESG are kept in synchronization with the reference implementation as it changes. We call these "formal extensions."

All coalition members have rights to the source code, which allows users to build OpenAccess for any environment. The license requires that changes be reported back to the Change Team for integration.

The license also allows members developing applications to redistribute a binary executable copy of OpenAccess to their products. This comes with two caveats: First, members cannot resell OpenAccess, so source code and documentation are not included within redistribution packages. Second, to avoid reselling copies, the redistributed binary executable should be protected by the application.