

OpenAccess Scripting Language Workshop

Monday June 6, 1:30PM – 4:00PM, Room 29AB

This tutorial is intended for chip design engineers who want to interact with OpenAccess programs or data in scripting languages (such as Tcl, Perl, Python, Ruby), either integrated with native C++ code or as stand-alone programs. These engineers use scripting languages as part of their daily work. This tutorial will provide them with an invaluable knowledge base of what is available to them today.

This tutorial will teach engineers the following key points:

1. How to use these API's in writing scripts to:
 - Manage a design process / sub-process
 - Create quick tools for custom functions with minimal performance degradation
 - Create tools to perform "what if" evaluations as part of a design effort
2. The architecture of the OpenAccess Scripting (OAS) interfaces for 4 popular scripting languages:
 - **Perl** – a procedural, syntax-rich language used for fast prototyping
 - **Tcl** – a simple, command-based syntax used since 1993, supporting events, multiple interpreters, and OS-level threading
 - **Python** – a mostly object-oriented language with garbage collection, operator overloading, reflection, free functions, closures, lists, iterators, and list comprehensions
 - **Ruby** – an object-oriented language with garbage collection, operator overloading, reflection, access control, closures, and blocks
3. Procedures to
 - Download the OAS package
 - Install and build an OAS interfaces in the user's environment
4. Use of the OAS interfaces with detailed programming examples from the scripting language versions of the C++ Labs in the *Si2 OpenAccess API Tutorial*

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01:30PM - 01:40PM: **Introduction:** Sumit DasGupta, Sr. VP of Engineering, Si2

01:40PM - 02:40PM:

01:40PM - 02:00PM: **Scripting Language Overall Goals,** Rudy Albachten, AMD

02:00PM - 02:20PM: **Scripting Language Architectures,** Stefan Zager, AMD

02:20PM - 02:40PM: **Scripting Language Interfaces:** James Masters, Intel

02:40PM - 03:00PM: **Break**

03:00PM - 04:00PM **Scripting Language Workshop Demos and Interaction**

03:00PM - 03:30PM: **Wrapping Methodology demo**

03:30PM - 04:00PM: **Language example demos**