

IEEE Has it Goin' on in Cloud

IEEE Cloud Computing Initiative

David Bernstein

Cloud Strategy Partners, LLC

Chairman, IEEE Cloud Standards Track, Cloud Computing Initiative

Expert Group/Program Committee, SIENA/Cloudscape Initiative

Consulting Scientist, NIST ITL Lab, Cloud Computing Project

SIENA Cloudscape V Meeting

Brussels, Feb 2013

IEEE Cloud Computing Initiative



- **An Initiative tying together several IEEE Activities**
- **Conferences, an Active Research Community and Standards Working Groups**
- **IEEE P2301 - Guide for Cloud Portability and Interoperability Profiles**
- **IEEE P2302 - Standard for Intercloud Interoperability & Federation**
- **PAR in Formation – Standard for Cloud Computing Units of Measurement**
- **PAR in Formation – Swift and Nova Standard for IaaS Cloud API**
- **PAR in Formation – EC2 and S3 Standard for IaaS Cloud API**
- **PAR in Formation – GCI Standard for IaaS Cloud API**
- **Industry Connections Program – IEEE Cloud Computing Interoperability and Portability Test Bed**



Conferences

IEEE CloudCom – 5th year

IEEE Cloud – 6th year

IEEE Grid & Pervasive Computing – 8th year

IEEE eSciences and Grid - 9th year

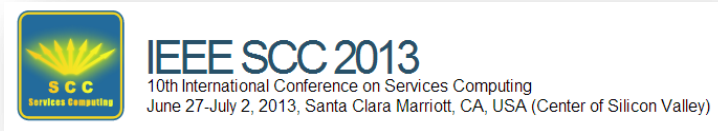
IEEE Services Computing - 10th year

IEEE Cluster, Cloud, & Grid - 11th year

IEEE Parallel/Distributed Processing - 13th year

IEEE High Perf. Computing & Simulation - 28th year

IEEE Distributed Computing Systems – 33rd year



IEEE Intercloud Testbed Directions



University of Essex



dream Orange

Global Certificate Authority



GICTF Global Inter-Cloud Technology Forum



IEEE Reference Root and Exchange



NSF Center for Autonomic Computing - Four Member Universities

NOTE:

The P2302 blueprint is a “Transparent Peer to Peer Volunteer” architecture.

In contrast to the EGI work, which is an “Independent Multi-Cloud” architecture.*

The SS7/IN PSTN and the Internet are both of type Transparent Peer to Peer Volunteer.

* N. Grozev and R. Buyya, “Inter-Cloud Architectures and Application Brokering: Taxonomy and Survey”, *Journal of Software: Practice and Experience.*, Wiley InterScience 2012

Thank You

David.Bernstein@ieee.org

<http://standards.ieee.org/develop/project/2302.html>

<http://cloudcomputing.ieee.org/intercloud>