IEEE Intercloud Testbed

Engineering Meeting
10/22/13

Agenda

1. Members Roster
2. Press Release and Marketing Launch
3. Members, Subject Matter Experts, and Executive Committee
4. IPR Policy
5. Information Web Site
6. Engineering Work

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Founding Members

1. AT&T, Inc. *
2. Centre for Development of Advanced Computing, India
3. CITIC Telecom International CPC Limited
4. Cloudscaling, Inc
5. ComputeNext
6. Fraunhofer FOKUS Institute for Open Communication Systems
7. Global Inter-Cloud Technology Forum
8. JT Global
9. Juniper Networks, Inc
10. DOCOMO Innovations
11. Orange Group, France Telecom SA
12. Second University of Naples
13. ServiceMesh, Inc
14. Telx Group, Inc
15. The University of Ulster, Coleraine, Northern Ireland
16. The Hong Kong Polytechnic University
17. The University of Melbourne
18. University of Essex UK
19. University of Stavanger
20. Virtustream
21. 6Fusion

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* Note: AT&T has requested to recuse themselves from marketing/promotion activities but they will still otherwise remain a Member

Press Release/Launch Status

Business Wire
A Berkshire Hathaway Company

HOME SERVICES NEWS EDUCATION ABOUT US Search

IEEE Intercloud Testbed Project Announces Founding Members

Twenty-one global companies and research institutions have joined the IEEE Intercloud Testbed and launched work t… interoperable, and federated cloud ecosystem

October 08, 2013 09:00 AM Eastern Daylight Time

PISCATAWAY, N.J. (BUSINESS WIRE)--Today IEEE, the world's largest professional organization advancing technolog… introd… ct. The IEEE Intercloud Testbed is developing clou… inter… become as ubiquitous and as mainstream as the Int… the p… P2302™ Standard for Intercloud Interoperability an… is dev…

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cloud federation / david-bernstein / ieee

Mission: Protocols to ea… cloud federation

by Barb Darrow OCT. 8, 2013 - 8:43 AM PDT

No Comments

SUMMARY: *The IEEE's Intercloud Testbed Project aims to pave the road to true cloud federation and now has 21 members to help. A great goal but one quibble: the big cloud names are MIA.*

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The newly named founding members of the IEEE Intercloud T… a tough problem ahead of them: coming up with protocols to … of workloads across clouds.

WIRED GEAR SCIENCE ENTERTAINMENT BUSINESS SECURITY DESIGN OPINION

INNOVATION INSIGHTS | *contributor content* | featured blog cloud

Will Multiple Clouds Evolve Into the Intercloud?

BY JOE WEINMAN, TELX 10.10.13 11:47 AM

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Image: opensourceway/Flickr

A group of interrelated technologies is redefining how we live and work: cloud computing, big data, mobility, and the Internet of Things. The cloud is at the epicenter of all this activity: big data migrates to the cloud to be sliced and diced; today's tablets, smartphones, and phablets rely on the cloud for services and entertainment ranging from social networking and microblogs to streaming video; and the hyperconnected world of smart grids, biosensors and connected vehicles will rely on the cloud to collect data and then turn down thermostats, alert physicians, or avoid collisions.

Forbes

New Posts +1 posts this hour | Most Popular A Walk Down Silk Road | Lists TV's Highest-Paid Actors

188 Share 313 Tweet 1.0k Share 1

Joe Weinman, Contributor
I focus on the business value of technology.
+ Follow (10)

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TECH | 10/08/2013 @ 10:24AM | 16,905 views

What's Next For The Cloud? The Intercloud

+ Comment Now + Follow Comments

Cloud computing products and …rices from Amazon, Google, …rosoft, and Rackspace as well …ompanies ranging from AT&T …uora are clearly gaining …tion, growing at a 36% CAGR, …rding to one recent forecast. …loud computing becomes …vasive, customers will need to …rmine how various cloud …ponents from various …panies will work together to …t business objectives. The …E—"the world's largest professional association for the advancement of …nology," and the one that standardized Ethernet (IEEE 802.3) and Wi-… EEE 802.11)—has brought together industry and academia to help …elop Intercloud standards as part of its Cloud Computing Initiative and …y announced an effort intended to test those standards under real-…d conditions.(*Disclosure: I am the chairman of the IEEE Intercloud …bed executive committee*)

Cloud Computing (Photo credit: Wikipedia)

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Members, Subject Matter Experts, and Executive Committee

1. New Members may continue to join.
   - Please refer to project coordinator for discussions and to process applications.
2. Individual Subject Matter Experts can be members
   - They do not get listed as Members or featured in marketing
   - They contribute as individuals to the project
   - SME's may be nominated by any member, approved by Executive Committee
3. Subject Matter Experts so far
   - Yuri Demchenko, Univ of Amsterdam
   - Deepak Vij, 2302 Chair
   - Krishna Sankar, Tata
4. Executive Committee
   - Joe Weinman (Chair), Senior Vice President, Cloud Services and Strategy, Telx Corporation
   - Henry Chan (Vice Chair), Department of Computing, Hong Kong Polytechnic University
   - Prof. Kun Yang (Secty), Head of NCL Laboratory, University of Essex, UK
   - Mark Davis, Vice President, Dell Software, Dell Corporation
   - Michael Lightner, Professor and Chair, Department of Electrical, Computer, and Energy Engineering, Co-Director, Lab for New Media Strategy and Design, University of Colorado at Boulder
   - Jon Rokne, Professor, Department of Computer Science, University of Calgary

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Approved IPR Policy

- Compliance with IEEE Patent Policy (as posted)
- Software
  - BSD “3 clause” (“BSD New”) license
  - Widely Adopted
  - OSI and FSF approved
  - GNU, Apache, MIT Compatible
  - http://opensource.org/licenses/BSD-3-Clause
- Documentation
  - FreeBSD Documentation License
  - Widely Adopted
  - OSI and FSF approved
  - BSD, GNU, Apache, MIT Compatible
  - http://www.freebsd.org/copyright/freebsd-license.html

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2013 Plan

- **Q1-Q3**
  - **Create initial testbed and formal Intercloud Working Group** → ***We Formally Organized the Testbed project, with Policies and Procedures and other documents, a formal engineering plan, Membership Sign up, collaboration environment, and engineering kick off***
  - **Promote and facilitate development** → ***Promotion & recruitment efforts at IEEE, other conferences in US, Europe, Asia, and Middle East. Place several articles. Launch Intercloud Section of IEEE Cloud Website & Information Website.***
  - **Press release** → ***Press Release Issuance at end of Q3***
- **In Q4**
  - **Broaden collaboration** → ***Continued Evangelism at CloudNet 13 in SF November and CloudCom 13 in UK. Members continue to sign up on "Bootstrap Plan" engineering modules and new Member interest continues.***
  - **Deliver Specs with Resourced Engineering** → ***Author Working Documents / Identify Technology Sources in each area of Bootstrap Plan.***

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2014 Plan

	Q1	Q2	Q3	Q4
Engineering Milestones	Engineering Infrastructure Root Coding	Exchange Coding Replication Code	Reference Systems	Network Expansion
Conferences / Engineering Meetings	PTC14 CloudscapeIV Cloud Expo 14 IC2E14	CCGrid2014 ICC2014 MobileCloud2014 Structure2014	Cloud2014	OpenStack Summit CloudNet2014 CloudCom2014
Sustainability Milestones	Name Space Design	Directory Service Design	Compatibility Spec	As a Service Test
Membership	25	30	40	50+
Standards / Publications	Conference Paper(s) P2302 Liaison NIST, OSI, ETSI, ITU-T Liaison as appropriate			

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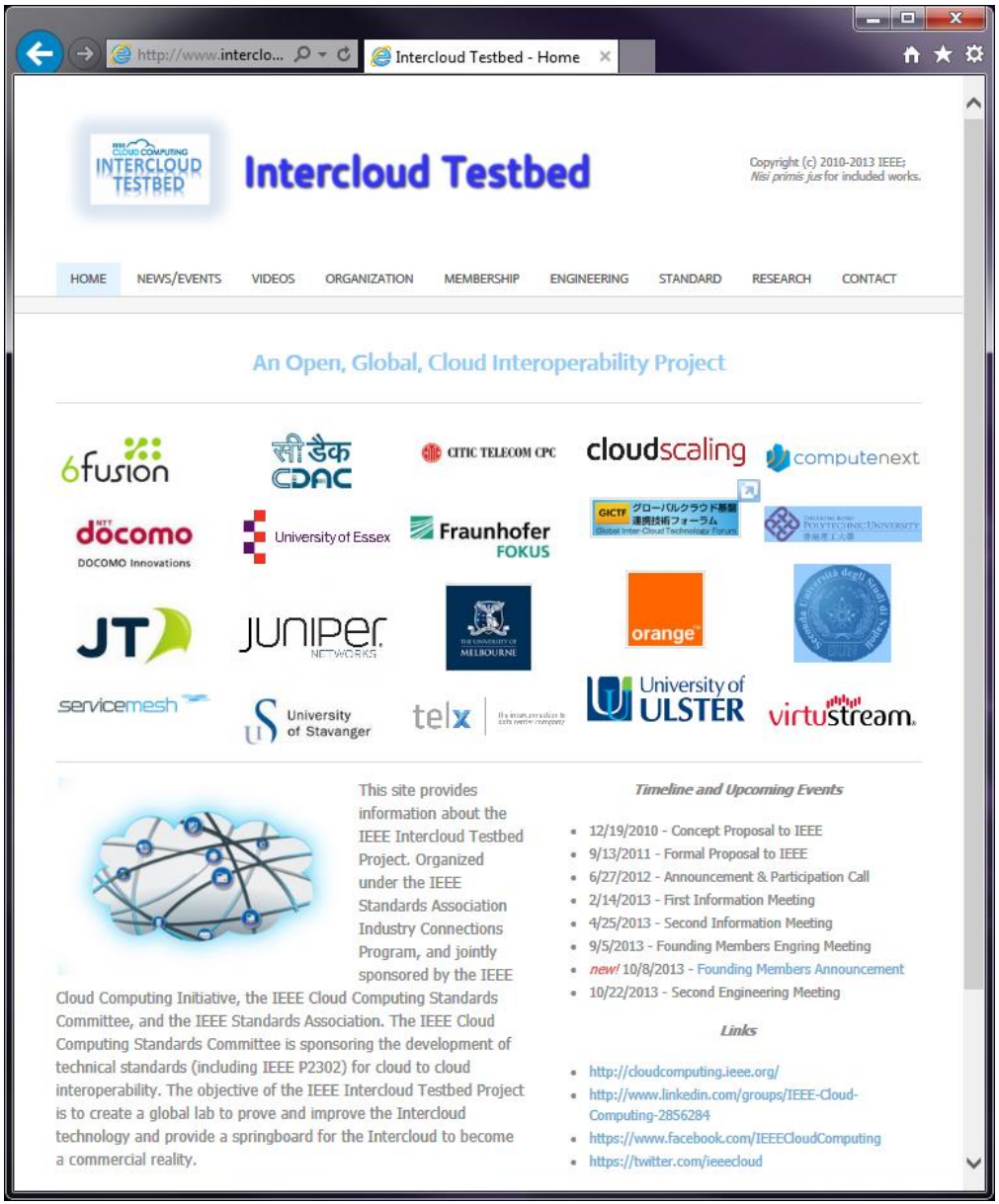
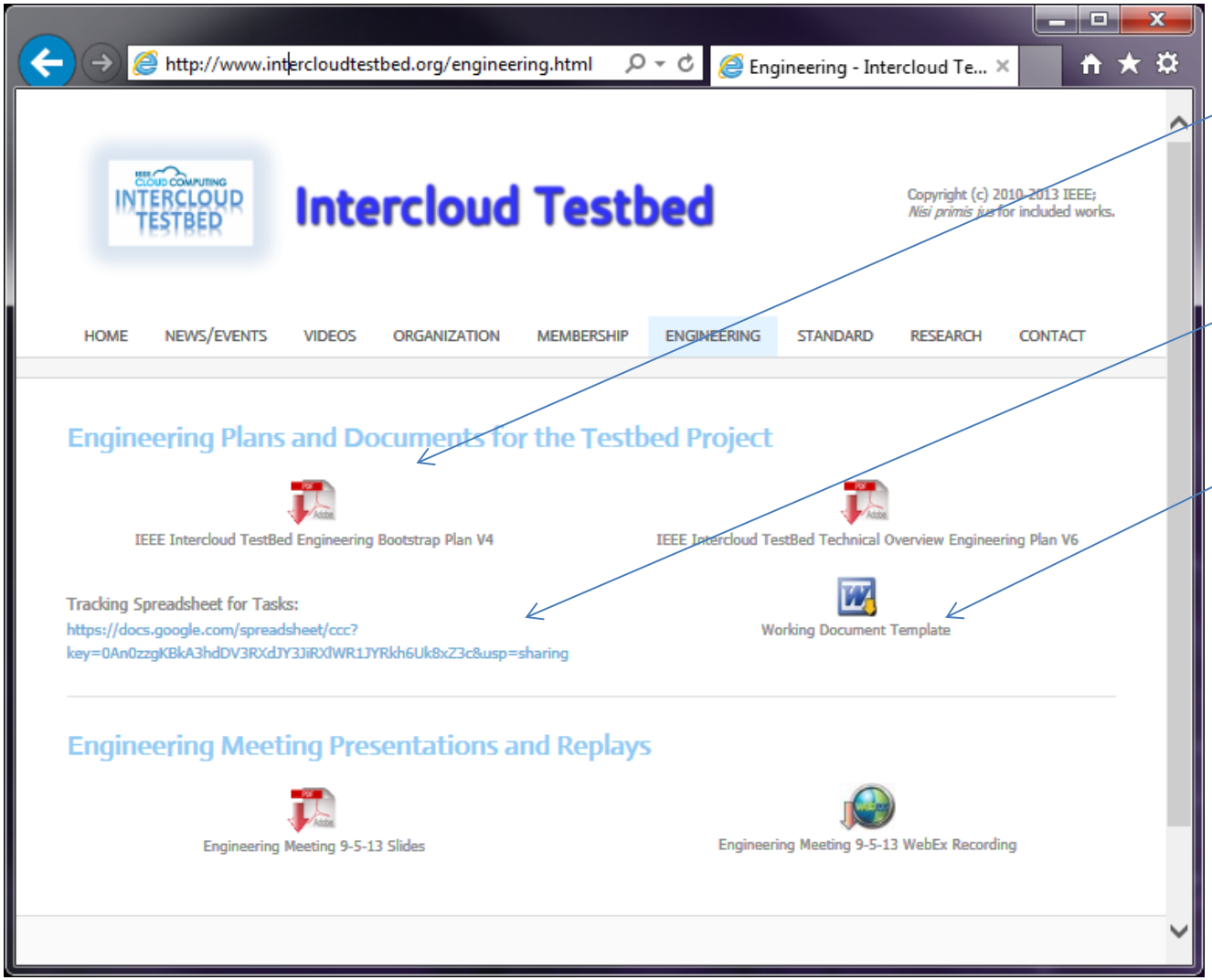
Temporary IEEE Intercloud Testbed Site



http://www.intercloudtestbed.org/

Engineering Work



Bootstrap Plan

Planning Spreadsheet

Working Document Template

Testbed Main Bootstrap Plan Timeline

1. Finish the Master Design sessions
2. Chunk the Work-areas.
3. Recruit and Identify Resources to lead Work-areas.
4. Spec and Provision the Neutral Reference Root and Exchange locations.
5. Identify Local Labs
6. Do initial work per Work-area.
7. Stand up a First Root and some Protocol Test Jigs.
8. Stand up a First Exchange and have it talk to First Root.
9. Stand up Cloud to Exchange Functionality.
10. Member Cloud Join and Federate for use case.

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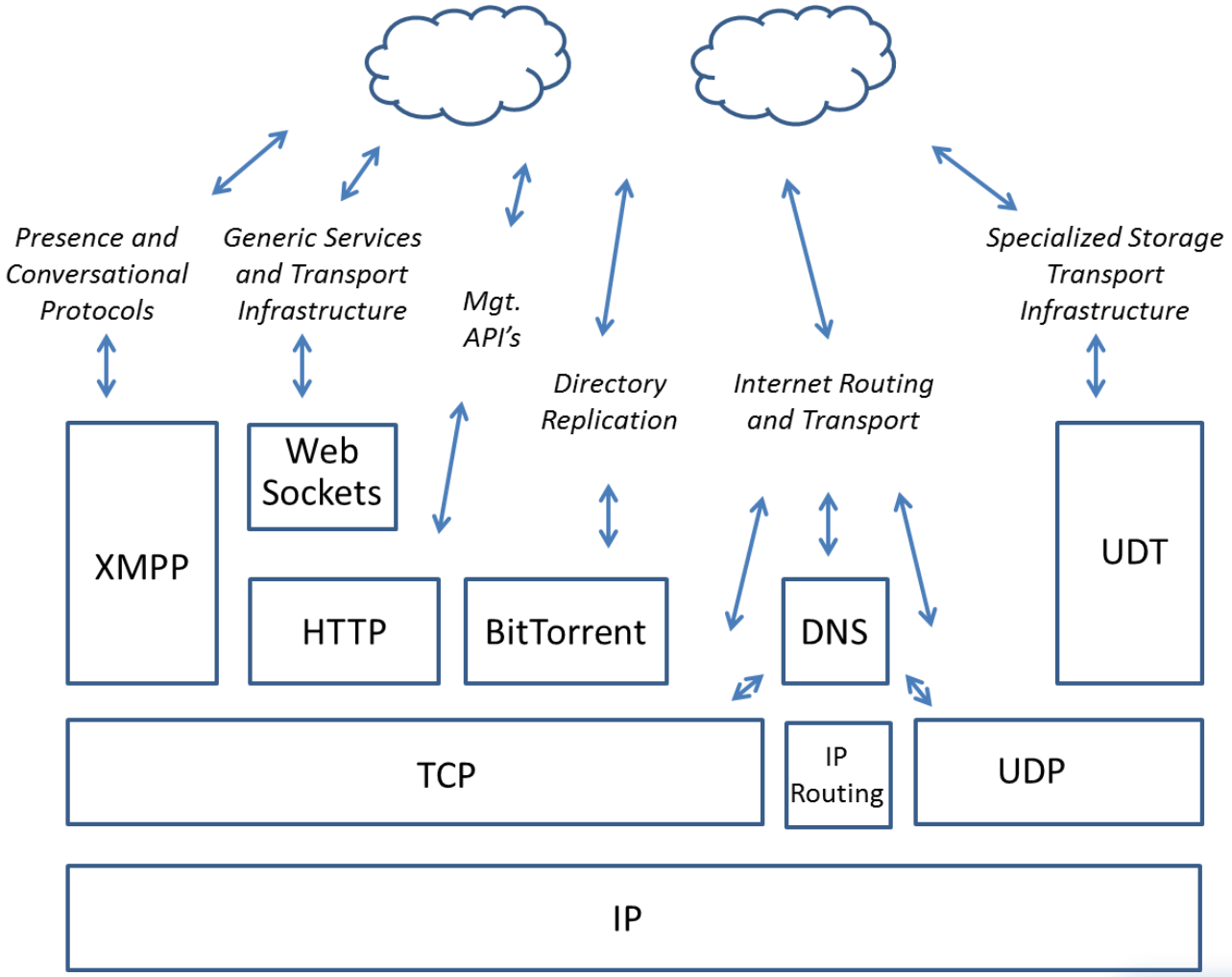
Protocols



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Testbed Main Bootstrap Plan Subject Areas

1) Completion of Master Technical Design Work
2) Collaboration, Source Code, Specs, Internal and Public Site(s)
3) Reference Root(s) Infrastructure, Physical and Networks
4) Reference Exchange(s) Infrastructure, Physical and Networks
5) Overall (Naming Part) Development and Policy/Procedures and Governance
6) Overall (Conversational Part) Development
7) Overall (Transport Part) Development
8) Overall (Trust/Identity Part) Development
9) Overall (Protocol/API Part) Development
10) Overall Root (Semantic Directory Part) Development
11) Overall Root (Audit Part) Development
12) Overall Root and Exchange (Deployment/Replication Part) Development
13) Reference Root (Integration of above services) Integration/Development
14) Overall Exchange (Solver/Arbitrage Part) Development
15) Reference Exchange (Integration of above services) Development
16) Portable Gateway (per Cloud OS flavor) Development
17) Use Case of IaaS Federation and Base Ontology, Implementation
18) Use Case of PaaS Federation and/or Specific Engine (ex, transcoding)