W3C and Cloud Standardisation

w3.org

html5apps-project.eu

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World Wide Web Consortium

- Universality
- Founded by Tim Berners-Lee in 1994
- W3C Standards: HTML, CSS, XML, WAI, RDF, ...
- About 80 staff, 4 hosts, 40% Europe
The Open Web Platform
The Open Web Platform
Web and Cloud

- Cloud as a specialized application of the Web
  - use URIs, HTTP, Linked Data, XML, Web Services, etc.  
    *No need for new Web Standards*

- Web apps as generic consumer of Cloud services
  - MobileApps with limited storage, Data-intensive geomap apps, etc.
    *Some pre-standardization work started*
Web and Cloud go together

- Open Web Platform impacts cloud requirements
  - *PaaS and SaaS live in the Web*
  - *Web is the entry points for consumers*
  - *Web is the Business platform for industry*
  - *Similar horizontal issues: Security, Privacy, Scalability, etc*

- Lessons from Web standardization
  - *Royalty-free standards and cohesive architectures are the keys to interoperability and a thriving ecosystem*
  - *The cloud can expand more rapidly than its current pace*
Built on open standards

- Due process, cooperation, broad consensus, transparency
- Multi-stakeholder participation
  - Address use cases and diversity
  - Need all players
  - Global participation
- Longevity
  - Ensure humanity’s knowledge remains
  - Specifications are freely available

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### Slowing down factors

<table>
<thead>
<tr>
<th>Challenge</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loss of control</td>
<td>48%</td>
</tr>
<tr>
<td>Integration with existing architecture</td>
<td>41%</td>
</tr>
<tr>
<td>Data loss and privacy risks</td>
<td>39%</td>
</tr>
<tr>
<td>Not sure the promise of a cloud environment can be realized</td>
<td>28%</td>
</tr>
<tr>
<td>Implementation/transition/integration costs too high</td>
<td>28%</td>
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<tr>
<td>Risk of intellectual property theft</td>
<td>27%</td>
</tr>
<tr>
<td>Lack of standards between cloud providers (interoperability)</td>
<td>25%</td>
</tr>
<tr>
<td>Legal and regulatory compliance</td>
<td>22%</td>
</tr>
<tr>
<td>Transparency of operational controls and data</td>
<td>22%</td>
</tr>
<tr>
<td>Lack of visibility into future demand, associated costs</td>
<td>21%</td>
</tr>
</tbody>
</table>

Source: KPMG International’s 2012 Global Cloud Providers Survey.
Driving factors for Open Source Clouds

- Flexibility: 67.9%
- Open Standards and API: 61.5%
- No Vendor Lock-In: 54.1%
- Savings: 47.7%
- Portability: 41.3%
- Other (please specify): 8.3%
In Summary

- We need urgently a set of Royalty-Free Standards For Cohesive Cloud Architecture