



Four Worlds of Open

Open Standards

Open (Government) Data

Open Documents

Open Source



Open Standards

- Applications must be able to communicate and interoperate
- Open Standards are the foundation for this
- Open Standards are created through open processes and are generally available
- Standards means substitutability (customer choice), ergo reduces Lock-In!
- Microsoft is a leader in Open Standards participation (e.g. Pioneer in Web Services standardization, Example: CMIS (Content Management Interoperability Services)



Open (Government) Data

Data must be accessible

Data formats must be non-proprietary

Microsoft and Open (Government) Data:

- The Open Data Web Protocol
 - http://www.odata.org/home
 e.g. Virtual City of Miami:
 - http://www.miamigis.com/cityofmiamive/
- Open Government Data Initiative
- (Open Government Data Initiative)



Open Documents

Open standard for document formats There are two primary:

- OpenXML
- ODF (cf. Interoperability document French Government)

MS Office supports both





Open Source (1)

What is Open Source?

- A community of developers (consensus-driven projects)
- Distribute binaries and source code
- Freely modifiable and re-distributable

Three Open Source models:

- Free Software "The original view"
- Commercial Open Source Community-driven, like Linux foundation, Drupal/Acquia
- Commercial Open Source Vendor-driven, like Sun, Red Hat, Alfresco, LifeRay, Google, etc.)



Open Source (2)

For Commercial OSS:

Monetization is a key component of the model

Open Source debate should be driven by

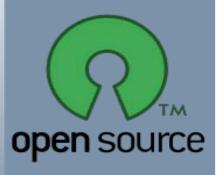
Added-Value and Interoperability



Open Source (3)

"Our customers have been asking for enterprise ready Open Source Software on Windows. We are pleased to be working with Microsoft and the Open Source community to deliver this choice to customers." – Ali Shadman, Vice President, Unisys

Microsoft actively participates in open source projects (PHP, Apache foundation, Linux foundation, Eclipse Foundation, etc.) mainly to drive our Interoperability value proposition Commercial OSS: Different R&D, channel, sales and business/license model



Cloud computing is part of the solution

Cloud computing provides IT resources, as a service, in a dynamic and scalable manner over a network.

Five essential characteristics:

- On-demand self-service
- Broad network access
- Resource pooling
- Rapid elasticity
- Measured service





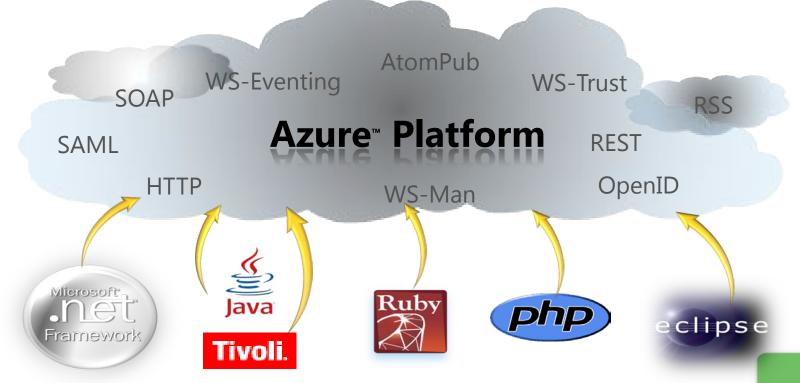




Client-Server

Information Communications Technologies (ICT)

Openness and the Cloud



Cloud is built on Interoperability and Standards

- Use existing standards
 - Today's enterprise standards are cloud standards
 - Web standards like HTML, XML, JSON, SOAP, REST
 - Access Control Standards like SAML, OAuth and OpenID are cloud standards...
 - Data Center and Grid Standards are merging and extending to cloud...
 - ... and new cloud standards will emerge as we learn new interop needs
- Use development platform of choice
- Combine both client + cloud



Microsoft is committed to supporting standards

Key Interoperability Technology: Open Data Protocol (oData)

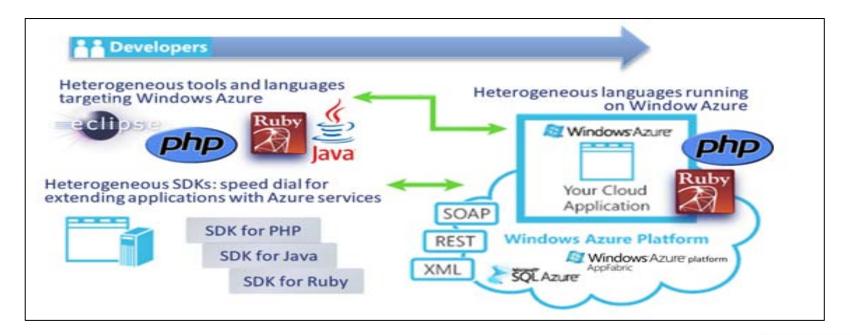
Eliminates data silos, increases shared value of data and business logic

- Access with just HTTP from any platform, or use new libraries for .NET, ATAX, PHP and Java
- Supported by SQL Server 2008 R2 and SQL Azure, Windows Azure Storage, Excel 2010, SharePoint Server 2010, Azure public data warehouse, Open Government Data Initiative...
 - And by Websphere Extreme Scale (IBM), Db4objects (Versant), OpenAccess ORM (telerik), LINQpad



Visit www.odata.org for details

Developer Choice: Open Source Support



Quickly create cloud solutions in the environments you already know

Making Open Source Easy

- Microsoft is funding open source for Azure:
 - SDKs in Java, PHP and Ruby languages for the Windows Azure platform.
 - A plug-in for PHP developers using Eclipse to create Web apps targeting Azure
 - Future: other language tools, Eclipse frameworks, service dashboards and OpenID
- Mixed source applications can all access Microsoft's cloud
 - HPC Dryad/LINQ

Key Takeaways



Yes, Microsoft is open

- Interoperable web services, open standards protocols, and open data are at least as important as open source Open discussion should be driven by Added-Value and Interoperability as a minimum requirement, and not by Free vs. Paying, Open vs. Closed