

Silverlight – What is it and how can we use it?

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Items we are going to Cover...

- What is Silverlight and how has it matured?
- How can we use it now?
 - Demonstrations of building simple Silverlight functionality
 - Some live examples
- What are the plans for the future?
- Questions

What is Silverlight and how has it matured?



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What is Silverlight?

- Formerly WPF/E – Windows Presentation Foundation Everywhere
- It is a cross browser, cross platform implementation of .NET
- Aimed at creating the next generation of media experiences and rich interactive applications (RIAs) for the web
- Client side install similar to Adobe Flash, i.e. a browser plug-in

How has it matured?

- 1.0 released in 2007
 - Capable of delivering rich media
 - JavaScript Support for Programmability
 - XAML Parser (Based on WPF)
 - 2D Vector Graphics/Animations
- 2.0 (Formerly 1.1) released in 2008
 - Capable of delivering RIAs in addition to rich media
 - Support for .NET languages
 - Subset of .NET Framework
 - Suite of familiar controls
 - Web services
 - LINQ
 - Multi-threading
- 3.0 beta released in March 2009

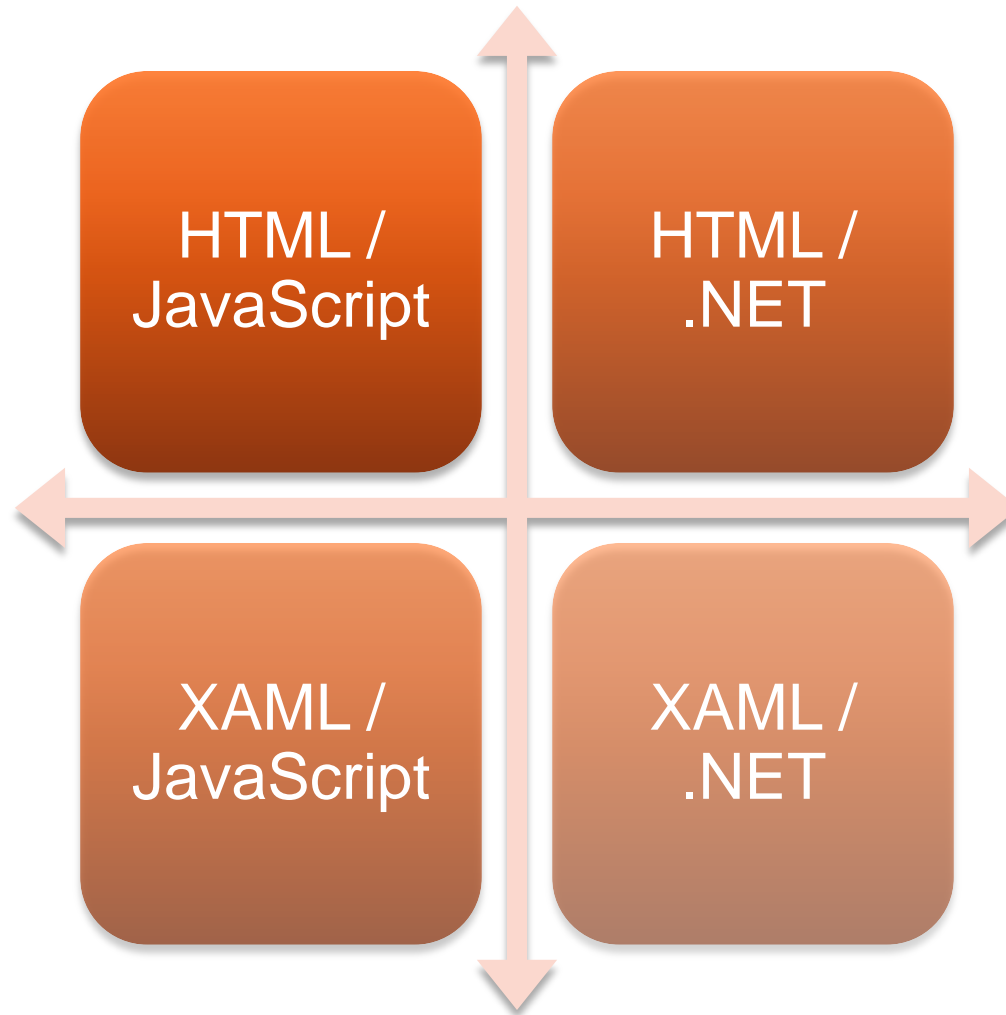
Is it completely cross browser and platform?

- 2.0 officially supports:
 - Windows Vista, Server 2003/2008 and Windows 7 beta
 - Internet Explorer 7/8
 - FireFox 1.5, 2 and 3
 - Windows XP
 - Internet Explorer 6/7/8
 - FireFox 1.5, 2 and 3
 - Windows 2000
 - IE 6
 - Mac OS 10.4.8 (intel based) and above
 - FireFox 1.5, 2 and 3
- Linux Support through Moonlight Project - Mono

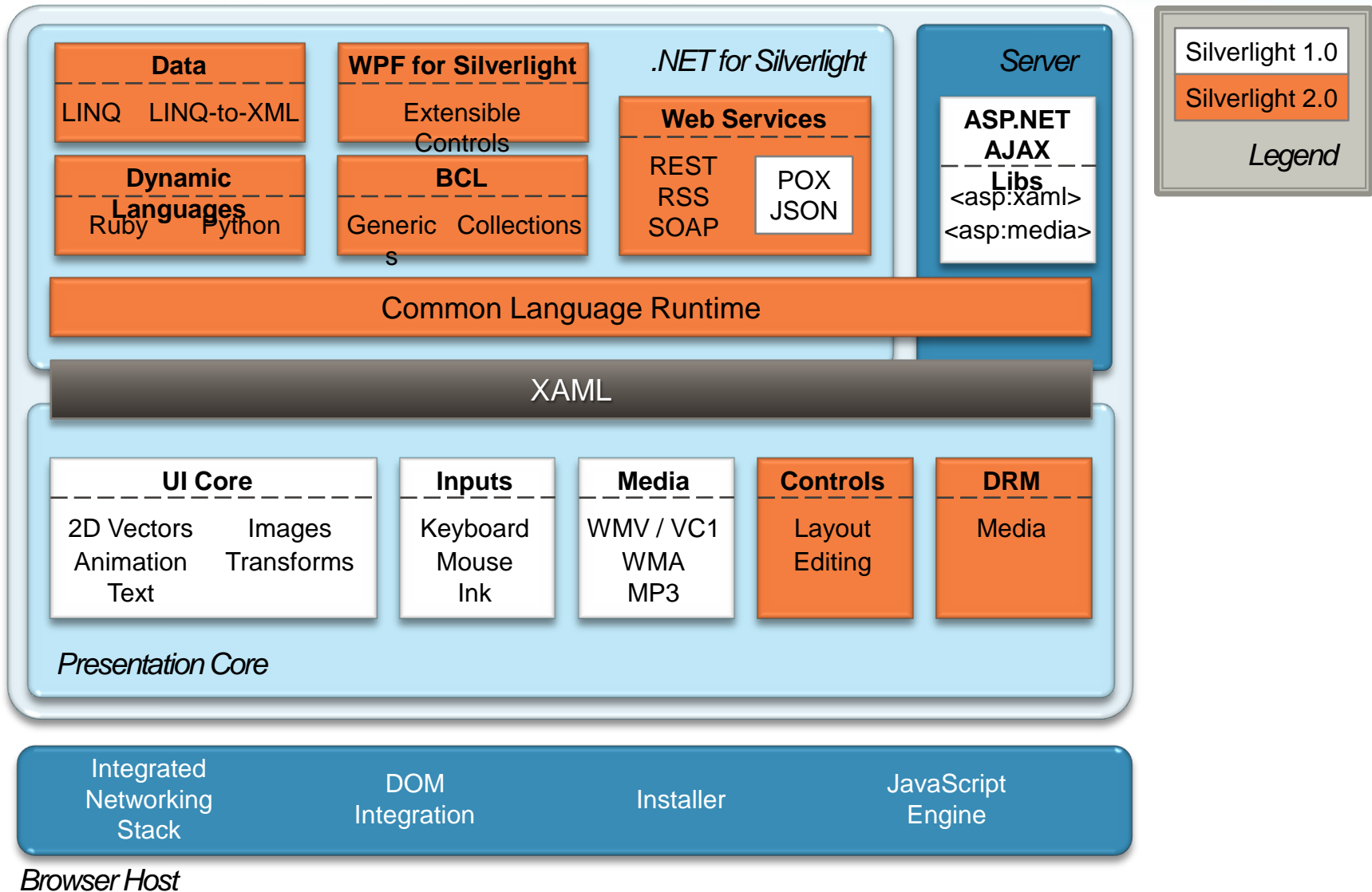
XAML, WPF and XAP

- XAML
 - Extensible Application Markup Language, or XAML (pronounced "zammel")
 - Used by WPF and Silverlight
 - Language used to describe visual presentation, similar to HTML
- XAP
 - Pronounced "zap"
 - Compressed output file for the Silverlight application and includes:
 - AppManifest.xaml
 - Application Assembly
 - Other dependencies and DLLs
 - Loaded by web pages, similar to a .SWF object

Silverlight and the Web



Silverlight Architecture



Browser Host

How can we use it now?



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Tools Required

- Theoretically you can use any text editor etc to build these applications
- To get the most out with high productivity:
 - Silverlight Tools for Visual Studio 2008 SP1
 - Or Visual Web Developer Express with SP1 with various add-ons
 - Microsoft Expression Blend 2 (Or full Studio) - Optional
 - Service Pack 1
 - Trial versions available
 - Download Silverlight Toolkit - Optional
 - Codeplex

Demo: Hello World, Expression Blend and XAP



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Demo: Images, Audio and Video



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Demo: Layout Management



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Demo: Deep Zoom



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Some live examples



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What are the plans for the future?



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What are the plans for the future?

- 3.0 beta released in March 2009 – Features include:
 - File Open/Save
 - Stream Based
 - Hardware acceleration
 - Use of GPU
 - Perspective 3D
 - Pseudo 3D
 - Adaptive Streaming
 - Bitrates depend on network factors
 - Additional Controls
 - DockPanel, WrapPanel, Expander, Label, TreeView etc
 - Applications can run outside of the browser
 - Install locally

Some items not covered today

- Data Retrieval and Binding
- Custom Controls
- Templates for look and feel
- Use of Web Services
- Using Dynamic Languages, such as Python and Ruby
- Microsoft Expression Suite (Blend, Designer, Code, Media)
- RIA Services – Pattern for creating RIAs

Conclusion



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Conclusion

- Silverlight has matured greatly in the past 2 years
- .NET Developers can easily use their existing skills
- Rich media, Rich Interactive Applications (RIAs) and even Line of Business Applications (LOBs) are already being developed using version 2.0
- Moonlight is a fast growing option if near total cross platform usage is an issue
- Leading UI component developers such as Telerik and Infragistics are developing WPF and Silverlight components
- Version 3.0 and beyond will add even greater functionality and ease of use, so the sooner we become intimate with this technology the better

References

- <http://silverlight.net/>
 - Official Home Page
- <http://silverlight.net/GetStarted>
 - Installs, Quick links and Tutorials
- <http://silverlight.net/showcase/>
 - Showcase of Silverlight applications
- <http://www.mono-project.com/Moonlight>
 - Moonlight
- <http://patramadass.emediait.com>
 - This presentation, example code

Questions?



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