

Silverlight 2

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Building a Web Picture Gallery

- Video and code will be posted next week on
 - http://blogs.msdn.com/swiss_dpe_team
- RSS feeds
- LINQ to XML
- Bookmarks
- Animations
- Multi files upload
- Progressbar

What's in store for Data Driven apps...

- Welcome to the multi tiers web
 - Powerful Data Binding
 - Powerful DataGrid
 - Editable
 - Customizable through Template and Style
 - More features coming in Beta2
 - Sorting, Auto Filter, Freezable Columns
 - LINQ to OBJECT
 - Enables client side filtering
 - Combined with Isolated Storage enables powerful client side caching.
 - LINQ to XML

Layout

- Subset of WPF
- Layout containers
 - Canvas, Grid, StackPanel, Border
- Layout properties
 - Width, MinWidth, MaxWidth, ActualWidth
 - Height, MinHeight, MaxHeight, ActualHeight
 - Margin and Padding
- Layout extensibility

Beta 1 Controls

Label	Full Name	Rating	Renewal Date
Label	Zero	1	5/5/2006 1
Label	Mort	5	1/2/2008 5
Label	One	1	1/2/2008 5
Label	Einstien	1	1/2/2008 5
Label	Bitdiddle	1	1/2/2008

: default

Label	Full Name	Rating	Renewal Date
Label	Zero	1	5/5/2006 1
Label	Mort	5	1/2/2008 5
Label	Einstien	1	1/2/2008 5
Label	Einstien	1	1/2/2008 5
Label	Bitdiddle	1	1/2/2008

: default row hover

Label	Full Name	Rating	Renewal Date
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: default cell editing

Label	Full Name	Rating	Renewal Date
Label	Zero	1	5/5/2006 1
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Label	Einstien	1	1/2/2008 5
Label	Einstien	1	1/2/2008 5
Label	Bitdiddle	1	1/2/2008

: default row selected



: default



: hover



: press



: highlight



: disabled



: default



: default hover



: pressed



: default checked



: hover checked



: pressed checked



: disabled



: disabled checked



: brand agnostic app loader



Click Me

: hyperlink hovered

Click Me

: hyperlink pressed

Click Me

Click Me



: default



: hover



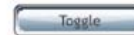
: press



: highlight



: default



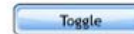
: default Indeterminate



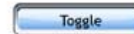
: hover



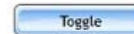
: hover indeterminate



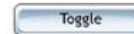
: press



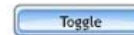
: press indeterminate



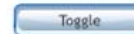
: checked



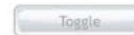
: hover checked



: pressed checked



: highlight



: disabled



: disabled checked



: disabled indeterminate

Textbox

Textb

Beta 1 Controls

- Canvas
- OpenFileDialog
- Grid
- Image
- ItemsControl
- MediaElement
- MultiScaleImage
- StackPanel
- TextBox
- TextBlock
- Button
- Popup
- CheckBox*
- DataGrid*
- DateTimePicker*
- GridSplitter*
- Hyperlink*
- ListBox*
- Calendar*
- RadioButton*
- Slider*
- ToggleButton*
- Tooltip*
- WatermarkTextBox*

* ship in a separate library

Note: additional controls to follow between Beta 1 and final release



Layout & Controls

demo



Getting non "SOAP" data

Only Async supported – otherwise browser would hang



Human-Readable Documentation



"Mashup APIs"
"Web APIs"



REST
Services



"POX"
(Plain Old XML
services






JSON
Services

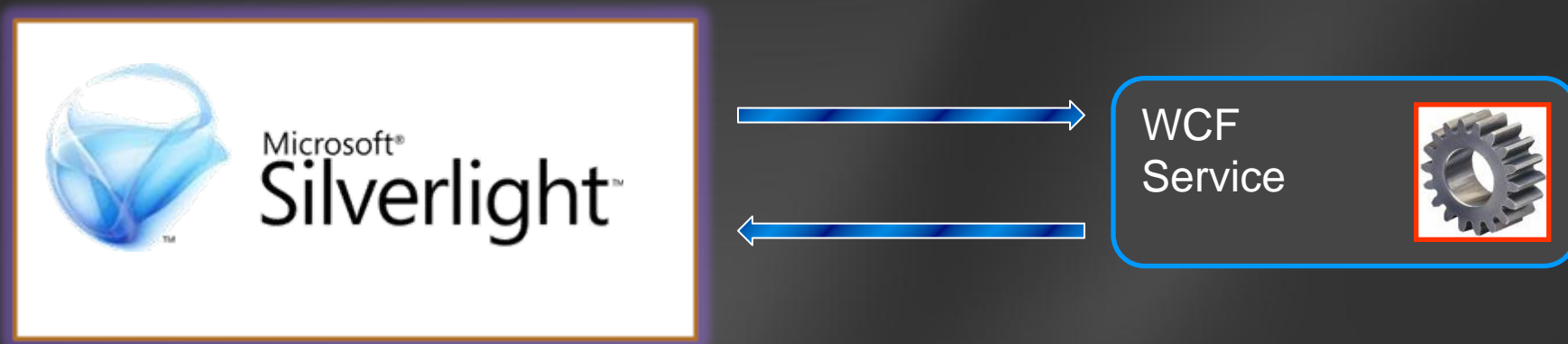


1. Build a URL
2. Make a request with WebClient or HttpWebRequest
3. Work with request/response data (XML or JSON)

Cross-Domain Policy Files

- Silverlight looks for two policy files:
 - Silverlight policy: **clientaccesspolicy.xml**
 - Adobe Flash policy: **crossdomain.xml**
 - Already used by    etc...
- All public services that work with Flash – will also work with Silverlight


How to get data: WCF support



Only asynchronous calls supported!

Data Binding

- Property Binding
 - One way, two way and one time
 - Use “DataContext” property
 - Supports value converters
- Collection/List Binding
 - Support data templates (repeater)
 - Use “ItemsSource” property



WCF, LINQ to SQL &
DataGrid

demo



What about CRUD?

- No ADO DataSet support
- Plain Object or XML support only
- LINQ to SQL on the middle tier can be a solution
 - Great for reads
 - But no Client Side Change Tracking
 - Custom solution
 - More explanation on our blog:
http://blogs.msdn.com/swiss_dpe_team/archive/2008/04/04/crud-operations-with-optimistic-locking-using-silverlight-2-beta1-wcf-and-linq-to-sql-inserts-updates-and-deletes.aspx



Changes done on the client "Order" object
Need to manually send back original values

A red callout box with a pointer pointing towards the Silverlight box, containing the text: "Changes done on the client 'Order' object
Need to manually send back original values".



CRUD

demo



Binding with Data Templates

Data Template:

```
<StackPanel Orientation="Horizontal">  
    <Image Source="{Binding FileImageUrl}"/>  
    <TextBlock Text="{Binding FileName}"/>  
</StackPanel>
```



Template Data Bindings

demo



Scrolling large data table

- LINQ to SQL does it for you
 - Optimized with new row_count feature in SQL Server 2005
 - Page 1 or Page 10000 same speed
 - Only the page size (e.g. 20 rows) is transferred from the DB
 - Falls back to a simpler version on SQL 2000
- Need to build your own “scroller” in Silverlight



Scrolling large data sets

demo



How can you live without Silverlight?

- Start using WPF & Silverlight today
 - You will not regret it
- www.silverlight.net
- http://blogs.msdn.com/swiss_dpe_team



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Silverlight Mobile

- V1 announced last week (no .NET)
 - CTP available in summer
 - Runs on Windows Mobile and Symbian!
- V2 (with .NET) coming next year