Agenda

- Intro
- Getting started
- Patterns & Practices
- Deploying apps
- Wrap-up
Intro
Applications
• ArcGIS Viewers
• ArcGIS APIs
  • Javascript, Flex, Silverlight...

The ArcGIS System

ArcGIS Online

Server
Applications
• ArcGIS Viewers
ArcGIS APIs
• Javascript, Flex, Silverlight...

Desktop
Applications
• ArcGIS Desktop, ArcGIS Explorer
ArcGIS SDKs
• WPF, Java, C++

Mobile
Applications
• ArcGIS
ArcGIS SDKs
• iOS, Android, Windows Phone, Windows Mobile
ArcGIS API for Windows Phone

- Powerful Windows Phone Mapping API
- Designed for the Windows Phone
  - Same Object Model as the ArcGIS API for Microsoft Silverlight/WPF
- Use ArcGIS Server/Online, Bing Maps services
- Full Touch/Gesture support
- Integrates with Microsoft development environments
Requirements

• **Windows Phone Developer Tools**
  - Microsoft Visual Studio 2010
  - Expression Blend 4
  - Deployment Utility
  - Emulator
  - From [App Hub](http://apphub)

• **Windows Phone**

• **Vista and Windows 7 operating systems**
Libraries

- **ESRI.ArcGIS.Client.dll**
  - Map, ArcGIS Service Layers, Graphics, Geometry, Symbols
- **ESRI.ArcGIS.Client.Bing.dll**
  - Adds support for using Bing layers and services
- **ESRI.ArcGIS.Client.WebMap.dll**
  - Read & process WebMap 1.2
- **ESRI.ArcGIS.Client.Toolkit.dll***
  - Common set of controls for map interaction
- **ESRI.ArcGIS.Client.Toolkit.DataSources.dll***
  - Common set of data sources

*CodePlex URL: [http://esrisilverlight.codeplex.com](http://esrisilverlight.codeplex.com)
Capabilities

• Visualization with Map control
• Editing
• Tasks
  - Query, Find, Identify, Address Locator, Geometry, Geoprocessing, Route
• Consume geospatial services
  - ArcGIS.com
  - ArcGIS Server
  - Bing Maps
Resource Center

- ArcGIS App Info
- Concepts
- Samples
- API Reference
- Code Gallery
- App Showcase
Getting Started
Your First App
Patterns and Practices
Patterns & Practices

- Metro design
- Effective use of data
- Map Tips
- Legend
- Editing
- Using the Phone’s GPS
Metro Design

Themes
Static resources
Page Anatomy
Animations & Transitions
Device Form Factor
Execution Model
Effective Use of Data

- Screen size
- Finger size
- Data transfer cost
Map Tips

- ESRI.ArcGIS.Client.Toolkit.InfoWindow
- Bind ContentTemplate to Popup if defined
<esriToolkit:Legend Map="{Binding ElementName=MyMap}"
LayerIDs="Points of Interest, United States"
LayerItemsMode="Flat"
BorderThickness="0" />

Legend
Editing

- **ESRI.ArcGIS.Client.Editor** vs. **FeatureLayer**
- **Editor Commands**
  - Select, Add, EditVertices, Delete, etc.

```csharp
Editor editor = new Editor();
editor.Map = myMap;
editor.LayerIDs = new string[] { "myEditTargetLayer" };
if (editor.Add.CanExecute(10100))  // feature type id
    editor.Add.Execute(10100);
```

- **Edit and draw magnifier**
  - Interactive editing experience to support touch devices
- **Attribute editing**
  - TextBox InputScope
  - DateTime & ListPicker controls
Using the phone’s GPS

- GPS + WiFi + Cellular radio
- User of the phone controls app access to GPS
- System.Device.Location.GeoCoordinateWatcher
- ESRI.ArcGIS.Client.Toolkit.DataSources.GpsLayer
- Testing: Windows Phone GPS Emulator (Microsoft)
- Consider: power consumption

<esriToolkitDS:GpsLayer ID="GPSLayer" />
Deployment
Deploying your ArcGIS app

- Read [ESRI’s licensing agreement](#)
- Include [attribution](#)
- Fill out deployment questionnaire & email it to arcgis4windowsphone@esri.com
- **Publish** to Windows Phone Marketplace
  - Or publish to developer phones with Windows Phone deployment utility
Publishing to the Marketplace

App Hub
- Account
- Tools
- Publish

Certification
- Reliable
- Efficient
- Safe

Marketplace

Developer

Users

Feedback
Wrap-up
Road Ahead

- 2.2 API – Released June
- 3.0 API Beta 1 – August
  - ArcGIS Server 10.1 Beta 1
- 2.3 API – September

- Road Ahead – ArcGIS for Windows Phone
  Thursday 11:05am Room 6B
More Windows Phone at the UC

- **Road Ahead – ArcGIS for Windows Phone**
  - Thursday 11:05am – 11:25am, Room 6B
- **ArcGIS API for Silverlight/WPF – An Introduction**
  - Wednesday 10:15am – 11:30am, Room 6E
  - Thursday 10:15am – 11:30am, Room 8
- **ArcGIS API for Silverlight/WPF – Advanced Topics**
  - Wednesday 1:30pm – 2:45pm, Room 8
  - Thursday 3:15pm – 4:30pm, Room 32B
More Windows Phone at the UC

Mobile Demo Theaters

- Introduction to ArcGIS for Windows Phone
  - Wednesday 1:30pm – 2:00pm
  - Thursday 9:00am – 9:30am

- Using ArcGIS on Windows Phone devices
  - Wednesday 2:00pm – 2:30pm
  - Thursday 9:30am – 10:00am

- Developing applications for the Windows Phone platform
  - Wednesday 2:30pm – 3:00pm
  - Thursday 12:00pm – 12:30pm
Please fill out your session surveys

www.esri.com/sessionevals