Getting Started with ArcGIS Runtime

Rob Elkins, David Cardella, Euan Cameron and Eric Bader
Agenda

• ArcGIS Runtime SDK Overview
• WPF SDK
• Java SDK
• iOS, Android, Win Phone SDKs
• Runtime at the User Conference
• Road Ahead
Making ArcGIS available from any device ... anywhere

Your data and maps on any device
Applications

- Apps give users access to their data and maps

  - Apps for Mobile Devices
  - Apps for Tablets
  - Apps for the Desktop
Application Development

- Focus applications built for a known platform

ArcGIS Runtime SDKs
Introducing the ArcGIS Runtime

• New GIS runtime for desktop and mobile devices
  • Integrated into the ArcGIS system
  • Fast Display
  • More than Mapping
  • Modern API
  • Easy to Deploy
## ArcGIS Runtime SDKs

<table>
<thead>
<tr>
<th>Windows</th>
<th>Linux</th>
<th>Windows Mobile</th>
<th>iOS</th>
<th>Android</th>
<th>Windows Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>.NET WPF</td>
<td>Java SE</td>
<td>.NET CF</td>
<td>Objective C</td>
<td>Java</td>
<td>Silverlight</td>
</tr>
</tbody>
</table>

**Standard, Rugged and Embedded Devices**

**Smartphones and Tablets**
ArcGIS Runtime SDK for WPF
ArcGIS Runtime for WPF

• New Architecture
  - Native 32 and 64 bit code execution
  - Utilizes hardware (Cores, CPUS,..)
  - Asynchronous programming pattern

• Simplified Deployment
  - No install required
  - Deploy only needed components
  - Side-by-Side deployment
  - Independent of other ArcGIS installs

• SDK
  - Visual Studio 2010
  - WPF Map Control
  - Interactive Sample
Its Not Just About Writing Code

- ArcGIS for Desktop Used to Provision Solution
- Content is Authored
  - Map and Tile Packages
- Functionality is Authored
  - Geoprocessing Packages
  - Extensions: Spatial, Network and 3D
  - Locator Packages for Geocoding
- Packages delivered on media, or downloaded
- ArcGIS Server Can Deliver Content to Clients
ArcGIS Runtime SDK for Java
ArcGIS Runtime SDK for Java

- 32 and 64 bit JVM
- Simpler API
- Easy deployment
- Linux: Ubuntu 10 and 12
- Performance
Java ArcGIS Engine Developers

- Plan on migrating from ArcObjects Java to ArcGIS Runtime SDK for Java
- ArcGIS Runtime SDK for Java is the future
- New development projects: use the ArcGIS Runtime SDK
ArcGIS Runtime SDK for WPF and Java available via the Esri Developer Network (EDN) Subscription
# Deployment and Licensing of Custom Applications

## WPF and Java

<table>
<thead>
<tr>
<th>Basic</th>
<th>Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fully connected functionality</strong></td>
<td>• Basic level functionality</td>
</tr>
<tr>
<td>• Viewing</td>
<td>• Read/write access to simple features in GDB</td>
</tr>
<tr>
<td>• Popups</td>
<td>• Point to point routing</td>
</tr>
<tr>
<td>• Data collection</td>
<td>• GP tools (subset)</td>
</tr>
<tr>
<td>• Sharing</td>
<td>• Extensions (3D, Spatial Network)</td>
</tr>
<tr>
<td>• Routing</td>
<td>• Fully disconnected functionality</td>
</tr>
<tr>
<td>• Search/Geocoding</td>
<td>• Geocoding, editing, GP</td>
</tr>
<tr>
<td>• Analysis</td>
<td></td>
</tr>
<tr>
<td>• Disconnected viewing</td>
<td>Deployment packs required</td>
</tr>
</tbody>
</table>

**No deployment fee**
ArcGIS Runtime SDK for Windows Mobile
ArcGIS Runtime SDK for Windows Mobile

Strategic Platform

- Truly rugged (IP rated)
- Accuracy
- Offline feature cache

API
- Coarse-grained .NET API
- Build focused, custom solutions
- Extend COTS application

- Windows XP, Vista, Windows 7
- Windows Mobile
Deployment and Licensing of Custom Applications

Windows Mobile

- ArcGIS Server Advanced Enterprise
  - Unlimited deployments

- ArcGIS Desktop
  - Includes one deployment

- Deployment packs of 5/50 are available
ArcGIS Runtime SDKs
Smart Phones and Tablets
Smartphone and tablet SDKs
iOS, Android and Windows Phone

- Embed ArcGIS into existing applications
- Native APIs for building focused applications
- Common conceptual framework across platforms

- ArcGIS Resource Center
  - API download
  - Conceptual and reference help
  - Community resources
  - Samples

http://resources.arcgis.com/
Deployment and Licensing of Custom Applications
iOS, Android and Windows Phone

- App does NOT generate revenue
  - No licensing fees

- App DOES generate revenue (Sales, advertisement, etc…)
  - Licensing fees apply
ArcGIS Runtime at the User Conference
Mobile and SDK - Showcase

• Tuesday and Wednesday
  - 9:00am – 6:00pm
• Thursday
  - 9:00am – 1:30pm

• Meet Members of the Development Team

• Demo Theater Presentations
Technical Sessions for Developers

Tuesday

• Building Apps with ArcGIS Runtime SDK for WPF
  - 1:30pm Room 2

• Building Apps with ArcGIS Runtime SDK for Android
  - 3:15am Room 32A

• Sessions for the different Smart Phone and Tablet Apps
Technical Sessions for Developers

**Wednesday**

- **Building Apps with ArcGIS Runtime SDK for WPF**
  - 8:30am Room 2

- **ArcGIS for Developers - An Introduction**
  - 8:30am Room 9

- **Building Apps with ArcGIS Runtime SDK for Java**
  - 10:15am Room 2

- **Building Apps with ArcGIS Runtime SDK for Windows Mobile**
  - 3:15am Room 31 B
Technical Sessions for Developers

Thursday

• Building Apps with ArcGIS Runtime SDK for iOS
  - 8:30am Room 31 B

• Building Apps with ArcGIS Runtime SDK for Windows Phone
  - 3:15am Room 31 B

• Sessions for the different Smart Phone and Tablet Apps
Road Ahead Technical Session

- Road Ahead – ArcGIS for Mobile Devices
  - **Wednesday** July 25, 10:15am – Room 6 B
  - **Thursday** July 26, 10:15am - Room 6 B
Road Ahead
Road ahead

ArcGIS Runtime SDKs

- Configurable \ Extendable Apps
- 3D Capabilities
- Offline Functionality
- New Platforms and APIs
- Release strategy
New Platforms

- Mac OS
- Windows 8 Metro
Steps to evaluate UC sessions

- My UC Homepage > “Evaluate Sessions”
- Choose session from planner
  OR
- Search for session

www.esri.com/ucsessionsurveys
• Thank you for attending
• Have fun at UC2012
• Open for Questions

• Please fill out the evaluation:

www.esri.com/ucsessionsurveys

Session ID: 792