Deploying your Smartphone and Tablet Apps

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Agenda

• Enterprise deployment
  - What are your options?

• App Store\marketplace deployment
  - Submission assets
  - Difference between the stores and marketplaces

• Attribution and Licensing
ArcGIS is a Complete System
Managing and working with geographic information

- Online (public or private cloud)
- Server (on premises or private cloud)
- Desktop
- Mobile/devices
- Content

Many deployment options
### Apps and SDKs

<table>
<thead>
<tr>
<th>Windows Mobile</th>
<th>Windows/ iOS Android</th>
<th>Linux</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apps: ArcGIS</td>
<td>Apps: ArcGIS, ArcGIS Explorer</td>
<td>Apps: ArcGIS, ArcGIS for iOS, ArcGIS</td>
</tr>
<tr>
<td>Runtime SDK: .NET CF</td>
<td>Runtime SDK: Silverlight, Objective C</td>
<td>Runtime SDK: Java, Objective C</td>
</tr>
<tr>
<td>Runtime SDKs: WPF, Java</td>
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</tr>
</tbody>
</table>
ArcGIS Runtime SDKs
iOS, Android, Windows Phone, Windows Mobile

- Native developer toolkit
- Build focused mapping applications
- Embed ArcGIS in to existing apps
- Leverage the ArcGIS system
- Available from the Resource Centers
Before You Can Begin …

Hardware

- Intel based Mac
  - (Snow Leopard) or 10.7 (Lion)

- iOS device
  - iPhone 3GS / 4 / 4S
  - iPod Touch (2nd gen +)
  - iPad 1 / 2 / 3
  - Required
Before You Can Begin …

Software

- Get an Apple developer account (free)
  - Access to iOS developer resources
- iOS SDK (4.x)
- Xcode IDE (4.x)
Before You Can Begin …

Apple Developer Program

- iOS developer program
  - Standard - Individual or sole proprietor
  - Company - Organization
  - App Store distribution

- iOS developer Enterprise program
  - In-house applications

- iOS developer University program
  - Curriculum
iOS Development Life Cycle - Fees

Develop: No cost

Debug: Potential cost

Test: Requires Developer Program

Deploy: Requires Developer Program
Debugging

Simulator does not require a developer program

Device requires a Developer Provisioning Profile
Provisioning Profiles

- Developer Certificate
- App ID
- Device UDIDs

Provisioning Profile
Testing and Enterprise Deployment

**Enterprise**
- Enterprise program
- Unlimited for company devices
- No UDID

**Ad-Hoc**
- Enterprise or Standard program
- 100 deployments
- Includes dev devices
- Requires UDID

**Requires a** Distribution** Provisioning Profile**
Testing and Enterprise Deployment

Enterprise
- Requires iTunes
- Level of effort

Ad-Hoc
- Deployment via web page
- One click install
ArcGIS API for Android

- Java development using Eclipse 3.6 or higher
- ArcGIS Android SDK delivered via a plugin
- OpenGL ES 2
- ArcGIS for Android Resource Center
  - Download Bits
  - Concepts and reference doc
  - Forums, blog, code gallery

Requires Android 2.2 API 8 and higher
Android Development Life Cycle - Fees

- **Develop**
  - No cost

- **Debug**
  - No cost

- **Test**
  - No Cost

- **Deploy**
  - Developer Registration Fee

*No Fee for Enterprise deployment*
Testing and Enterprise Deployment

- Email attachment or link
- Manual install
- Web site
ArcGIS API for Windows Phone

- **Silverlight Development using VS 2010**
  - Download Windows Phone Developer Tools, ArcGIS API
  - Develop Applications using Silverlight API for Windows Phone

- **ArcGIS for Windows Phone Resource Center**
  - Download Bits
  - Concepts and reference doc
  - Forums, blog, code gallery
  - Interactive SDK
Windows Phone Development Life Cycle - Fees

- **Develop**
  - No cost

- **Debug**
  - Potential cost

- **Test**
  - Requires Subscription

- **Deploy**
  - Requires Subscription
Debugging

Any deployment to the device requires it to be unlocked

Simulator does not require a developer subscription

Device requires a developer subscription
- Device must be unlocked

Any deployment to the device requires it to be unlocked
Testing and Enterprise deployment

- Unlock device
- Use Application Deployment Tool to install zap
  - Windows Phone Developer Tools
- Need to be an admin
- Labor intensive
## Enterprise Deployment Summary

<table>
<thead>
<tr>
<th></th>
<th>iOS</th>
<th>Android</th>
<th>Windows Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Debugging</td>
<td>$$ on device</td>
<td>No fee</td>
<td>$$ on device</td>
</tr>
<tr>
<td>Enterprise Deployment</td>
<td>Fee</td>
<td>No Cost</td>
<td>Fee</td>
</tr>
<tr>
<td>Annual Subscription</td>
<td>Yes</td>
<td>No (one time)</td>
<td>Yes</td>
</tr>
<tr>
<td>Deployment Options</td>
<td>iTunes, Web site</td>
<td>Email, File, Web Site</td>
<td>Deployment tool</td>
</tr>
<tr>
<td>Deployment numbers</td>
<td>100 - Unlimited</td>
<td>Unlimited</td>
<td>3</td>
</tr>
</tbody>
</table>
Deployment to the App Store

- Human Interface Guidelines (HIG)
- Submission of assets
  - SKU number, Icons, retina
- App Store provisioning profile
- Approval process
  - Crowd Sourced wait times
  - Expedite Request Process
- Marketing Assets
  - Artwork, download badges, etc …

The App Store is the ONLY way to Deploy apps Outside of your Organization
Provisioning profiles

- Developer Provisioning Profile
- Distribution Provisioning Profile
  - Enterprise and Adhoc
- App Store Provisioning Profile
Deployment to Google Play

- Interface Guidelines
- Submission of assets
  - Screenshots, promo graphic txt
- **Must sign app – Use Keytool**
  - 2032
- Approval process
  - Many Stores
- Marketing Assets
  - Artwork, download badges, etc …
Deployment to Windows Phone Marketplace

- Interface Guidelines
- Submission of assets
- Approval process
  - Typically 1 week
- Marketing Assets
  - Artwork, download badges, etc …
# App Store/Marketplace Summary

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<tbody>
<tr>
<td>Approval Process</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Distribution outside the store</td>
<td>No</td>
<td>Yes</td>
<td>No*</td>
</tr>
<tr>
<td>Fragmentation</td>
<td>Very Little</td>
<td>Yes</td>
<td>Yes*</td>
</tr>
<tr>
<td>Multiple stores/Marketplaces</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>
Attribution Requirements

For Custom Applications

- Attribution in *About or Credits*
  - API
  - Data

- Esri logo on map screens
  - When using ArcGIS Online basemap
Deployment and Licensing of Custom Applications
iOS, Android and Windows Phone

- App does NOT generate revenue
  - No SDK licensing fees

- App DOES generate revenue (Sales, advertisement, etc…)
  - SDK licensing fees apply
Steps to evaluate UC sessions

- My UC Homepage > “Evaluate Sessions”

- Choose session from planner
  OR

- Search for session

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

• Please fill out the evaluation:

www.esri.com/ucsessionssurveys

Offering ID: 969
References

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