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ArcGIS for Mobile – An Introduction

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Benefits of mobile GIS?



Accessibility



Timely Decision-making



Efficiency and Accuracy



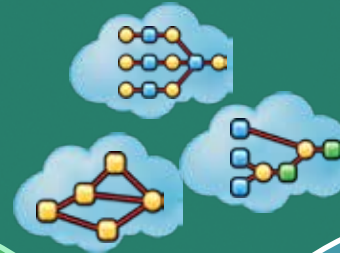
Rapid Data Collection

**Types of
mobile
solutions?**

Apps & APIs



Functionality



iOS

Windows Phone

Linux

Windows Mobile

Android

Windows

Platforms



Form
Factors

Rugged Device Solutions

Windows Mobile

Windows

Linux



Smart Device Solutions

iOS

Android

Windows Phone



Rugged Device Solutions



**Products for
rugged
devices?**

XP, Vista, 7, and
Windows Mobile



High
Accuracy



ArcPad
ArcGIS
Mobile



Occasionally
Connected



Replace Paper
Forms

**What's the
difference?**

	ArcPad	ArcGIS Mobile
Workflow	Ad-hoc	Well-defined
GIS Training	Some	Little to none
Size of Workforce	Small or medium	Scalable
Licensing	Stand-alone	Through core products

**ArcPad
capabilities?**

Ad-hoc Projects

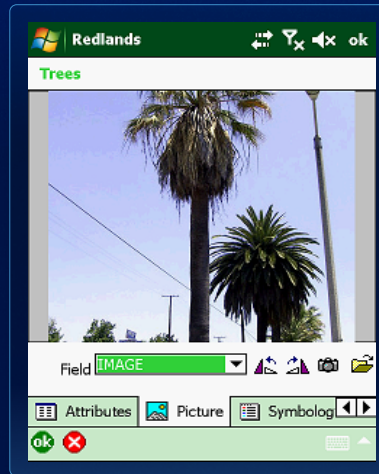
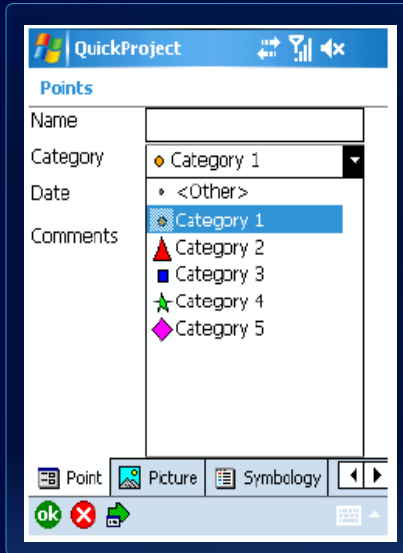
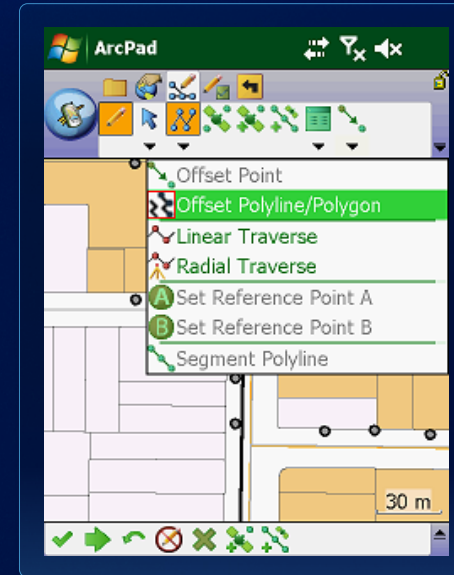


Photo Capture



Geometry Editing



Routing

PoleID	Type	Built
123	Wood	8-Oct-99
124	Steel	5-Jul-87
125	Wood	7-Jun-

Related Tables

PoleID	Insulator #	Type
123	1	200kv
123	2	400kv
123	3	200kv

What do you get?

Windows and
Windows Mobile
Application

Data Manager
Toolbar for Desktop

ArcGIS Server
Extension

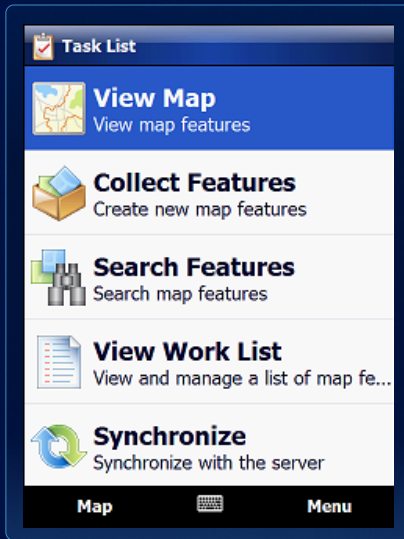
ArcPad
Studio

Streetmap

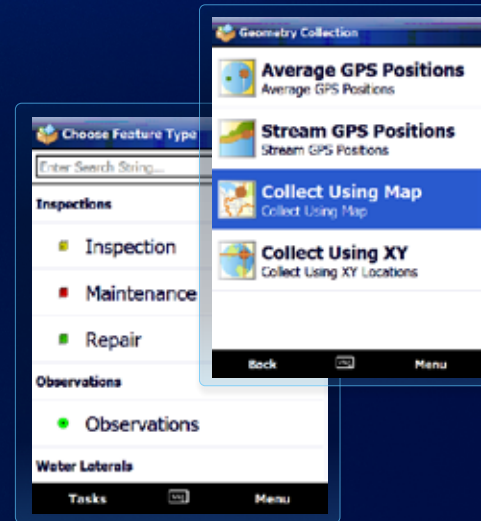
ArcGIS Mobile Capabilities?



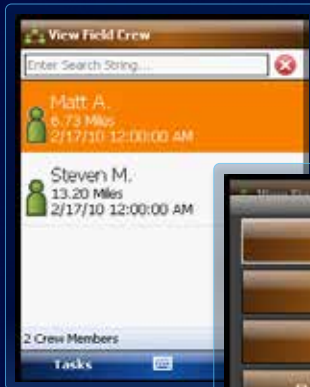
View Maps



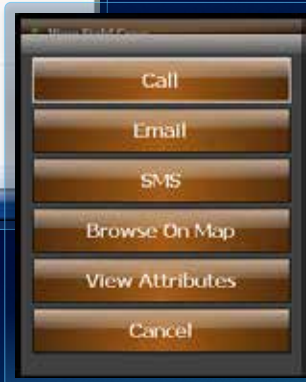
Task-driven Interaction



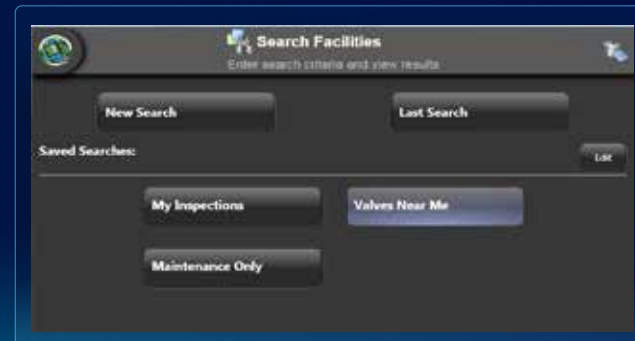
Collect/Update data



View Field Crews



Attribute Queries



ArcGIS for Windows Mobile

Food Safety



What do you get?

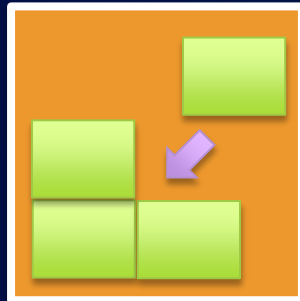
Windows and
Windows Mobile
Applications

Mobile Project
Center

Geoprocessing
Tools

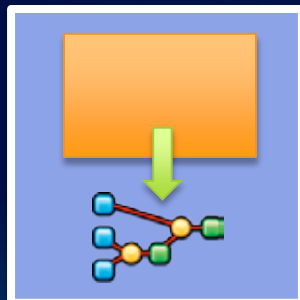
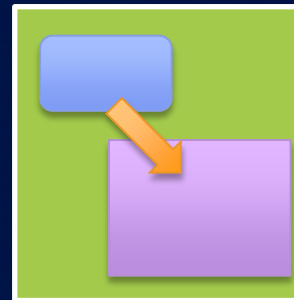
.NET SDK

Software Development Kit



Build new
apps

Embed into
existing apps



Extend ready-
to-deploy apps

ArcGIS Mobile Licensing



ArcGIS Desktop

- One free deployment
- Purchase packs of five



ArcGIS Server

- Advanced Enterprise: unlimited deployments
- Standard Enterprise: purchase packs of 50

**Other
developer
solutions?**

WPF

Java

Qt

Java

Windows

Linux

ArcGIS Runtime

ArcGIS Mobile

Windows
Mobile App

Windows
App

ArcGIS for
Windows Mobile

Windows
Mobile
App

ArcGIS Runtime
SDK for WPF

Windows
App

Smart Device Solutions



**Products for
smart
devices?**

iOS, Android,
and Windows
Phone



ArcGIS Online/
Server Web
Maps



ArcGIS



Always
Connected

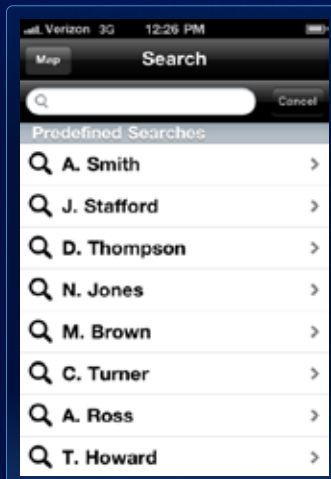


Replace Paper
Forms

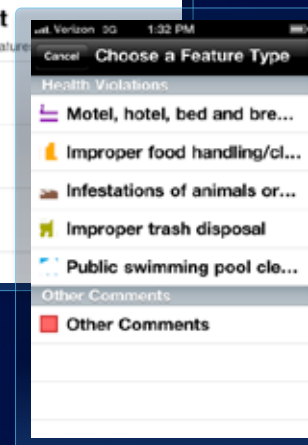
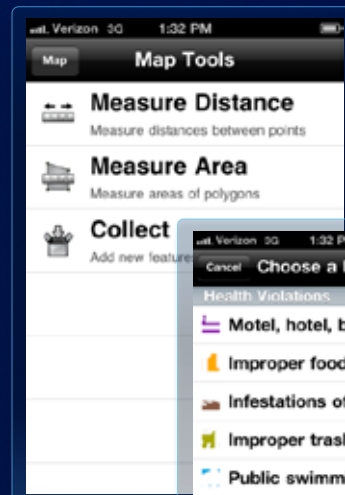
**Smart device
app
capabilities?**



View Maps



Query Attributes



Collect data

Identify

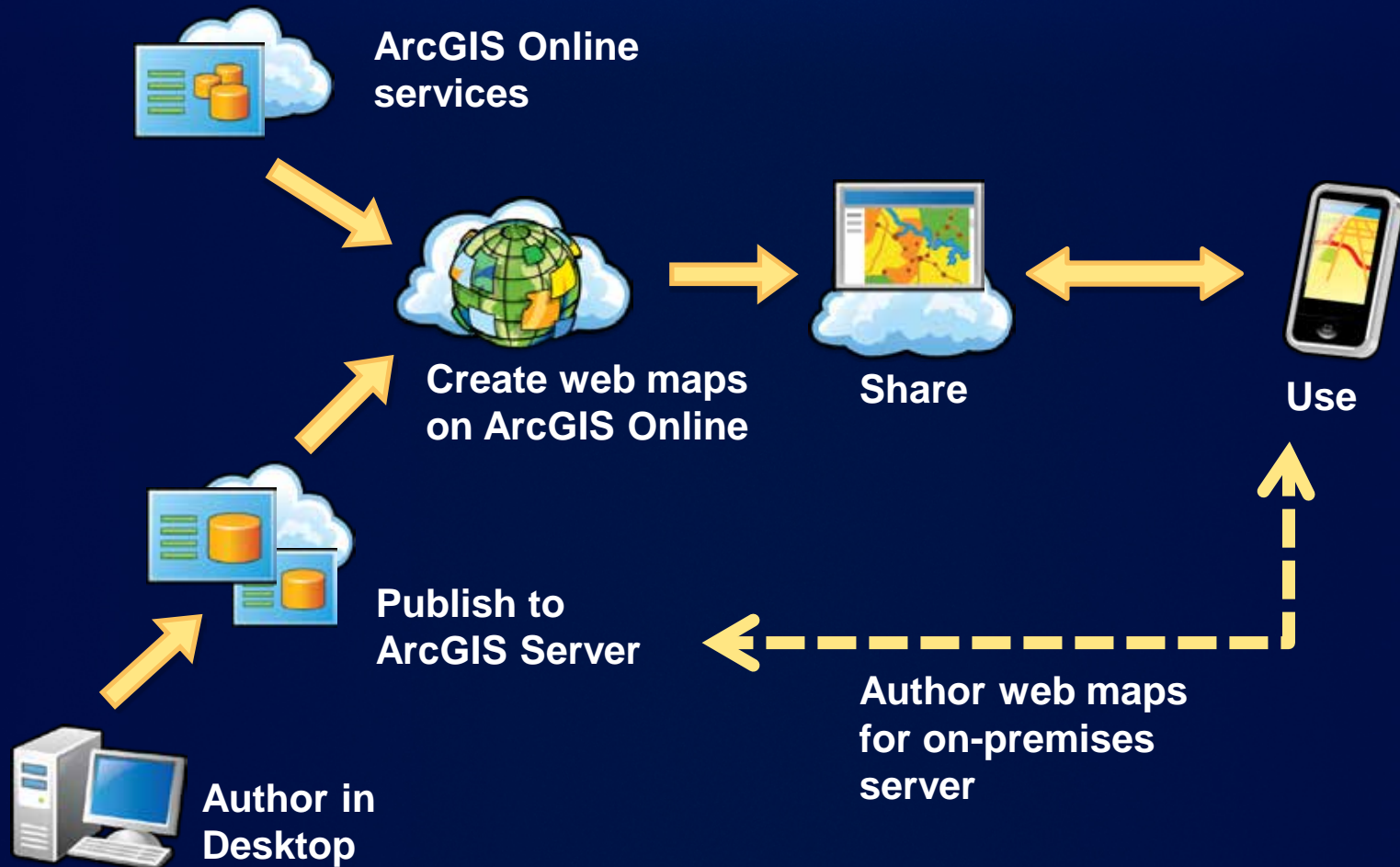


ArcGIS for Android

Citizen Engagement



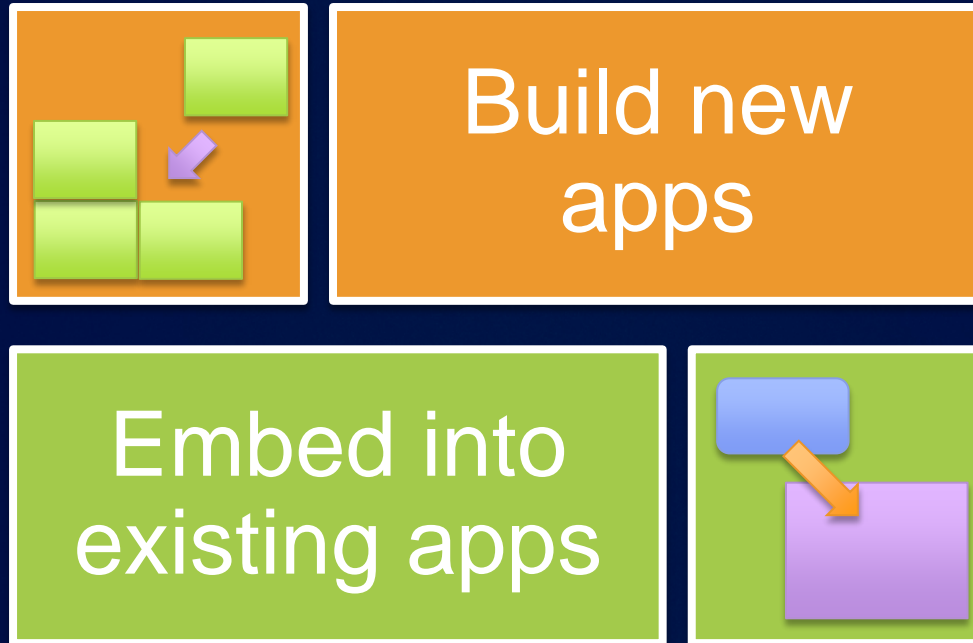
**Where do
web maps
come from?**



**Developer
solutions for
smart
devices?**

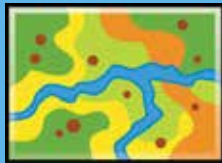
	iOS	Android	Windows Phone
Language	Objective C	Java	Silverlight
Environment	Xcode	Eclipse	Visual Studio

Runtime SDKs



Maps

- Multiple map projections
- Dynamic, tiled, Bing, OSM services



Graphics

- Sketch on map
- Create pop-ups



Tasks

- Query, Identify, Find features
- Collect data
- Locate addresses
- Geometry operations
- GP tasks

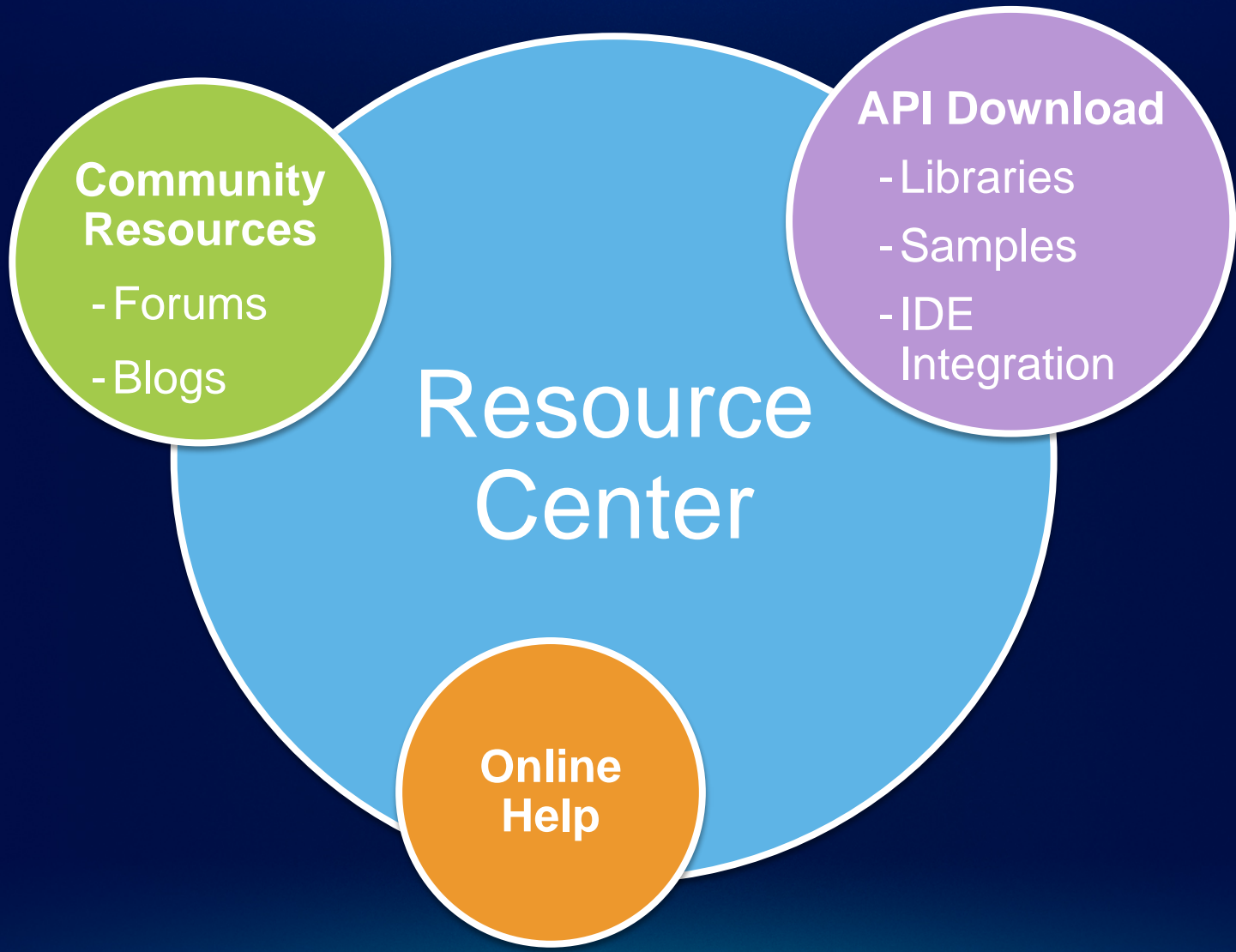


ArcGIS Runtime for iOS

iRouter



**How do I get
them?**



Community Resources

- Forums
- Blogs

API Download

- Libraries
- Samples
- IDE Integration

Resource Center

Online Help

Licensing?

**Enterprise
Deployment**



Free

**Store
Deployment;
No Revenue**



Free

**Store
Deployment;
Revenue**



Negotiated

Attribution is Required!



Other Solutions



Web APIs

JavaScript

Flex

Silverlight

HTML5
components
Cross-platform

Browser apps
on Android
Native apps

Browser apps
in IE9
Native apps
on WinPhone

	ArcGIS API for JavaScript	ArcGIS API for Flex	ArcGIS API for Silverlight
Execution	Pure browser	Browser and Flash plug-in	Browser and Silverlight plug-in
Environment	Any text editor or Aptana, Visual Web Developer, etc.	Flash Builder or text editor with Flex SDK compiler	Visual Studio or Visual Web Developer
Languages	JavaScript and HTML	ActionScript and MXML	.NET (C#, VB.NET) and XAML

ArcGIS API for JavaScript

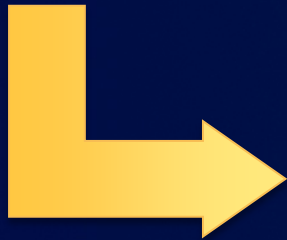
GeoStories



Building Mobile Apps with Flex

Write

- ArcGIS API for Flex 2.4
- Adobe Flex SDK 4.5



Compile

- Adobe Flash Builder 4.5.1



Deploy

- iOS (native)
- Android (AIR)

Resources

- <http://resources.arcgis.com>
 - Under ArcGIS Products, choose Mobile
- <http://training.esri.com>
 - “Authoring and Serving ArcGIS Mobile Projects”
 - “Mobile GIS: Creating Web Maps for Lightweight Mobile Apps”
 - “Mobile GIS: Using the ArcGIS for iOS Application”
 - “Mobile GIS: Getting Started with the ArcGIS API for iOS”
- <http://arcgis.com>
 - Gallery à Mobile Apps
- <http://ideas.arcgis.com>
 - Expand Products on the left, choose ArcGIS Mobile



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