Esri International Developer Summit

Palm Springs, CA

Getting Started with ArcGIS Runtime SDK for iOS and OS X

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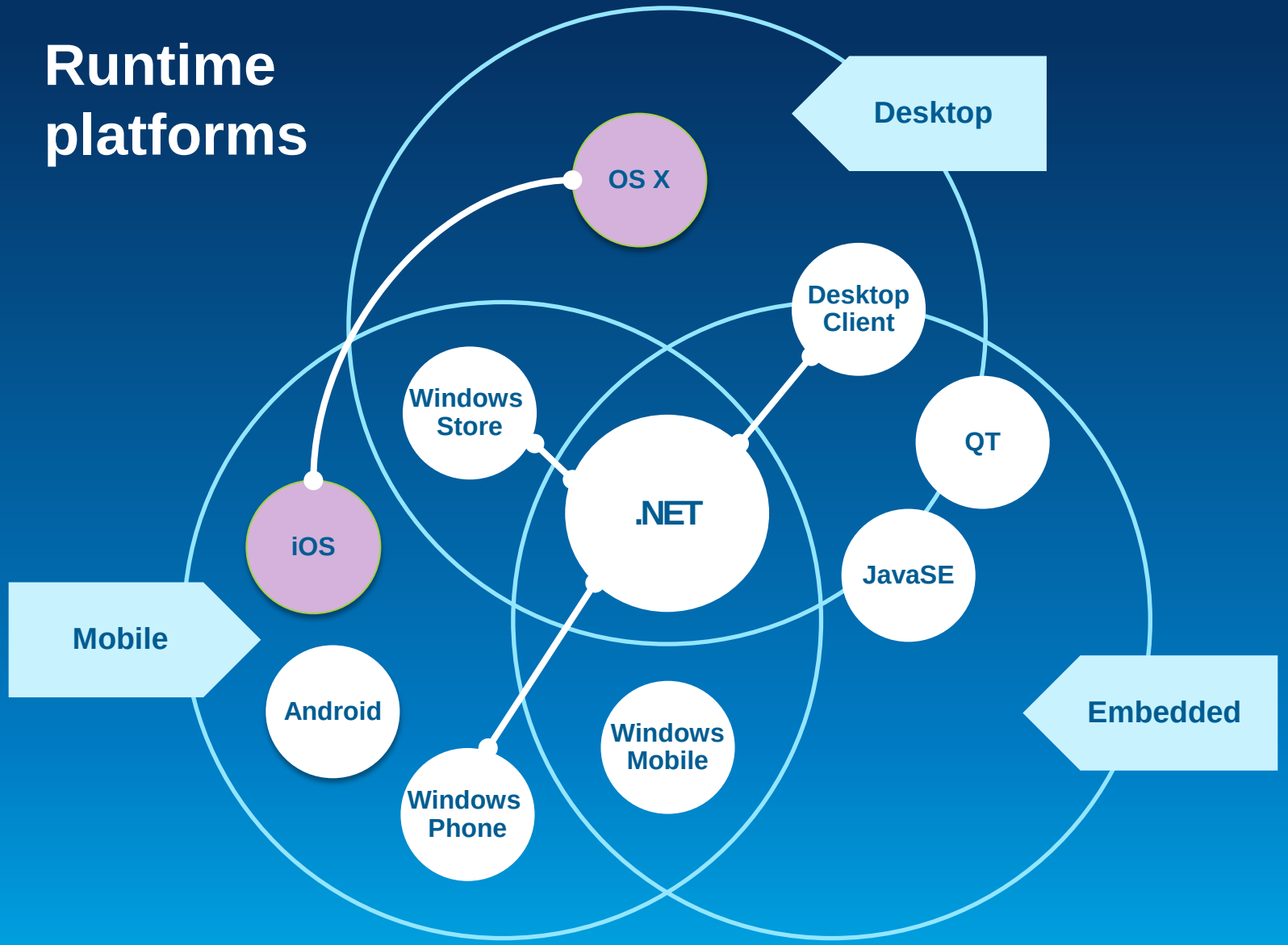
Runtime platforms



Before you begin…

- Intel-based Mac
  - OSX 10.7, 10.8 and 10.9
    (Lion, Mountain Lion
    & Mavericks)

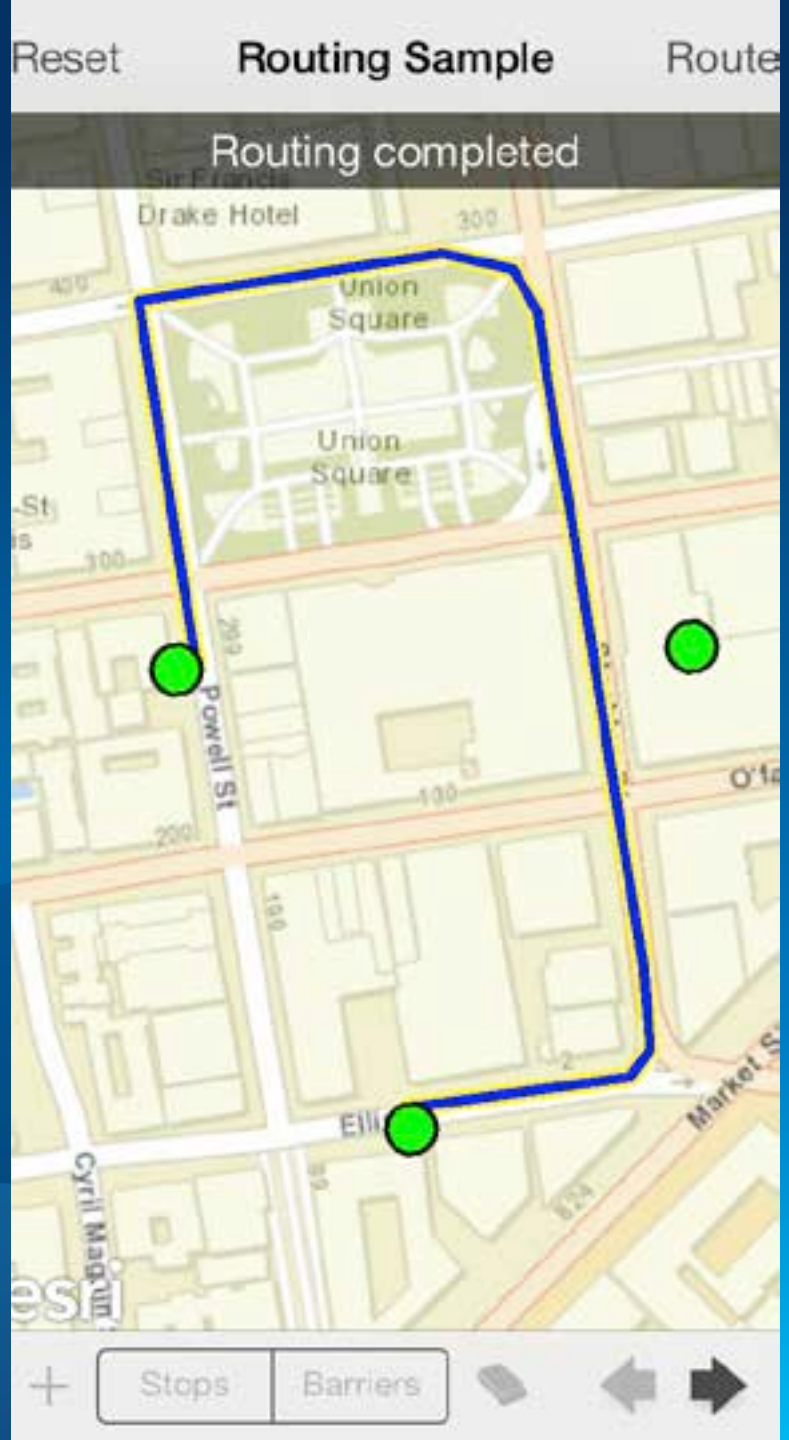
- Xcode from the App Store
  - Simulator
  - iOS SDK

- ArcGIS Runtime for iOS v10.2.2

To test and deploy on actual hardware or older iOS…

- Join Apple's iOS Developer Program
  - Standard : AppStore distribution
  - Enterprise : In-House distribution

The ArcGIS Runtime SDK for iOS



ArcGIS Runtime SDK for iOS

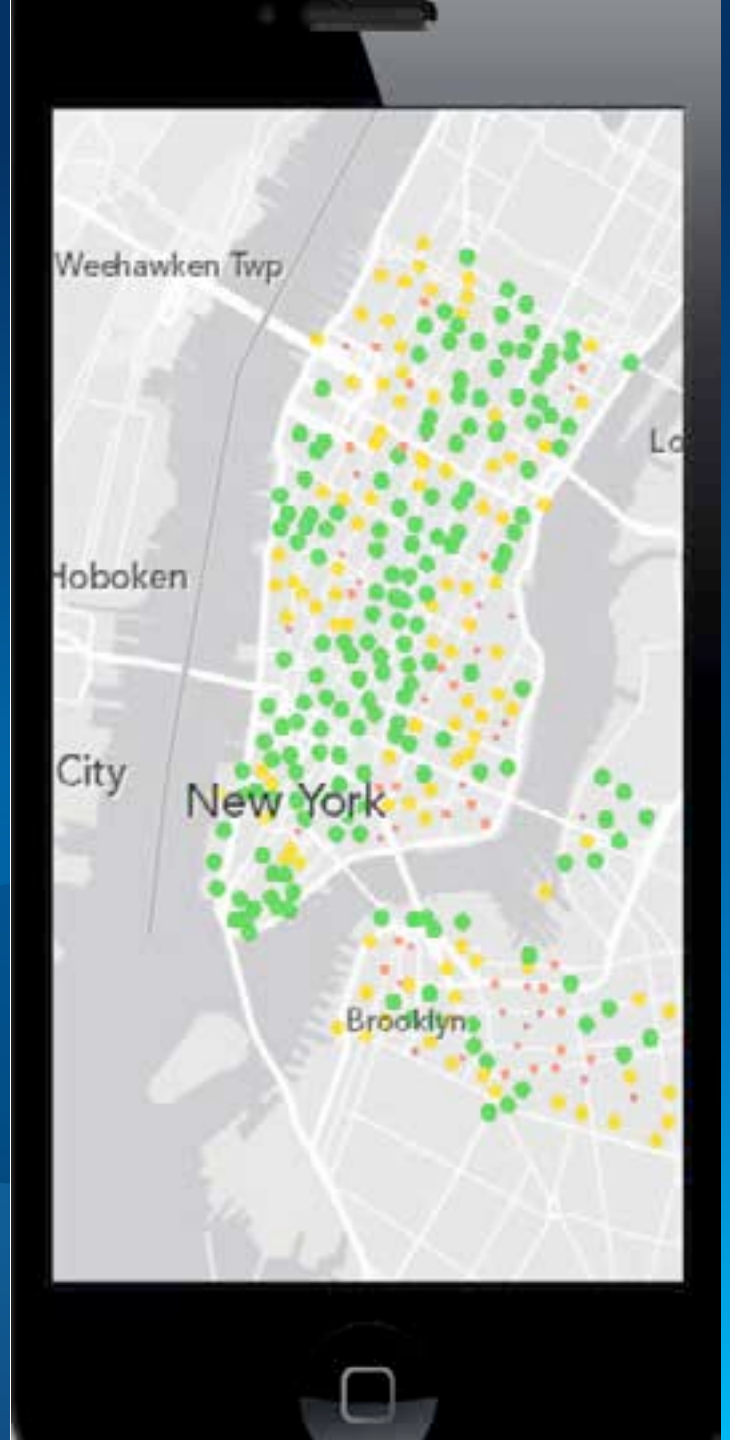
- **Build native applications using Objective-C**
  - **iPhone, iPad, iPod Touch**
  - **iOS 6.0 and up**

Displaying a Map

- **UI Component : AGSMapView**
  - **Responds to gestures**
    - **Pinch to zoom & rotate**
    - **Drag to pan**
    - **Tap & Hold to magnify**
  - **Displays GPS location**
    - **Auto pan modes**
      - **Default (pan as necessary)**
      - **Driving (rotate map by course)**
      - **Walking (rotate map by heading)**

Demo

Making some maps



Performing Analysis

- Using Tasks
  - Query / Find / Identify
    - Search for features In the map

  - Geoprocessing
    - Spatial analysis using GP tools and models

  - Locator
    - Geocode and reverse geocode addresses
    - ArcGIS World Geocoder (POI, Global Find, etc.)

Performing Analysis

- Using Tasks
  - Geometry Service
    - Perform geometry operations on the server
  - Routing Task
    - Point-to-point and multipoint driving directions
    - Barriers, Time Windows, Best Sequence
  - Closest Facility Task
    - Find nearest facility
  - Service Area Task
    - Compute drive times and service areas

Performing Analysis

- Native
  - Geometry Engine
    - High-performance engine for performing geometric operations on the device
    - Buffer
    - Union
    - Cut
    - Project
    - Geodesic
    - Spatial relationships
    - etc.

Visualizing Results

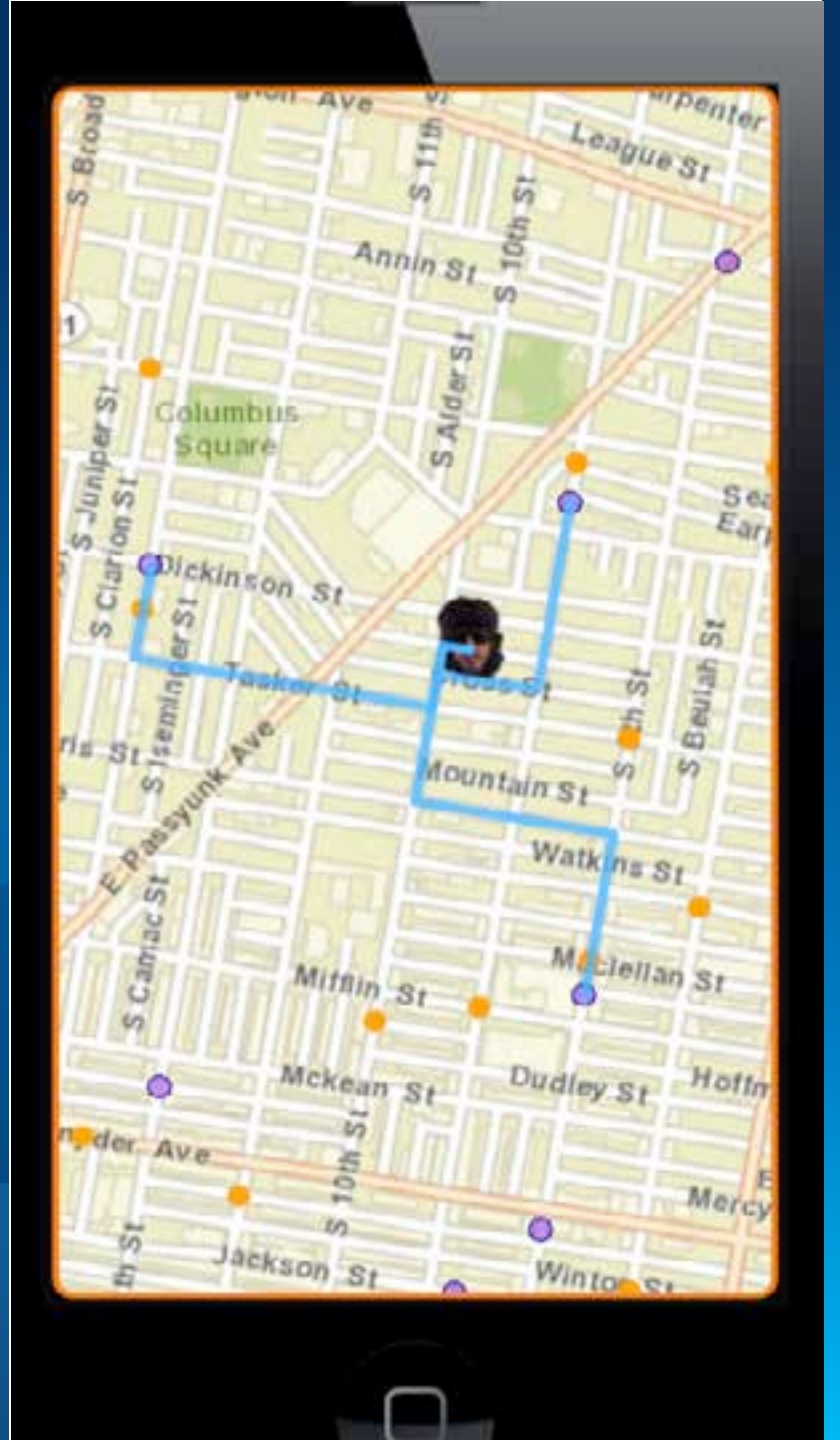
- Graphics
  - Geometry
  - Attributes
  - Symbol
- Symbols
  - Picture, Marker, Line, Fill
  - Composite
  - Text

Task Pattern

1. **Create** & Connect.
2. Set up parameters. **Send**.
3. Get **Results.**

Demo

Tasks


League St
Annin St
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S 10th St
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Columbus Square
S Juniper St
S Clarion St
Dickinson St
Mountain St
Watkins St
S Beulah St
Mifflin St
Mckean St
Dudley St
Jackson St
S 10th St

Offline API

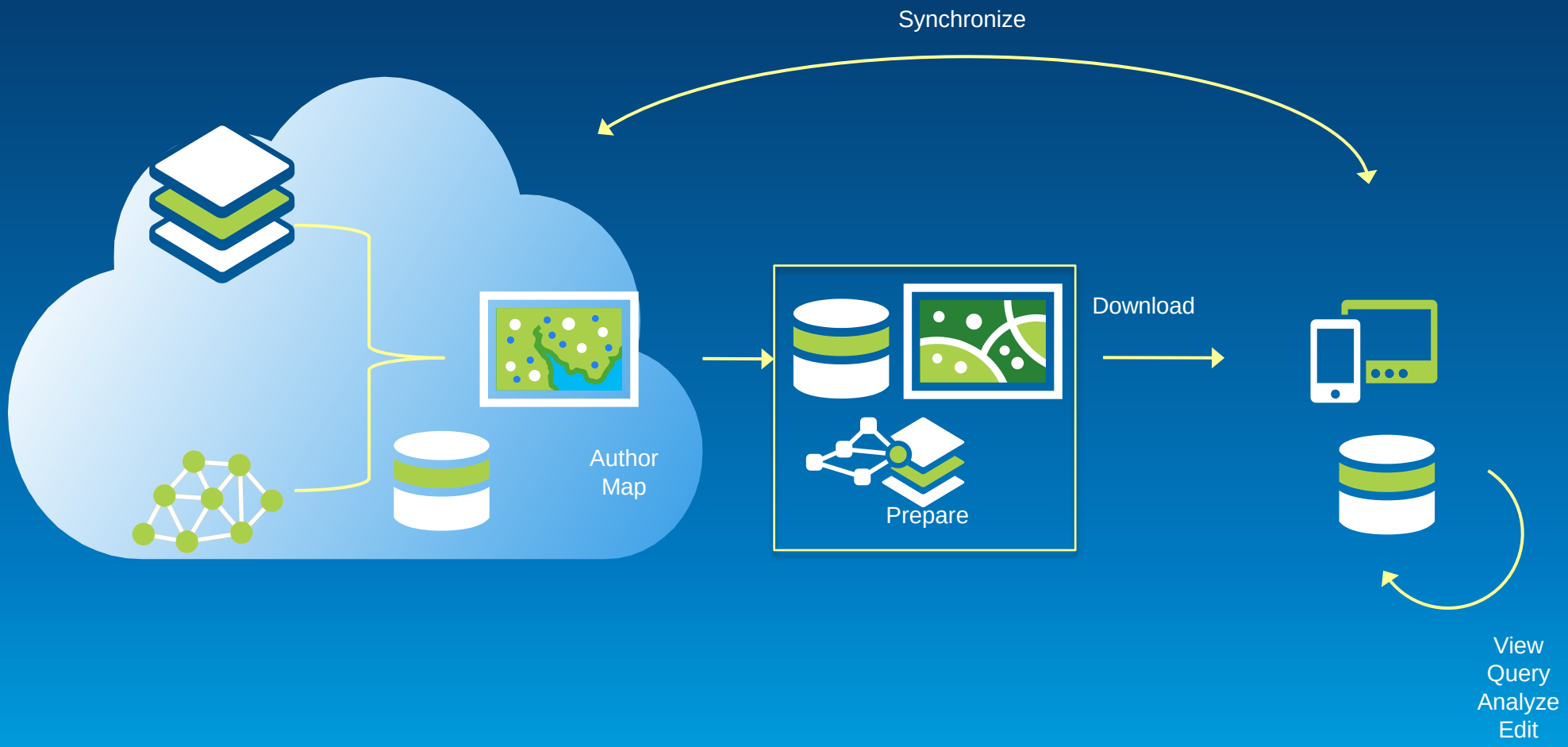
Adding data to the ArcGIS cloud

Offline Map Capabilities – Final with 10.2.2

Disconnected Use of the ArcGIS Platform

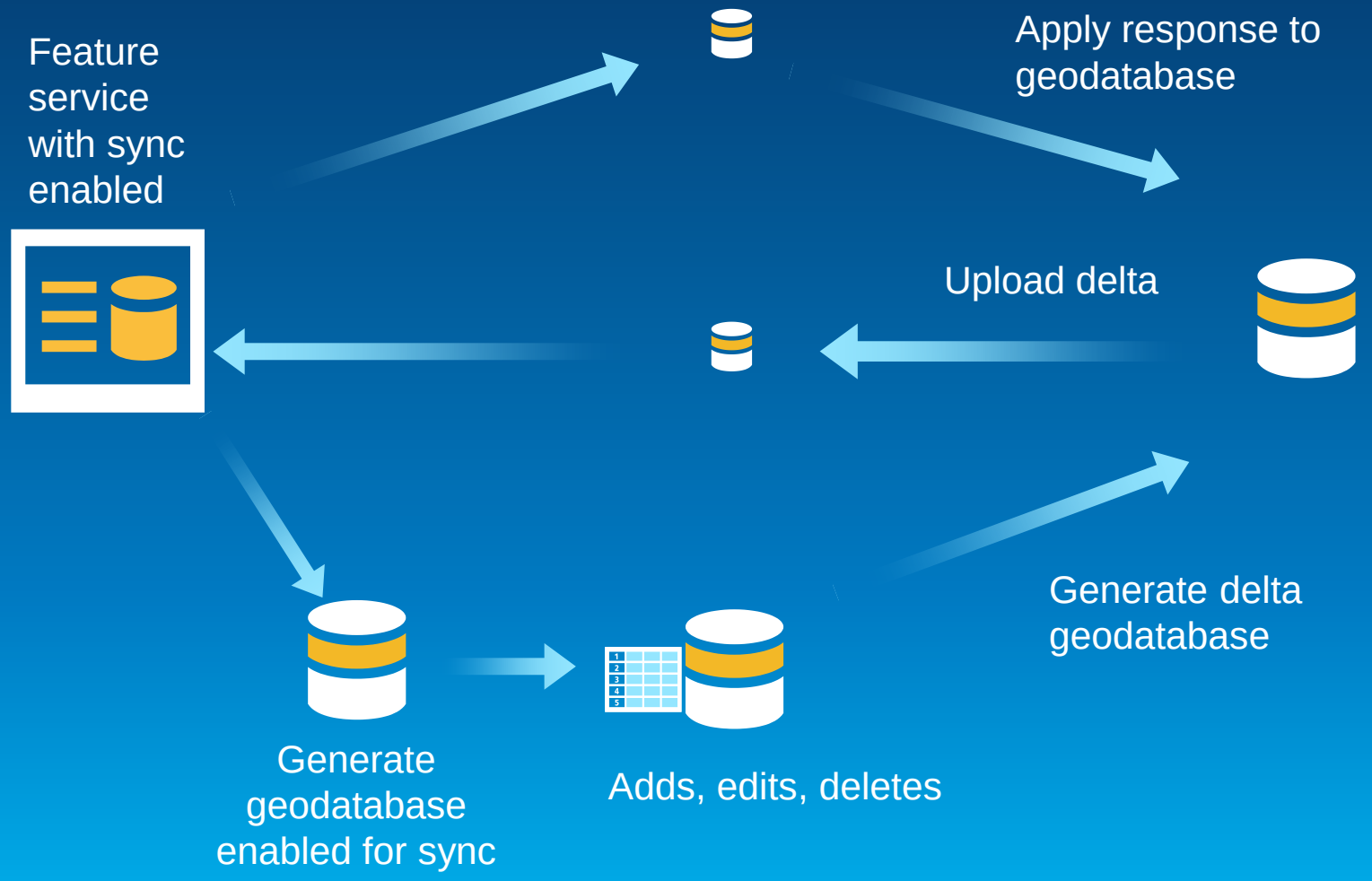
- Viewing and Interacting with Maps
- Querying Data
- Editing Features
  - Synchronization
- Spatial Intelligence
  - Find places and locations
  - Get directions
- Pre-planned or On-demand Workflows
- Occasionally Connected Scenarios
- All Runtime SDKs*

From ArcGIS Online



How Does Sync Work?

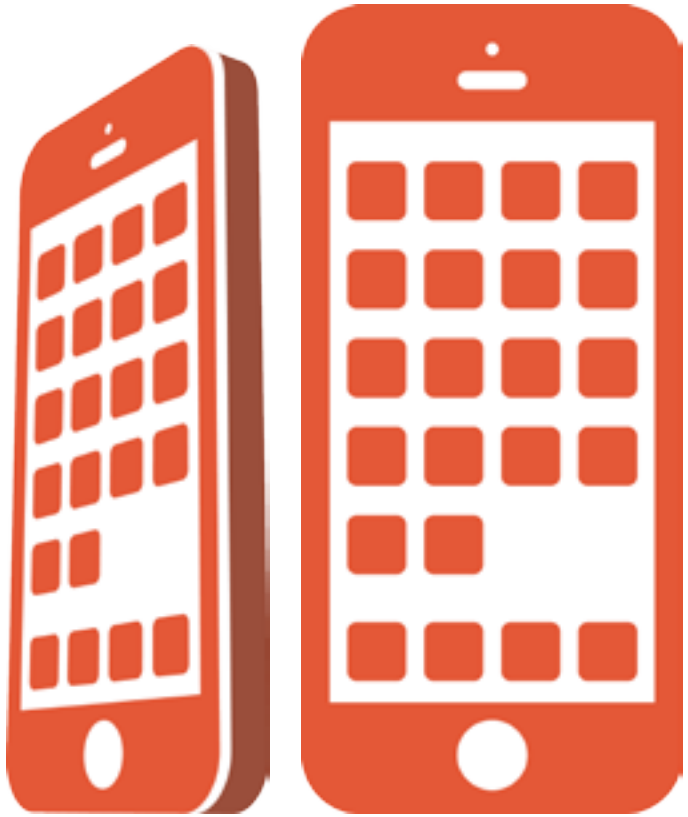
The Flow of Data



Demo

Offline

Runtime Licensing



Runtime Licensing

Development and Deployment Workflow

1. Download and Install

2. Develop and Test

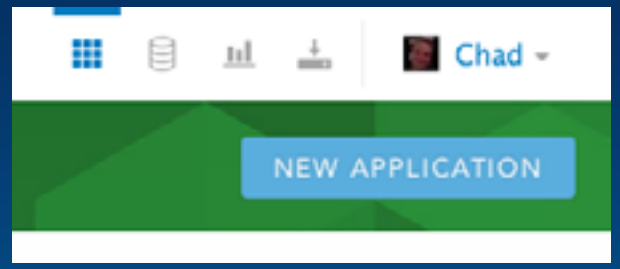
3. Deploy and Distribute

License levels and functionality

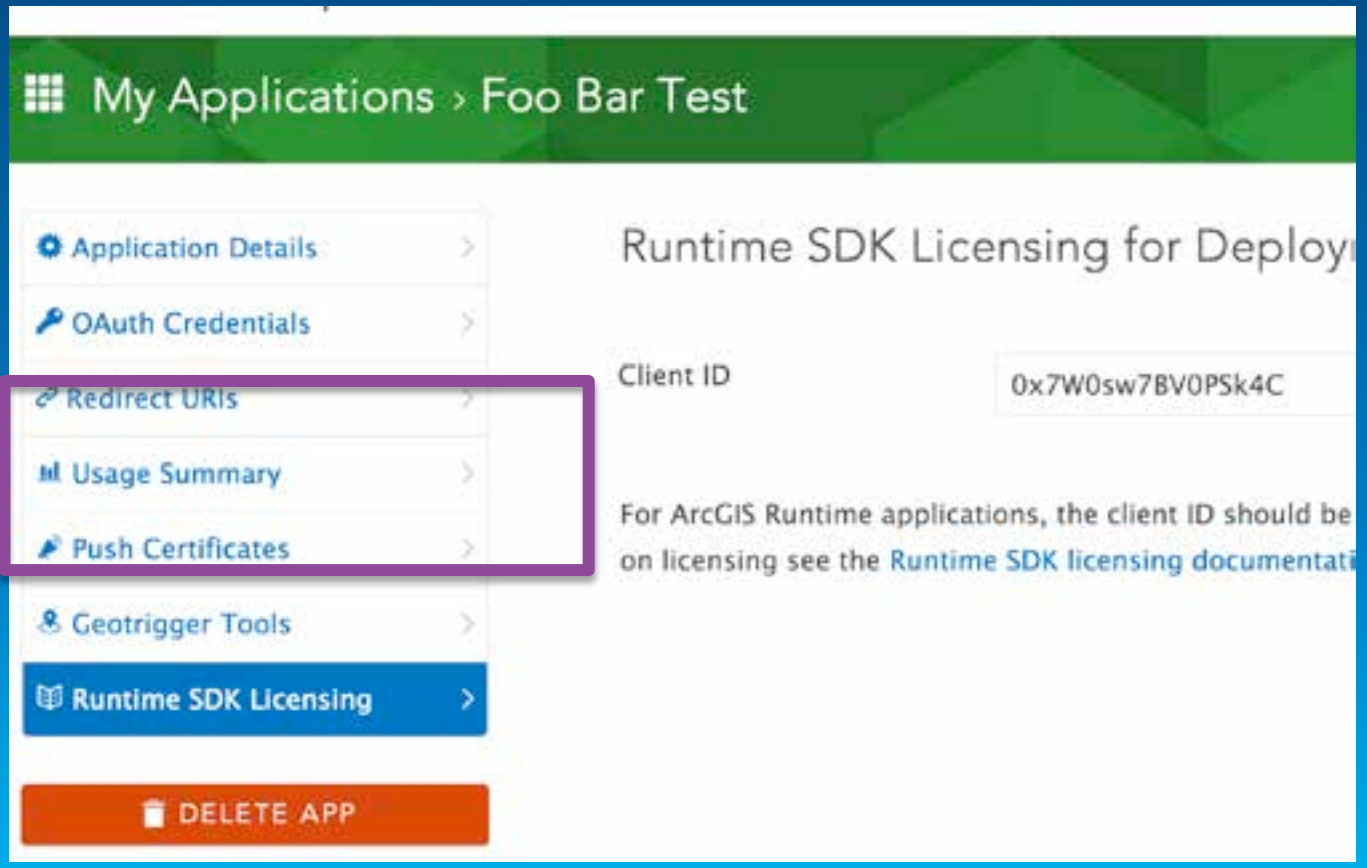
License Level	Available functionality
Developer (development and testing only)	All functionality (watermarks and debug messages will be generated, nag screens with local server*)
Basic	Connected - all functionality Offline - map viewing only
Standard	Connected and offline - all functionality, includes: • Local locators (geocoding) • Local routing • Local geodatabase editing • Local geodatabase sync operations • Local server*

*** For those SDKs that support it**

How to license your app at the basic level



- http://developers.arcgis.com
- Under Application section, create a New Application (or select existing)
- Click on Runtime SDK Licensing
- Copy the Client ID and use it to set your clientID



How to license your app at the standard level

- **You have 2 options:**

1. **Use an organization account (ArcGIS Online or Portal for ArcGIS)**
   - **Requires users of your app to log in with their account**

1. **Use a license string obtained from Customer Service or your international distributor**
   - **License burnt into the app**
   - **Extensions can also be added with this option**

For more info speak to sales or product management

ArcGIS Runtime Sessions

ArcGIS Runtime SDK sessions Monday

Session Name	Time	Location
Getting Started with ArcGIS Runtime SDK for iOS and OS X	11:00am – 12:00pm	Smoketree A-E

ArcGIS Runtime SDK sessions Tuesday

Session Name	Time	Location
Deploying iOS Apps	1:30pm – 2:00pm	Demo Theater 1 – Oasis 1
Migrating your Apps to the iOS Platform	5:30pm – 6:30pm	Demo Theater 2 – Oasis 1

ArcGIS Runtime SDK sessions Wednesday

Session Name	Time	Location
Building iOS Apps with ArcGIS Runtime SDK	10:30am – 11:30am 1:00pm – 2:00pm	Smoketree A – E Mesquite G-H
Building Mac Apps with ArcGIS Runtime SDK	1:00pm – 2:00pm	Mojave Learning Center
20 Things You Didn’t Know You Can Do with ArcGIS Runtime SDK for iOS	2:30pm – 3:00pm	Demo Theater 1 – Oasis 1
Building Offline Apps for iOS and the Mac	2:30pm – 3:30pm	Mojave Learning Center
Building Offline Apps with ArcGIS Runtime SDK – Part 1	4:00pm – 5:00pm	Primrose B
Building Offline Apps with ArcGIS Runtime SDK – Part 2	5:30pm – 6:30pm	Primrose B

ArcGIS Runtime SDK sessions Thursday

Session Name	Time	Location
The Road Ahead: ArcGIS Runtime SDKs	8:30am – 9:30am	Primrose A
Everything (or Anything) You Wanted to Know about the ArcGIS Runtime SDKs	10:00am – 11:00am	Primrose A
Building iOS Apps with ArcGIS Runtime SDK	1:00pm – 2:00pm	Mesquite GH

Useful links

developers.arcgis.com

bit.ly/building-ios-apps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Understanding our world.