



Esri International Developer Summit  
Palm Springs, CA

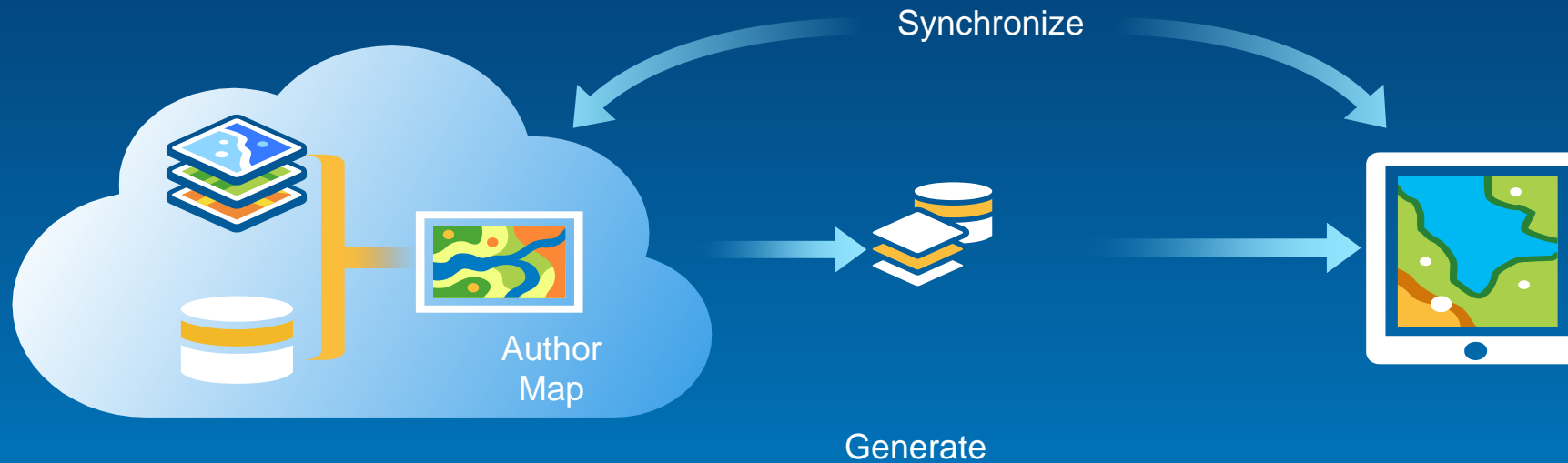
# Building Offline Apps for iOS and the Mac

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# Demo Theatre

- **Work Order Management- iWorkIt**
- **Mountain Biking - MTB or Die**
  
- **Offline**
  - **Taking features offline and editing**
  - **Update the server**
  - **Get route and driving directions**
  - **Basemaps**
  
- **Offline app design, Licensing, Best Practise**

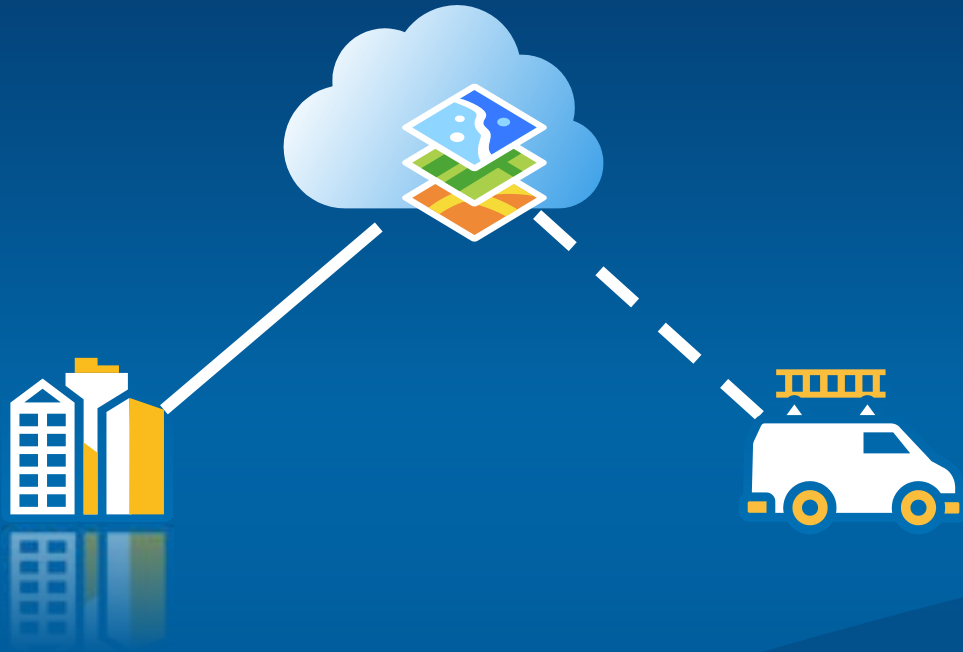
# Going Offline from ArcGIS Online and Portal for ArcGIS



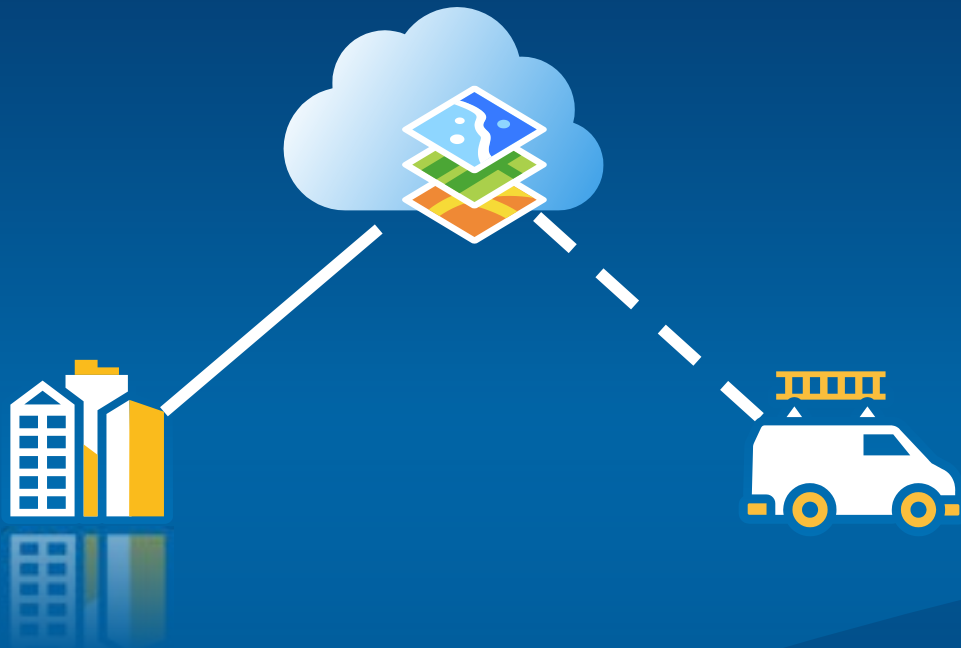
- **Synchronize Options**

- Download
- **Upload**
- Bidirectional

# iWorkIT Demo



# iWorkIT Code



```
UIBackgroundTaskIdentifier ta  
beginBackgroundTaskWithEx
```

```
AGSGDBSyncParameters* syncPar  
self.database];
```

```
self.syncTask =  
[self.gdbSyncTask  
syncGeodatabase:self.dat  
params:syncPara  
status:^(AGSRes  
{NSStrin  
completion:^(AGSGDB  
{self.sy  
if (com  
com  
}  
[[UIApp  
}
```

```
];
```

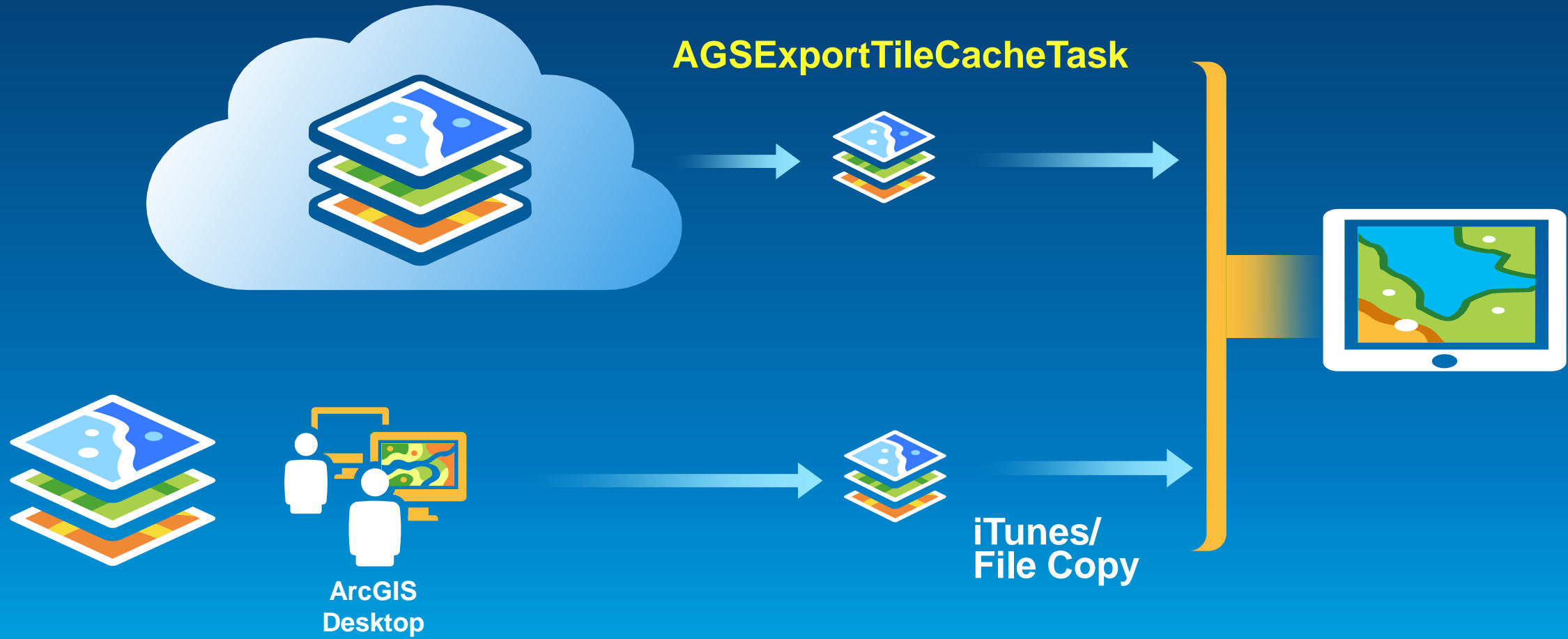
```
}
```

```
@end
```

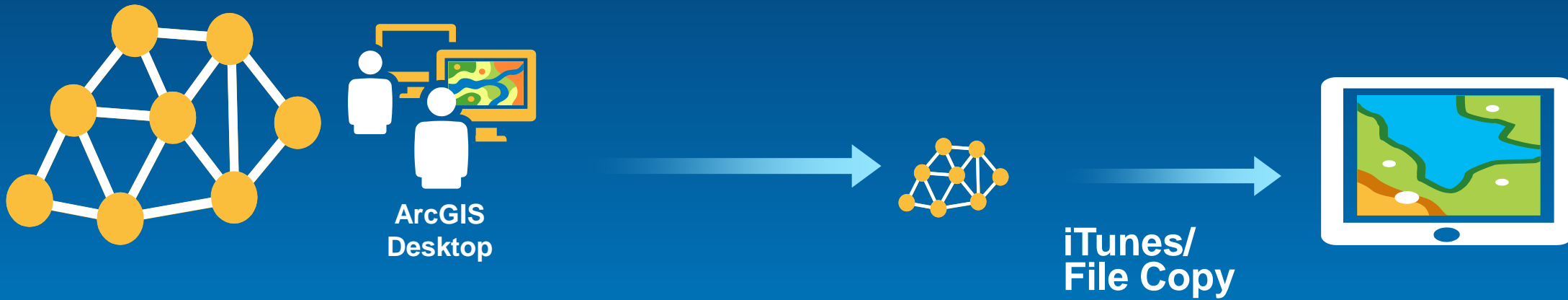
## Know your ArcGIS Runtime Tasks

- Adopt Task Protocol
- Instantiate Task and Retain the task (STRONG)
- Retrieve Task default parameters
- Execute Task with Parameters
- Implement Delegate Methods
- Process the Results
  
- Current Tasks at 10.2.2
  - **Locator**, ExportTileCache, ClosestFacility, Find, GeometryService, Geoprocessor, Identify, ImageServiceIdentity, **Query**, ServiceArea, **Route**, **GDBSyncTask**

# Tiled Maps

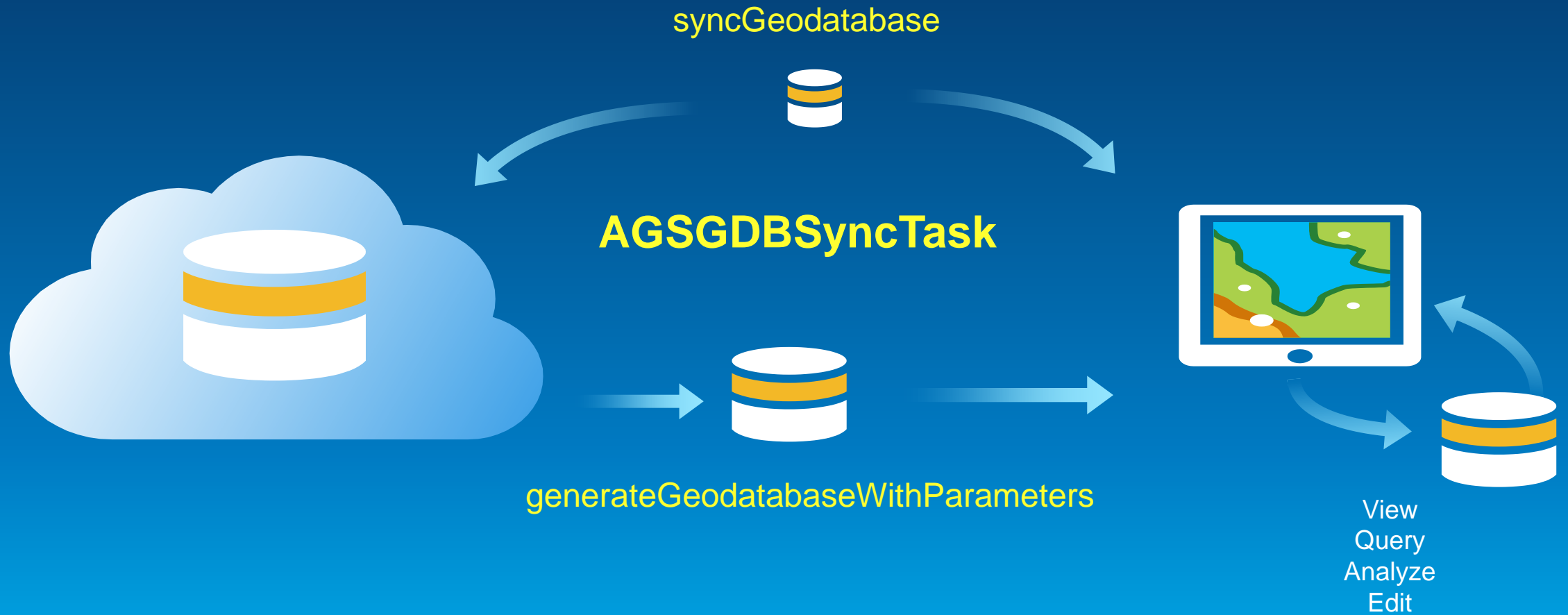


# Network Dataset (and Locators) – Runtime Content Package





# From Feature Service to Geodatabase and back



# Upload you edits when internet is available

- Use the System Configuration Framework
- Broadcast when the Internet is Available

```
[[NSNotificationCenter defaultCenter] postNotificationName:  
    InternetAvailableNotification object:nil];
```

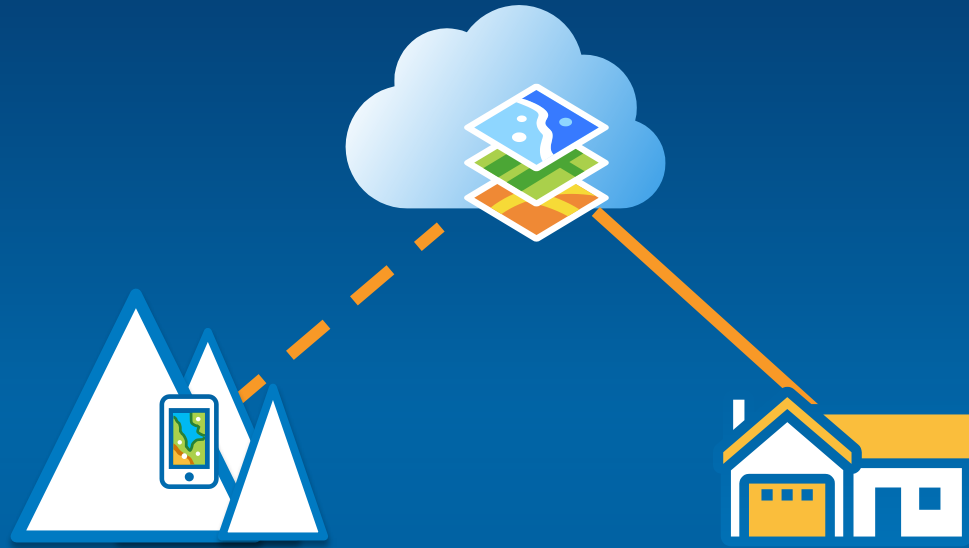
- Add an observer to listen for the notification

```
// subscribe to internet connection notification  
[[NSNotificationCenter defaultCenter] addObserver:self  
    selector:@selector(didConnectToInternet)  
    name:InternetAvailableNotification  
    object:nil];
```

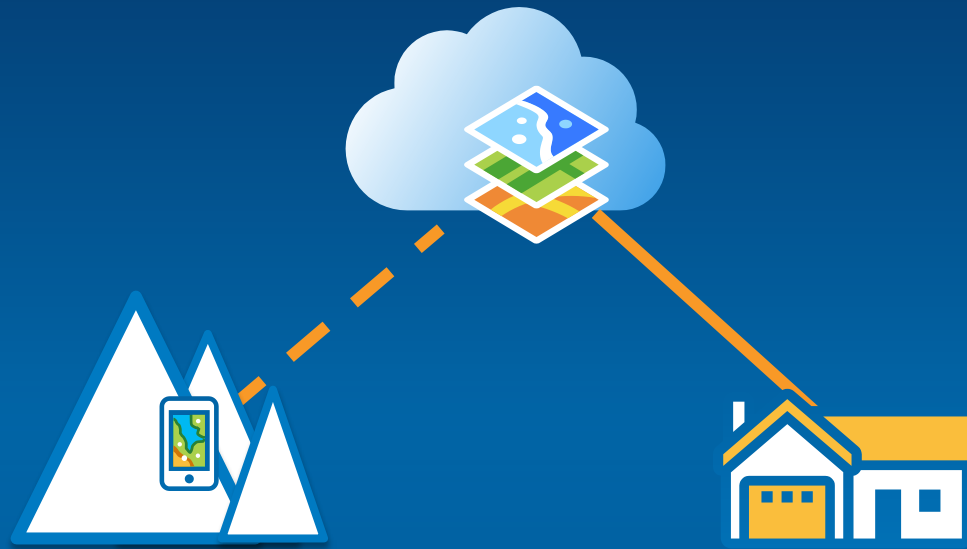
- Method to Sync Edits

```
- (void)didConnectToInternet  
{  
    if (self.workOrderTable.hasLocalEdits) {  
        [self syncEdits:nil];  
    }  
}
```

# Mountain Bike Demo



# Mountain Bike Code



The screenshot shows a file explorer interface with a toolbar at the top containing icons for file operations. The main content area displays a project structure:

- mbxhack-osx** (2 targets, OS X SDK 10.9)
  - common
  - mbxhack-osx
  - mbxhack-osxTests
  - Frameworks
  - Products
- mbxhack-ios** (2 targets, iOS SDK 7.0)
  - external
  - common
  - mbxhack-ios
  - mbxhack-iosTests
  - Frameworks
  - Products

# iOS and OS X – sharing the code!

- **Common look and feel**
- **Common functionality**
- **Faster to Develop**
- **Easier to Maintain**
- **Fewer Unit Tests**



# Licensing for Deployment

License Level	Available functionality
Basic	Connected - all functionality Offline - map viewing only
Standard	Connected and offline - all functionality, includes: <ul style="list-style-type: none"><li>• Local locators (geocoding)</li><li>• Local routing</li><li>• Local geodatabase editing</li><li>• Local geodatabase sync operations</li></ul>

# How to license your app at the standard level

- You have 2 options:
  1. Use a license string obtained from Customer Service or your international distributor
    - License burnt into the app
    - Obfuscate your license string
  2. Use an organization account (ArcGIS Online or Portal for ArcGIS)
    - Requires users of your app to log in with their account
    - Token based or oAuth authentication
    - Store license in the Keychain for use offline

For more info speak to sales or product management

# #devsummit Runtime sessions





## ArcGIS Runtime SDK sessions Today and Tomorrow

Session Name	Time	Location
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

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



Understanding our world.