



Esri International Developer Summit  
Palm Springs, CA

# Offline Network Analysis with ArcGIS Runtime

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# Disconnected Mobile Routing with ArcGIS Runtime

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- **Why offline routing?**
- **Demo:**  
Sharing data from ArcMap
- **Demo:**  
Disconnected routing on  
an Android tablet
- **What next?**



# Demo: Sharing Runtime Content

- 1 – Prepare your map**
- 2 – Share Runtime content**
- 3 – Deploy to device**



# Demo: Offline Routing

# Runtime Routing API Cheat Sheet

## Class Global Instances

```
RouteTask mRouteTask;  
RouteParameters mRouteParameters;
```

## Switching between Online and Offline

```
boolean offline = true;  
if (offline) {  
    mRouteTask = RouteTask.createLocalRouteTask("~/sandiego.geodatabase", "Streets_ND");  
}  
else {  
    mRouteTask = RouteTask.createOnlineRouteTask("service.url", null);  
}
```

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```

## Runtime Routing API Cheat Sheet (Continued)

### Optimized Routing

```
mRouteParameters.setFindBestSequence(true);  
mRouteParameters.setPreserveFirstStop(true);  
mRouteParameters.setPreserveLastStop(true);
```



## Runtime Routing API Cheat Sheet (Continued)

### Directions in Multiple Languages

```
mRouteParameters.setDirectionsLanguage("es");
```

## Runtime Routing API Cheat Sheet (Continued)

### Adding Stops

```
Graphic stop1 = new Graphic(new Point(x1,y1), null);  
Graphic stop2 = new Graphic(new Point(x2,y2), null);  
NAFeaturesAsFeature stops = new NAFeaturesAsFeature();  
stops.addFeatures(new Graphic[] { stop1, stop2 });  
mRouteParameters.setStops(stops);
```

### Adding Polygon Barriers

```
Polygon polygon = new Polygon();  
polygon.startPath(x1, y1);  
polygon.lineTo(x2,y2); polygon.lineTo(x3,y3);  
NAFeaturesAsFeature barriers = new NAFeaturesAsFeature();  
barriers.addFeature(new Graphic(polygon, null));  
mRouteParameters.setPolygonBarriers(barriers);
```

<https://developers.arcgis.com/>

<https://proceedings.esri.com/>





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