

Exercise: Working with Operational Layers

Operational layers are overlaid on top of the basemap and typically include the data layers of interest to your application. Multiple operational layers can be active and visible at the same time. These layers can be accessed by the end user through the Map Switcher, More... button, and Layer List widget.

```
<operationallayers>
  <layer label="Demographics" type="tiled" visible="false" alpha="0.5"
    url="http://server.arcgisonline.com/ArcGIS/rest/services/Demographics/USA_Median_Household_Income/MapServer">
    <sublayer id="1" popupconfig="popups/PopUp_Demographics_BlockGroups.xml"/>
    <sublayer id="2" popupconfig="popups/PopUp_Demographics_Tracts.xml"/>
    <sublayer id="3" popupconfig="popups/PopUp_Demographics_Counties.xml"/>
    <sublayer id="4" popupconfig="popups/PopUp_Demographics_States.xml"/>
  </layer>
  <layer label="Boundaries and Places" type="tiled" visible="false"
    url="http://server.arcgisonline.com/ArcGIS/rest/services/Reference/World_Boundaries_and_Places_Alternate/MapServer"/>
  <layer label="Fires" type="feature" visible="false" alpha="1.0"
    popupconfig="popups/PopUp_Fires.xml"
    url="http://sampleserver3.arcgisonline.com/ArcGIS/rest/services/Fire/Sheep/FeatureServer/0"/>
</operationallayers>
```

In this exercise you will learn how to add an operational layer to your application.

Step 1: Open the Configuration File

- Open config.xml in your favorite text editor.

Step 2: Add New Operational Layer

- Open a web browser and navigate to:
<http://sampleserver3.arcgisonline.com/ArcGIS/rest/services/Earthquakes>

- There are a number of services in this folder.

ArcGIS Services Directory

[Home](#) > [Earthquakes](#)

Folder: Earthquakes

Current Version: 10.0

View Footprints In: [Google Earth](#)

Services:

- [Earthquakes/CaliforniaDEM](#) (ImageServer)
- [Earthquakes/EarthquakesFromLastSevenDays](#) (MapServer)
- [Earthquakes/EarthquakesFromLastSevenDays](#) (FeatureServer)
- [Earthquakes/RecentEarthquakesRendered](#) (MapServer)
- [Earthquakes/SanAndreasLidar](#) (ImageServer)
- [Earthquakes/Since 1970](#) (MapServer)

Supported Interfaces: [REST](#) [SOAP](#) [Sitemap](#) [Geo Sitemap](#)

- Let's add the service that displays the earthquakes from the past seven days. Click the link for this service. There is a single layer in this service. This is a dynamic layer so you'll need to account for that when you add the layer to the map.

Earthquakes/EarthquakesFromLastSevenDays (MapServer)

View In: [ArcMap](#) [ArcGIS Explorer](#) [ArcGIS JavaScript](#) [Google Earth](#) [ArcGIS.com Map](#)

View Footprint In: [Google Earth](#)

Service Description:

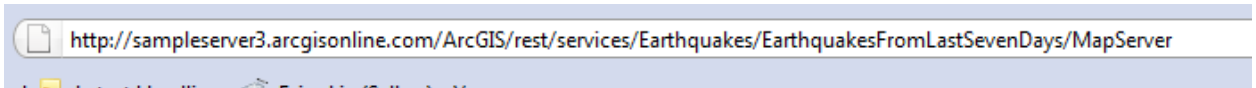
Map Name: Layers

[All Layers and Tables](#)

Layers:

- [Earthquakes from last 7 days \(0\)](#)

- You may want to copy the URL in the address bar of your browser since you'll use it when you define the layer.



- Add the following layer tag to the <operationallayers> tag to display this map service.

```
<operationallayers>
  <layer label="Demographics" type="tiled" visible="false" alpha="0.5"
    url="http://server.arcgisonline.com/ArcGIS/rest/services/Demographics/USA_Median_Household_Income/MapServer">
    <sublayer id="1" popupconfig="popups/PopUp_Demographics_BlockGroups.xml" />
    <sublayer id="2" popupconfig="popups/PopUp_Demographics_Tracts.xml" />
    <sublayer id="3" popupconfig="popups/PopUp_Demographics_Counties.xml" />
    <sublayer id="4" popupconfig="popups/PopUp_Demographics_States.xml" />
  </layer>
  <layer label="Earthquakes" type="dynamic" visible="false"
    url="http://sampleserver3.arcgisonline.com/ArcGIS/rest/services/Earthquakes/EarthquakesFromLastSevenDays/MapServer" />
  <layer label="Boundaries and Places" type="tiled" visible="false"
    url="http://server.arcgisonline.com/ArcGIS/rest/services/Reference/World_Boundaries_and_Places_Alternate/MapServer"/>
  <layer label="Fires" type="feature" visible="false" alpha="1.0"
    popupconfig="popups/PopUp_Fires.xml"
    url="http://sampleserver3.arcgisonline.com/ArcGIS/rest/services/Fire/Sheep/FeatureServer/0"/>
</operationallayers>
```

Notice that we've defined this as a 'dynamic' layer and we've set the initial visibility to 'false' so that it won't display when the map loads.

- Save the config.xml file and open the Flex Viewer in a browser. Click the More... button and then click the check box to display the Earthquakes layer.

