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Connecting to Iowa Geographic Map Server Imagery: REST Service

Bailey A. Hanson
Iowa State University, bahanson@iastate.edu

Christopher J. Seeger
Iowa State University, cjseeger@iastate.edu

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Welcome to the Essential ArcGIS Task Sheet Series. This series supplements the Iowa State University GIS Geospatial Technology Training Program short course series, "Essential ArcGIS Tutorial Series." The task sheets are designed to provide quick, easy instructions for performing specific tasks in GIS.

Orthophotos are geometrically corrected aerial photographs. The Iowa Geographic Map Server provides orthophoto sets for the state of Iowa, dating back to the 1930s and available in natural color and color infrared. This task sheet will take you through the steps of connection to the Iowa Geographic Map Server Imagery through a REST Service and clipping the data frame to an area of interest.

1. Introduction

a. In a web browser, navigate to the Iowa Geographic Map Server website at www.ortho.gis.iastate.edu.

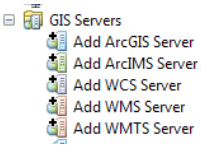
b. Click on **REST Services** located in the bar at the top of the website. You will be taken to a ArcGIS REST Service Directory where you will find a list of services.

c. Copy the URL for this page, http://ortho.gis.iastate.edu/arcgis/rest/services/ortho.

2. Add ArcGIS Server

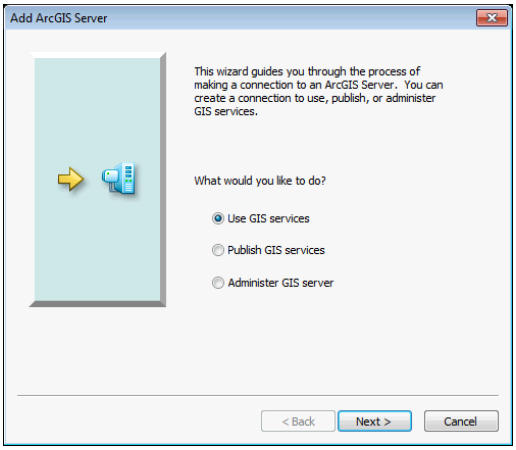
a. Open a blank **ArcMap** document. Click on the **Catalog** icon in the **Standard Toolbar** to open the Catalog window.

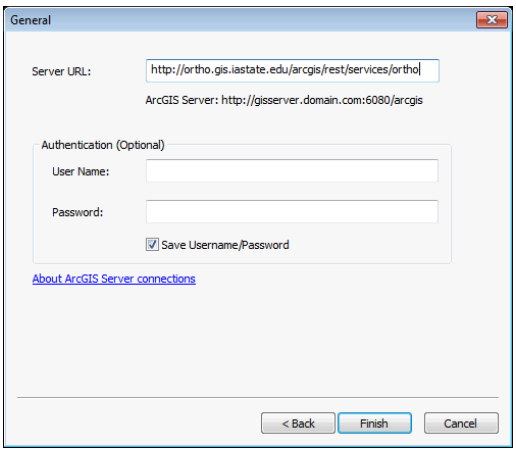
b. In **Catalog** window, scroll down to **GIS Servers** and open the folder. You will see different GIS server options. Select **Add ArcGIS Server**.



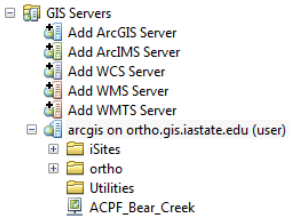
c. In the **Add ArcGIS Server** dialog box make sure **Use GIS services** is checked and click **Next**.

d. In the next window, paste the URL you copied from **step 1c** and paste it in the **Server URL:** text box. Click **Finish**.





3. Add the Imagery to ArcMap

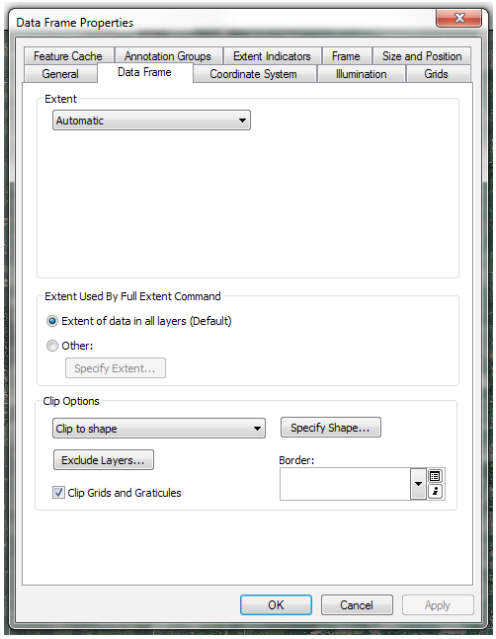


a. In **Catalog**, under the **GIS Servers** folder, you should see that **arcgis on ortho.gis.iastate (user)** is now added to your list.

b. Click and drag **AGS/Ortho/naip_2011_nc** to the white space of the ArcMap document or to the **Table of Contents**.

c. Add a shapefile that has an extent of an area you are interested in viewing. In this example, we will use a shapefile of Story County, Iowa. You can use any shapefile you like. *Note: your shapefile can be a point, line or polygon feature but its extent must be located within or partially within the state of Iowa or the imagery will not be visible in the next step.*

4. Clip the Data Frame to an Area of Interest

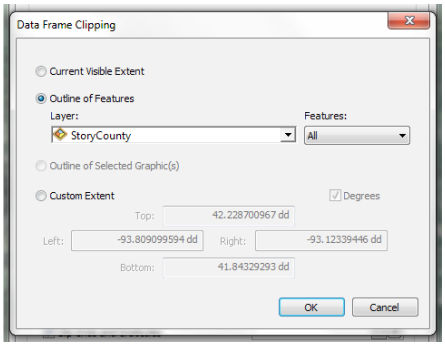


a. Open the **Data Frame Properties** dialog box by right-click on the data frame in the table of contents, **Layers** > **Properties**.

b. Select the **Data Frame** tab at the top of the window. In the **Clip Options** sections select **Clip to Shape**. Then click on **Specify Shape**.

c. In the **Data Frame Clipping** dialog box, select the clipping option of **Outline of Features** and choose your shapefile from the **Layer:** drop-down. Click **OK**.

d. Click **OK** in the Data Frame Properties dialog box. You will now see that the imagery is clipped to the extent of the shapefile you selected. As you zoom in and out and pan around the imagery you should notice that the draw time of the Ortho_naip_2011_nc files is faster then before it was clipped.



Contact:

Bailey Hanson bahanson@iastate.edu, 515-520-1436 or Associate Professor Christopher J. Seeger, ASLA, GISP cjseeger@iastate.edu, 515-509-0651 for more information about the Geospatial Technology Program. This task sheet and more are available at www.extension.iastate.edu/communities/gis

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