

MAXAR

**The SecureWatch Platform with ArcGIS
User Guide**



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1. Introduction to the SecureWatch Platform with ArcGIS

The SecureWatch platform provides access to products contained in Maxar’s online catalogs (imagery, imagery products, and imagery metadata) over the Internet via services that are compliant with Open Geospatial Consortium (OGC) standards.

 The OGC is a non-profit, international, voluntary consensus standards organization that is leading the development of standards for geospatial and location-based services.

The SecureWatch platform services you can import into ArcGIS are Web Map Service (WMS) and Web Map Tile Service (WMTS), which each contain several imagery and footprint layers; if you need to download data, you can use Web Coverage Service (WCS) via Maxar’s ImageConnect add-on for ArcMap (see “WCS” on page 8).

 Maxar’s ImageConnect plug-in for ArcMap provides a much more robust experience for working with Maxar imagery, including filtering. If you are able to download and install a plug-in in your environment, we recommend using ImageConnect rather than connecting with the SecureWatch platform directly. Download the ImageConnect plug-in from <https://securewatch.maxar.com>, and view its user guide in the online Help.

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1.1 WMS

WMS provides map images and associated product metadata for the layers that comprise the online imagery catalogs; accessible layers are determined by your account subscription access.

WMS limits the rendering of imagery to requests at zoom level 13 and higher, which corresponds to about 1:144,000 map scale. In most cases the newest images are on top, but your account stacking profile might layer the images differently. For information on stacking profiles, see the online Help.

 WMS and WMTS are based on Mercator projection zoom levels similar to Google Maps and Bing Maps. These zoom levels correspond only roughly with map scale in ArcGIS, which varies according to the projection you are using, your monitor resolution, and many other factors; the approximate map scales included in this document are for general reference when using a 96dpi monitor. Your configuration may vary.

The associated metadata/footprints layers display imagery footprints and acquisition dates, generally in solid blocks at lower zoom levels and as footprints at higher zoom levels. Footprints in some layers are color coded by age (<7 days, 7-30 days, and >30 days) with the newest images on top. Use the Identify tool to get full metadata for a footprint.

Available WMS layers include:

- » **DigitalGlobe:Imagery/DigitalGlobe:ImageryFootprint** Contains all imagery to which your account has access, including any other layers listed below. Also includes the "daily take," which comprises all image strips collected by Maxar that meet the following specifications:
 - » **Cloud Cover** 50% equatorial, 35% outside equatorial, or as NGA-directed.
 - » **Off-Nadir Angle** 0-30 degrees.

 Use this layer to discover images without regard to product type or composition.

- » **DigitalGlobe:CrisisEvent/DigitalGlobe:CrisisEventFootprint** Contains images taken in support of major world events, including political events, natural and manmade disasters, and human interest events.
- » **DigitalGlobe:CitySphere/DigitalGlobe:CitySphereFootprint** Contains the Basemap +Metro product (formerly known as Citysphere), which currently comprises high-resolution orthomosaics of about 1200 of the largest cities in the world, refreshed on a set schedule, with plans to increase to about 2,000 cities by the end of 2016. Depending on your subscription, you may have access to 2.4m, 1.2m, .6m, .3m, or .15m display resolution.
- » **DigitalGlobe:ImageInMosaicFootprint** Shows the seamlines and acquisition dates for the images that make up the orthomosaics contained in any other layer.

1.2 WTMS

WMTS provides cached map tiles at multiple levels of resolution; accessible layers are determined by your account subscription access. WMTS layers mimic WMS imagery layers, but serve the imagery as tiles for faster rendering. Like WMS, WMTS limits the rendering of high resolution imagery to requests at zoom level 13 and higher but, depending on your user profile, you may see landsat imagery at lower zoom levels.

1.3 WCS

WCS provides downloadable products; each product in the online finished product catalogs constitutes a separate coverage. To use WCS with ArcGIS, use the ImageConnect plugin available from <https://securewatch.maxar.com>.

2. Integrating the SecureWatch Platform with ArcGIS

Follow the steps below to integrate WMS and WMTS with ArcGIS. To integrate WCS, use the ImageConnect plugin by following the steps in the ImageConnect User Guide.

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2.1 Adding the SecureWatch Platform to ArcGIS 10.1

For ArcGIS 10.1, Maxar provides a packaged set of layers you can download and open directly.

! Although the menu item in SecureWatch is labeled ArcGIS 10.1+, an ESRI bug prevents its use beyond version 10.1.

1. Navigate to <https://securewatch.maxar.com> and log in.
2. On the header bar, select **Use With > ArcGIS 10.1+**. A package file called *item.pkinfo* downloads. Depending on your browser settings, you may have the opportunity to rename the file or select a download location.
3. Open the file. ArcMap opens and prompts for your user ID and password.
4. Enter your credentials and select **OK**.

The services are listed in the **Table of Contents** pane.

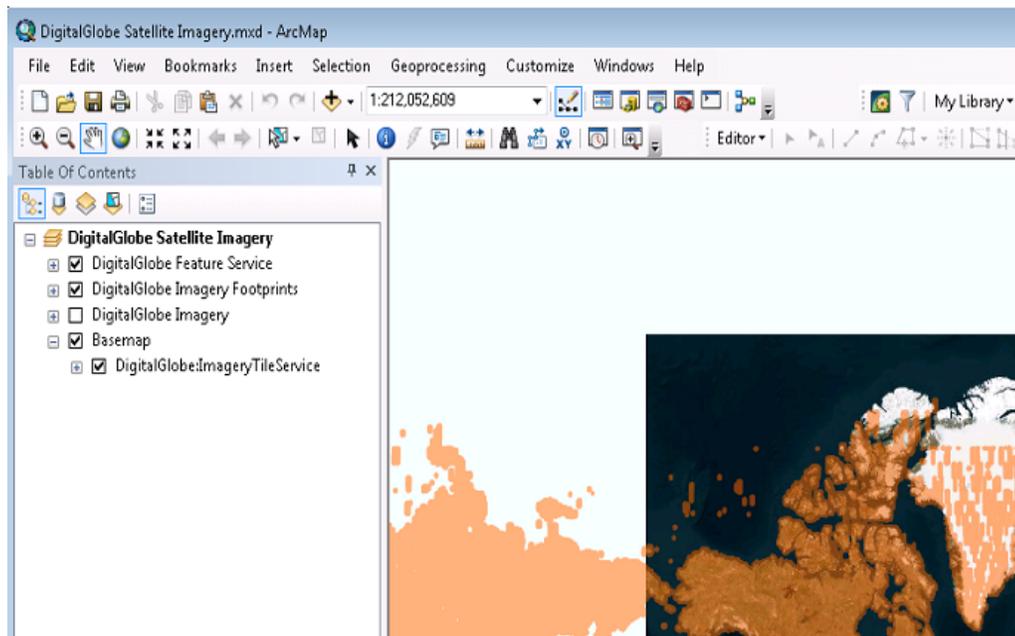


FIGURE 2.1: TABLE OF CONTENTS WITH MAXAR SATELLITE IMAGERY

See "Introduction to the SecureWatch Platform with ArcGIS" on page 5 for layer definitions. Labels may vary slightly.

5. To view your area of interest, zoom in on the map. The raster image may take several seconds to render.

2.2 Adding a WMS or WMTS Server to ArcGIS 10.1+

1. Navigate to <https://securewatch.maxar.com> and log in.
2. On the header bar, select **Use With > Web Services**. The **Web Services** dialog opens.
3. Copy the endpoint URL for WMS or WMTS.
4. Open ArcMap.
5. Open the **Catalog** window, then expand the choices under **GIS Servers**.
6. Double-click **Add WMS Server** or **Add WMTS Server**, then select **Add**. The **Add WMS/WMTS Server** dialog opens.
7. In the fields, enter the following details:
 - » **URL** Paste the WMS or WMTS URL that you copied from SecureWatch.
 - » **Version** Select **Default version**.
 - » **User** Enter your SecureWatch username.
 - » **Password** Enter your SecureWatch password.
8. (Optional) Select **Get Layers**. The server fetches the available layers and displays them in the **Server Layers** area. You can select each layer to see some basic information about it.

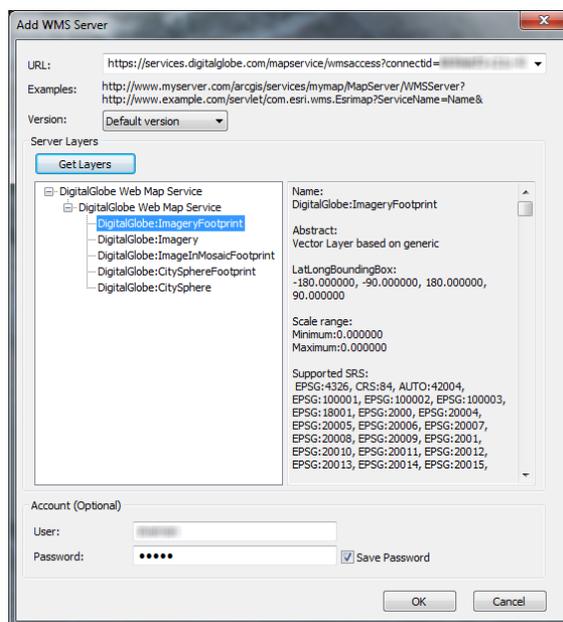


FIGURE 2.2: ADDING WMS SERVER DIALOG WITH LAYERS

9. Select **OK**. The new web service is listed under **GIS Servers** in the **Catalog** window. Expand **Web Map Service** to see the list of available layers.

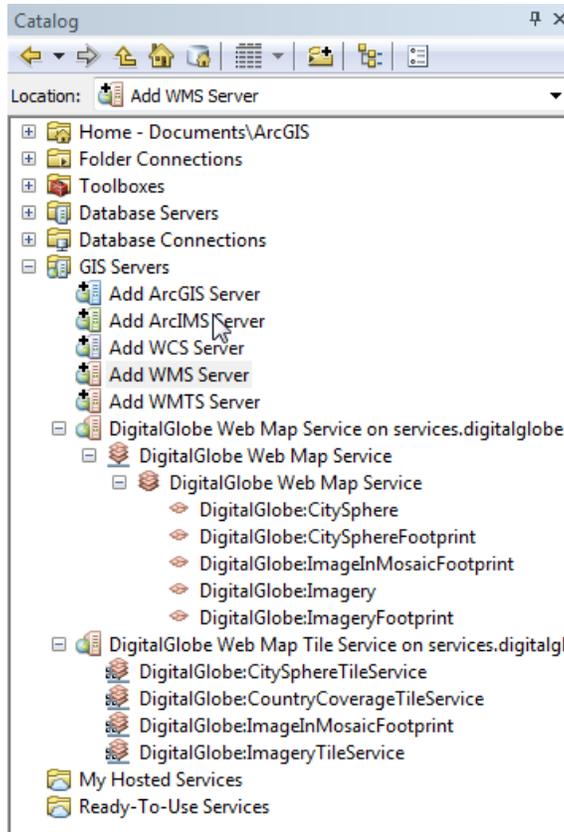


FIGURE 2.3: CATALOG WINDOW WITH WEB MAP SERVICE EXPANDED

10. To view your area of interest, zoom in on the map and drag the layer(s) you want to view into the data pane. The raster image may take several seconds to render.

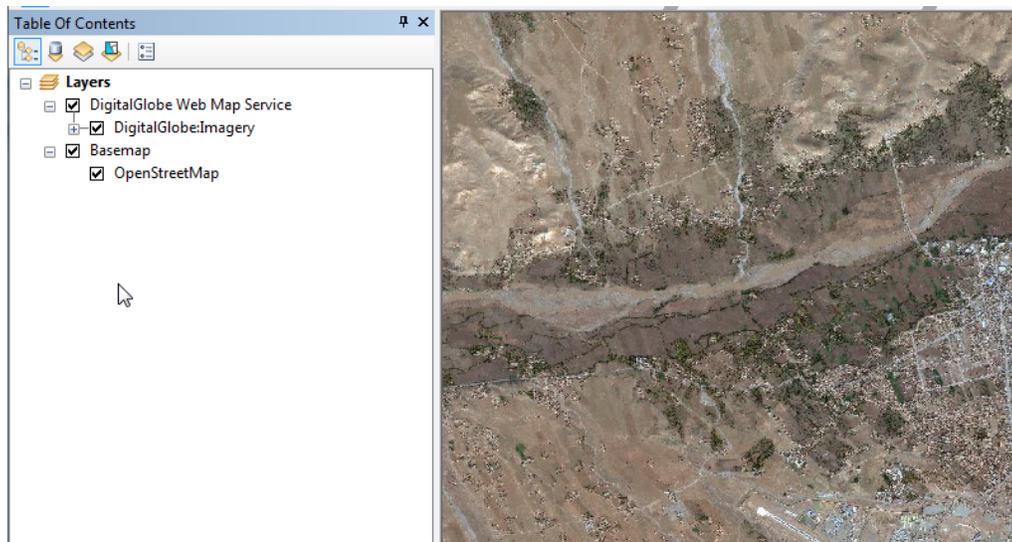


FIGURE 2.4: RASTER IMAGE IN THE DATA PANE