

# WMS Integration

## Introduction

Nearmap WMS integration allows users of off-the-shelf GIS and CAD applications to load high-resolution imagery on demand.

To consume Nearmap imagery via WMS, you must authenticate using [API Key Authentication](#).

Once authenticated, your software package will have a way for you to specify:

- The Nearmap layer you want to view
- The coordinate reference system you want to use to view the layer

## WMS Requests

To display Nearmap imagery, you will need to tell your GIS or CAD package to load a Nearmap layer in a coordinate reference system that our WMS server supplies it in. This is specified in our layer capabilities file, readable by WMS-enabled software packages, and located at:

### US & Canada:

[https://wmsus.nearmap.com/wms?REQUEST=GetCapabilities&httpauth=false&apikey=YOUR\\_API\\_KEY](https://wmsus.nearmap.com/wms?REQUEST=GetCapabilities&httpauth=false&apikey=YOUR_API_KEY)

### Australia & New Zealand:

[https://wms.nearmap.com/wms?REQUEST=GetCapabilities&httpauth=false&apikey=YOUR\\_API\\_KEY](https://wms.nearmap.com/wms?REQUEST=GetCapabilities&httpauth=false&apikey=YOUR_API_KEY)

## WMS Links

The [Manage API Keys](#) page of your Nearmap profile contains handy links to our WMS services containing your API Key. Click on the **WMS links** icon. The following screen will pop up:

### WMS Links

Connecting WMS is easy with an API key. Simply copy the link below and enter it when prompted by your application.

Once authenticated, your software package will have a way for you to specify:

- The Nearmap layer you want to view
- The coordinate reference system you want to use to view the layer

Additional information can be found [here](#).

**Select your region**

|   |                               |
|---|-------------------------------|
| <input type="text" value="https://wms.nearmap.com/wms"/>  | <a href="#">Australia</a>     |
| <input type="text" value="https://wmsus.nearmap.com/wr"/> | <a href="#">United States</a> |

Click on the **Australia** or **United States** button to copy the WMS link, including your API Key, to the clipboard. Paste it into your GIS application when prompted.

Note: New Zealand uses Australia WMS link.

See [API Key Authentication](#) for details of creating and managing API Keys.

## Image Format - Use JPEG

Most GIS applications have **PNG** as the default image format for WMS requests. We recommend that you instead set the image format to **JPEG** when you set up a WMS connection to Nearmap. Each GIS application will have a means of specifying the image format or image encoding.

JPEG imagery is compressed, whereas PNG imagery is not. Setting JPEG as the image format will result a substantial improvement in performance due to much less data being downloaded, with only a small reduction in quality compared to PNG.