# Importing geotiff time series data into Examind Community

***Requirements :***

- Have downloaded the examind community docker-compose and run.sh files
- Have downloaded the tar file including the examind docker image
- Have the geotiff files on the computer that will run examind

**Not required but highly recommended :**

- Turn your geotiff data into COG (cloud optimized geotiff) (can be done via qgis)

## Step 1 : Load docker image

With the tar file, run the command :
`docker load --input <filename>.tar`

## Step 2 : Launch the container a first time

In a folder of your choice, place the docker-compose and run.sh files.
And run `./run.sh`

Normally, a ***mount*** folder has been created in the folder containing the docker-compose file.

## Step 3 : Adding data to Examind server files

For the moment, we need to integrate the data into the server files. Later, it will be possible to use S3 storage.

Go to the folder : ***mount > examind > data*** , and create a new folder named ***TimeSeries***. in this folder, store your geotiff files.

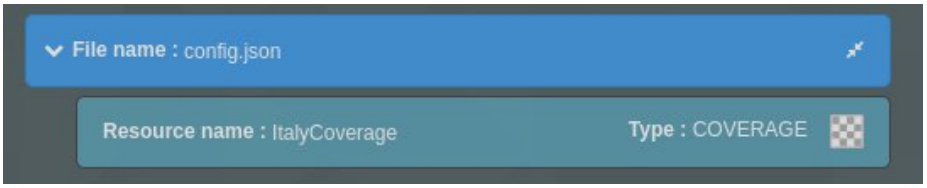
You'll need to add a ***json*** configuration file containing all the files and corresponding dates. Below is an example of a configuration file. In ***files***, you'll find each file, with its start and end dates.

```
{
   "name": "ItalyCoverage",
   "files": [
       {
           "path": "./SC_2006_LAEA_v2.tif",
           "startdate": "2006-01-01T00:00:00Z",
           "enddate": "2016-12-31T23:59:59Z"
```

```
        },
        {
            "path": "./SC_2012_LAEA_v2.tif",
            "startdate": "2012-01-01T00:00:00Z",
            "enddate": "2012-12-31T23:59:59Z"
        },
        {
            "path": "./SC_2015_LAEA_v2.tif",
            "startdate": "2015-01-01T00:00:00Z",
            "enddate": "2015-12-31T23:59:59Z"
        },
        {
            "path": "./SC_2016_LAEA_v2.tif",
            "startdate": "2016-01-01T00:00:00Z",
            "enddate": "2016-12-31T23:59:59Z"
        }
    ]
}
```

## Step 4 : Aggregate data

- Open in a web browser : http://localhost:8080/examind/
- Click on ***sign in*** at top right
- The credentials are ***admin*** / ***admin***
- In the top menu bar, click on ***Data***
- Click on ***Add Data***
- In the left menu, click on **Cloud**
- Select ***Server file*** protocol
- Type : file:///var/examind/TimeSeries
- Click on **Load**, below you will normally see a list of the files you have put in the examind folder
- In the ***Detected files format*** field on the right, select ***LinearGridTimeSeries-examind/unknown***
- Then select the json config file in the list
- Click on ***Next*** at bottom right
- Select generated coverage in the list



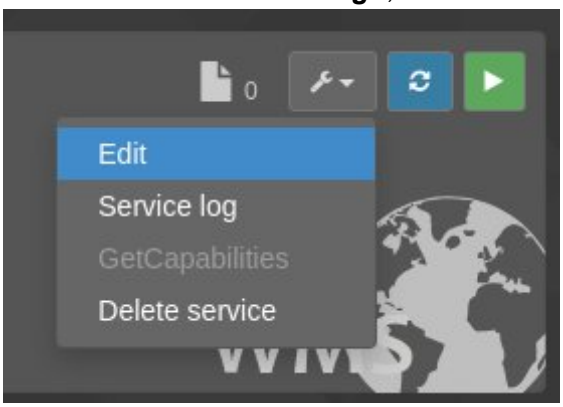

- Click on ***Next*** at bottom right
- Click on ***New Dataset*** at top right
- Choose a dataset name, and fill the required information (title, date of creation)
- Click on ***Next*** at bottom right
- Choose a title the coverage data, and fill the required information (title, date of creation, maintenance and update frequency, specification used for assessing

conformity, reference date of the specification, organization name, electronic mail address)
- Click on ***Finish*** at bottom right

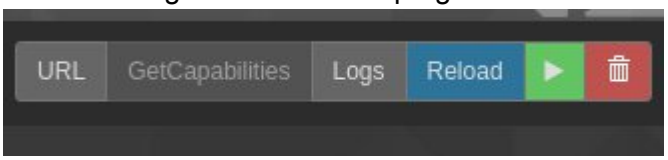
You now have a new dataset containing your aggregated data.

# Step 4 : Exposing data through WMS

- In the top menu bar, click on ***Web Services***
- Click on ***Create a service***, and select ***Maps (WMS)***
- Choose a name and an identifier (and select the two versions : 1.1.1 and 1.3.0)
- Click on ***Save*** at bottom right, you will get a new service (turned off for now)
- Click on the ***service settings***, then on ***Edit***




- Click on ***Add new layer***
- Click on ***Map layers***
- Select your aggregated data, click on ***Choose*** at the bottom right and click on ***Save Modifications***
- Click on the green button at top right to start the service




You can get the URL and the Capabilities of the WMS service in the same bar.