

## GDAL - file management in a virtual directory

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Combine open source software for GIS data management.

GIS data like a set of DEMs or orthophotos is often zipped in one big file (e.g. up to 1 GB) prepared for download.

Not uncommon, only a subset is needed for further GIS analysis. Unzip all files? Not needed, open source software like GDAL and grep offer a solution.

Given a zipped file orthophotos.zip, GIS data is in the subfolder dataset.

```
# list all files in a zipped file by gdal_ls.py
```

```
gdal_ls /vsizip/orthophotos.zip/dataset
```

```
/vsizip/orthophotos.zip/dataset/data01.TFW
```

```
/vsizip/orthophotos.zip/dataset/data01.TIF
```

```
/vsizip/orthophotos.zip/dataset/data01.TIF.xml
```

```
/vsizip/orthophotos.zip/dataset/data01.TIF.aux.xml
```

```
/vsizip/orthophotos.zip/dataset/data02.TFW
```

```
/vsizip/orthophotos.zip/dataset/data02.TIF
```

```
/vsizip/orthophotos.zip/dataset/data02.TIF.xml
```

```
/vsizip/orthophotos.zip/dataset/data02.TIF.aux.xml
```

```
/vsizip/orthophotos.zip/dataset/data03.TFW
```

```
/vsizip/orthophotos.zip/dataset/data03.TIF
```

```
/vsizip/orthophotos.zip/dataset/data03.TIF.xml
```

```
/vsizip/orthophotos.zip/dataset/data03.TIF.aux.xml
```

```
[...]
```

```
# pipe the file list to a text file by gdal_ls, e.g.
```

```
gdal_ls /vsizip/orthophotos.zip/data > filelist.txt
```

# filter non GIS files by piping grep commands, e.g.

```
grep -v .xml filelist.txt | grep .TIF > data_to_index.txt
```

# create a raster tile index by gdaltindex e.g.

```
gdaltindex -src_srs_name sourcesrs mydata.shp --optfile data_to_index.txt
```

Enjoy your GIS analysis.