

Proposal of Modication of the File Upload via REST



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Introduction

This proposal aims to modify the file upload via REST. These modifications involve the **gs-restconfig** module for GeoServer and **gt-imagemosaic** module for GeoTools.

Problem

The method **doFileUpload()** from the **StoreFileResource.java** class always returns an object which can be a Directory or a File.

For the ImageMosaic format, the result is a directory containing all the mosaic files without any distinction if they have just been uploaded or not, but for my purposes I need a list of the uploaded files.

Proposal

GeoServer

My proposal is to modify the output of the **doFileUpload()** method.

There will be a distinction between the **PUT** and **POST** operations. In the case of **PUT** operation, **doFileUpload()** must only return a single file or directory (as currently happens) which will be used for creating the Store. In the case of **POST** operation, the output will be a list of the uploaded files only, without considering the already existing files.

This proposal requires to modify **StoreFileResource** and changing the result from a single File to a List of them. This modification requires to also change the related subclass **CoverageStoreFileResource** in order to handle the multiple files.

Typically the input uploaded file is a Zip file; for this reason the **unzipFile()** method of the **RESTUtils** class should be changed for making it return a List of the uploaded files. Otherwise a separate method could be created for handling this special case.

GeoTools

On the GeoTools side will be modified the **ImageMosaicReader** class. The modification will involve the **harvest()** method giving it the ability to handle multiple files instead of a single one. Precisely I would create 3 inner classes each of them to associate to one of these 3 objects:

- single File
- directory

- list of files.

Each class will internally use the related **ImageMosaicWalker** implementation. For this reason I will create a new **ImageMosaicWalker** implementation handling multiple files.

Note that this implementation will check if the mosaic path is absolute because the input files could come from different locations and the relative path could not be the same for them.