

D4Science Infrastructure - Support #511

Support # 510 (Closed): Data Transfer on the THREDDDS instance

Publishing raster data via StatMan

Sep 01, 2015 11:38 AM - Gianpaolo Coro

Status:	Closed	Start date:	Sep 01, 2015
Priority:	Normal	Due date:	
Assignee:	Gianpaolo Coro	% Done:	100%
Category:	High-Throughput-Computing	Estimated time:	0.00 hour
Infrastructure:	Development		
Description			
A process to publish raster data via StatMan is required. This will publish maps on GeoExplorer via GeoNetwork and Thredds along with metadata.			

History

#1 - Sep 03, 2015 05:54 PM - Gianpaolo Coro

- % Done changed from 0 to 20

A publication process core for GIS raster data has been implemented, but still requires data transfer installation to be fixed.

Data transfer, in fact, seems to not support direct transfer from a local file. In particular, providing a local file URI from the client causes the service to search for the file on its file system. On the other hand, providing a http link works if this link is "simple": it works with dropbox links but does not work with URI resolver generated links (the service requires a "certificate"). Finally, directly providing smp links does not work because the service states that this protocol is not supported.

I have used the GHN on the following machine for these tests: dewn04.madgik.di.uoa.gr

I think a new installation should be done on the Thredds service, with updated libraries, also enabling the smp protocol.

#2 - Sep 03, 2015 08:04 PM - Pasquale Pagano

Gianpaolo Coro wrote:

A publication process core for GIS raster data has been implemented, but still requires data transfer installation to be fixed.

Data transfer, in fact, seems to not support direct transfer from a local file. In particular, providing a local file URI from the client causes the service to search for the file on its file system. On the other hand, providing a http link works if this link is "simple": it works with dropbox links but does not work with URI resolver generated links (the service requires a "certificate").

It should work on production where all servers acting as clients have their own certificate. Is this wrong? I suggest to add Roberto and Andrea as watchers.

Finally, directly providing smp links does not work because the service states that this protocol is not supported.

I have used the GHN on the following machine for these tests: dewn04.madgik.di.uoa.gr

I think a new installation should be done on the Thredds service, with updated libraries, also enabling the smp protocol.

#3 - Sep 04, 2015 06:32 PM - Gianpaolo Coro

After investigating with Roberto, we found the issue was mainly due to a transformation of smp URIs made by the class: org.apache.commons.vfs2.provider.SmpFileObject in vfs-provider-smp-1.1.0-3.8.0.jar

This class, in fact, corrupts current smp links because it was suited for the old format. I will modify it and release a new version.

#5 - Sep 07, 2015 11:17 AM - Gianpaolo Coro

This issue is now blocked by ticket #549

#6 - Sep 07, 2015 01:03 PM - Gianpaolo Coro

- % Done changed from 20 to 40

The blocking issue has been solved, now it is possible to upload files on thredds and produce layers through GeoNetwork. I'm going to build a new algorithm on top of these features.

#7 - Sep 07, 2015 04:10 PM - Gianpaolo Coro

- File DivalInterface.png added
- File ExperimentConfiguration.png added
- File Result.png added
- File DIVAtempGeoExplorer.png added
- File StatManUpload.png added
- % Done changed from 40 to 80

An algorithm has been implemented that allows publishing raster data on the geospatial network of D4Science.

The algorithm publishes raster data either as WMS/WCS maps (in the case of NetCDf-CF files) or as generic datasets (with attached metadata). The user is asked to indicate a file, the name of the layer, an abstract and other parameters.

An example is reported by means of the workflow described by the attached images:

1. a uniform temperature dataset is manually generated via the DIVA interpolation web service of SeaDataNet (<http://gher-diva.phys.ulg.ac.be/web-vis/diva.html#>),
2. the file is uploaded on StatMan,
3. the experiment is configured and executed,
4. the output reports the name of the generated layer and other information,
5. the layer is finally visualised on GeoExplorer.

This algorithm is currently under testing and will be officially released in October.

In order to build a more complete suite for managing raster files, also the DIVA web service is going to be integrated with StatMan.

#9 - Sep 23, 2015 01:47 PM - Gianpaolo Coro

- Status changed from New to Closed
- % Done changed from 80 to 100

Files			
DivalInterface.png	226 KB	Sep 07, 2015	Gianpaolo Coro
ExperimentConfiguration.png	129 KB	Sep 07, 2015	Gianpaolo Coro
Result.png	86.2 KB	Sep 07, 2015	Gianpaolo Coro
DIVAtempGeoExplorer.png	366 KB	Sep 07, 2015	Gianpaolo Coro
StatManUpload.png	95.2 KB	Sep 07, 2015	Gianpaolo Coro