

Geomajas TMS layer plug-in

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1.0.0

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Chapter 1. Introduction

This plug-in contains a raster layer definition for accessing raster data from TMS servers as specified by OSGeo. See the Specification [http://wiki.osgeo.org/wiki/Tile_Map_Service_Specification]. Although not an official OGC specification, TMS is easy to understand and has the advantage of high performance.

This plug-in does not support all TileMapService capabilities. It only supports a single TileMap configuration, represents a single layer. The supported TMS version is 1.0.0.

Chapter 2. Configuration

This chapter describes the perils of configuring a TMS layer for your Geomajas application. There are 2 obstacles to conquer: getting the TMS plug-in jar on your class path, and configuring a TMS layer using the Geomajas configuration.

1. Java dependencies

If you are using Maven, you're in luck. All you have to do is add the following dependency to your configuration:

```
<dependency>
  <groupId>org.geomajas.plugin</groupId>
  <artifactId>geomajas-layer-tms</artifactId>
  <version>1.0.0</version>
</dependency>
```

If you are not a Maven user, make sure that there is a recent version of JAXB (2.x) on your class path. Normally the Geomajas server has already required this, but we're mentioning it just in case.

1.1. Configuring a TMS layer

When configuring a TMS layer, there are 2 basic options to choose from: either configure your own `RasterLayerInfo` object (as with all other Geomajas raster layers), or you let the TMS plug-in configure the layer automatically, based upon the TMS layer description (see the `TileMap` resource in the TMS specification [http://wiki.osgeo.org/wiki/Tile_Map_Service_Specification]).

1.2. Option1: using the TMS layer description (TileMap)

This option is the easiest one, but only works if your TMS actually has a `TileMap` description. If no such description is available, you need to configure a `RasterLayerInfo` yourself.

This option requires you to specify the TMS layer description URL, upon which the TMS plug-in will retrieve the description and build a `RasterLayerInfo` automatically. The CRS, bounding box, resolutions, etc will be taken from the `TileMap` description. Below is an example of such a configuration:

```
<bean name="tms" class="org.geomajas.layer.tms.TmsLayer" >
  <property name="baseTmsUrl" value="http://tms.osgeo.org/1.0.0/landsat/" />
</bean>
```

1.3. Option2: configuring a RasterLayerInfo

This option would can be used in case there is no TMS description available, or in case you wish to use different configuration options. You would still need to specify the "baseTmsUrl" and a `RasterLayerInfo` object:

```
<bean name="tms" class="org.geomajas.layer.tms.TmsLayer" >
  <property name="baseTmsUrl" value="http://tms.osgeo.org/1.0.0/landsat/" />
  <property name="extension" value="jpg" />
  <property name="layerInfo" ref="layerTms" />
</bean>

<bean name="layerTms" class="org.geomajas.configuration.RasterLayerInfo">
  <property name="crs" value="EPSG:4326" />
  <property name="maxExtent">
```

```
<bean class="org.geomajas.geometry.Bbox">
  <property name="x" value="-180"/>
  <property name="y" value="-90"/>
  <property name="width" value="360"/>
  <property name="height" value="180"/>
</bean>
</property>
<property name="resolutions">
  <list>
    <value>0.5</value>
    <value>0.25</value>
    <value>0.125</value>
    <value>0.0625</value>
    <value>0.03125</value>
    <value>0.015625</value>
    <value>0.0078125</value>
    <value>0.00390625</value>
    <value>0.001953125</value>
    <value>0.0009765625</value>
    <value>0.00048828125</value>
    <value>0.000244140625</value>
    <value>0.000122070312</value>
  </list>
</property>
<property name="dataSourceName" value="landsat" />
<property name="tileWidth" value="512"/>
<property name="tileHeight" value="512"/>
</bean>
```

Note that this time, an extension and a link to a `RasterLayerInfo` have been added. The above configuration will generate tiles like:

<http://tms.osgeo.org/1.0.0/landsat/0/0/0.jpg>

Chapter 3. How-to