

QGIS Application - Feature request #13085

Add WMS-T (time) support

2015-07-06 11:50 AM - Anita Graser

Status: Open	
Priority: Normal	
Assignee:	
Category: Web Services clients/WMS	
Pull Request or Patch supplied:	Resolution:
Easy fix?: No	Copied to github as #: 21152
Description	
Add support for WMS with time support to Add WMS layer.	
http://docs.geoserver.org/latest/en/user/services/wms/time.html	
http://mapserver.org/ogc/wms_time.html	
Related issues:	
Related to QGIS Application - Feature request # 8809: WMS/WMTS with dimension...	Open 2013-10-09

History

#1 - 2015-07-06 11:55 AM - Anita Graser

- Subject changed from Add WMS-T support to Add WMS-T (time) support

#2 - 2015-07-08 09:33 AM - David Forrest

QGIS is currently able to access a WMST service as a plain WMS service by awkwardly embedding the TIME=????& parameter in the URL and not letting the system use the URIs from the GetCapabilities document. For an example see

<http://gis.stackexchange.com/questions/34667/does-qgis-have-wms-t-wms-with-time-support/153709#153709>

Maybe one way to make this improvement easier would be making the Layer/Properties/General/Layer Source an editable field so a user could manually update the optional parameters in the URL. If editing a layer's WMS service prefix string was programmatically accessible, then a plugin could perhaps be written to get the time and other optional dimensions from the capabilities document, and then provide UI tools to modify or control them.

As a sample use-case, the WMS-T service at

<http://mesonet.agron.iastate.edu/cgi-bin/wms/nexrad/n0r-t.cgi?TIME=2005-08-29T13:10:00Z&LAYERS=nexrad-n0r-wmst&TRANSPARENT=TRUE&FORMAT=image%2Fpng&SERVICE=WMS&VERSION=1.1.1&REQUEST=GetCapabilities> looks like it should have about 1 million rasters to play with.

#3 - 2015-07-09 07:51 AM - David Forrest

One can programmatically add and update a WMS-T layer like this:

```
urlWithParams =
```

```
'IgnoreGetFeatureInfoUrl=1&IgnoreGetMapUrl=1&contextualWMSLegend=0&crs=EPSG:3857&dpiMode=7&featureCount=10&format=image/png&layers=nexrad-n0r-wmst&styles=&url=http://mesonet.agron.iastate.edu/cgi-bin/wms/nexrad/n0r-t.cgi?TIME%3D2005-08-29T13:10:00Z%26LAYERS%3DnEXRAD-N0R-WMST%26TRANSPARENT%3DTRUE%26VERSION%3D1.1.1%26'
```

```
urlWithParams2 =
```

```
'IgnoreGetFeatureInfoUrl=1&IgnoreGetMapUrl=1&contextualWMSLegend=0&crs=EPSG:3857&dpiMode=7&featureCount=10&format=image/png&layers=nexrad-n0r-wmst&styles=&url=http://mesonet.agron.iastate.edu/cgi-bin/wms/nexrad/n0r-t.cgi?TIME%3D2005-08-29T13:10:00Z%26LAYERS%3DnEXRAD-N0R-WMST%26TRANSPARENT%3DTRUE%26VERSION%3D1.1.1%26'
```

```
g&layers=nexrad-n0r-wmst&styles=&url=http://mesonet.agron.iastate.edu/cgi-bin/wms/nexrad/n0r-t.cgi?TIME%3D2005-08-29T06:10:00Z%26LAYERS%3Dn
YERS%3Dnexrad-n0r-wmst%26TRANSPARENT%3DTRUE%26VERSION%3D1.1.1%26'
```

```
rlayer = QgsRasterLayer(urlWithParams, 'radar WMST timeV2', 'wms')
QgsMapLayerRegistry.instance().addMapLayer(rlayer)
```

```
#update to different time
rlayer.dataProvider().setDataSourceUri(urlWithParams2)
rlayer.dataProvider().reloadData()
rlayer.triggerRepaint()
```

#4 - 2015-10-16 03:50 AM - Nicolas Boisteault

Related issue #8809

#5 - 2017-05-01 12:47 AM - Giovanni Manghi

- *Easy fix? set to No*

#6 - 2017-09-18 03:51 PM - Anita Graser

- *Description updated*

TimeManager implements browsing WMS-T layers but it only helps for visualizations. Missing TIME parameters cause GetFeatureInfo requests to fail - or more specifically - Geoserver will assume some default time value which is inconsistent with the currently visualized time in QGIS.

#7 - 2018-02-28 12:00 PM - Nicolas Boisteault

Issue still exists in QGIS 3.0.

Tests can be made with this

http://sampleserver6.arcgisonline.com/arcgis/services/MultiDimensional_Sample/MapServer/WMServer?request=GetCapabilities&service=WMS