

## QGIS Application - Feature request #10124

### take advantage of gdal's vsipreload mechanism to support VSIFILE on all formats

2014-04-27 07:17 PM - Etienne Tournigny

<b>Status:</b>	Open	<b>Resolution:</b> <b>Copied to github as #:</b> 18586
<b>Priority:</b>	Normal	
<b>Assignee:</b>		
<b>Category:</b>	Data Provider/OGR	
<b>Pull Request or Patch supplied:</b>	Yes	
<b>Easy fix?:</b>	No	
<b>Description</b>		
<p>More details on vsipreload and why it would be a good thing to have it inside QGIS</p> <p><a href="http://osgeo-org.1560.x6.nabble.com/gdal-dev-vsipreload-enabling-VSI-Virtual-File-API-for-regular-I-O-td5055811.html">http://osgeo-org.1560.x6.nabble.com/gdal-dev-vsipreload-enabling-VSI-Virtual-File-API-for-regular-I-O-td5055811.html</a></p> <p>From gdal NEWS:</p> <p>Add vsipreload.cpp that can be compiled as a shared library that can be LD_PRELOAD'ed as an overload of libc to enable VSI Virtual FILE API to be used with binaries using regular libc for I/O</p> <p>Many formats (e.g. netcdf) cannot be read inside .zip files without this</p> <p>basically, it could be implemented this way (at least in linux):</p> <ul style="list-style-type: none"><li>- create a shared lib vsipreload.so and install it with other qgis libs (e.g. /usr/lib/)</li></ul> <p>this is how it is done inside gdal, should be done in another manner in qgis</p> <pre>g++ -Wall -fPIC port/vsipreload.cpp -shared -o vsipreload.so -lport -L. -L.libs -lgdal</pre> <ul style="list-style-type: none"><li>- modify qgis startup script so that qgis is started like this</li></ul> <pre>LD_PRELOAD=vsipreload.so qgis.bin</pre> <p>I am not sure about licensing issues though, can we copy the port/vsipreload.cpp to qgis source legally? Looks ok to me.</p>		

#### History

##### #1 - 2014-05-07 07:09 PM - Etienne Tournigny

- File vsipreload-patch.txt added
- File vsipreload.cpp added

Attaching the vsipreload.cpp code and a patch that allows to build and install it as a shared library.

With this, qgis can be started using the LD\_PRELOAD trick. It should be easy to add this to the debian builds, which already use a startup script.

##### #2 - 2014-05-07 10:33 PM - Paolo Cavallini

A pull request is probably better.

**#3 - 2014-05-08 04:10 PM - Etienne Tourigny**

- File *landsat-gz.nc.gz* added

**#4 - 2014-05-08 04:13 PM - Etienne Tourigny**

added a pull request, this works with debian build

<https://github.com/qgis/QGIS/pull/1342>

**#5 - 2016-05-24 01:06 PM - Alexander Bruy**

- Category changed from *Build/Install* to *Data Provider/OGR*

**#6 - 2017-05-01 12:47 AM - Giovanni Manghi**

- Easy fix? set to *No*

**Files**

vsipreload-patch.txt	1.08 KB	2014-05-07	Etienne Tourigny
vsipreload.cpp	55.1 KB	2014-05-07	Etienne Tourigny
landsat-gz.nc.gz	29.4 KB	2014-05-08	Etienne Tourigny