# QGIS Application - Bug report #19731
## Python error at qgis startup after changing profile folder

2018-08-29 02:31 PM - Andreas Mueller

| | | | |
|---|---|---|---|
| **Status:** | Feedback | | |
| **Priority:** | High | | |
| **Assignee:** | Luigi Pirelli | | |
| **Category:** | Build/Install | | |
| **Affected QGIS version:** | 3.2.2 | **Regression?:** | Yes |
| **Operating System:** | Windows 7 | **Easy fix?:** | No |
| **Pull Request or Patch supplied:** | | **Resolution:** | |
| **Crashes QGIS or corrupts data:** | No | **Copied to github as #:** | 27556 |

**Description**

I put my osgeo4w/qgis install onto a usb stick and use the nice new profile feature. Qgis is called with a fix profile via command line (--profiles-path) which points to a directory on the same usb sick. Unfortunately, there are absolute pathes stored in the QGIS3.ini file inside the profile, so if the drive letter changes, these pathes are invalid. This is the error  message i get.

```
FileNotFoundError: [WinError 3] Das System kann den angegebenen Pfad nicht finden:
'C:\\tmp\\gp180828\\Home\\.qis3\\profiles\\default\\processing\\scripts'
Traceback (most recent call last):
  File "C:/tmp/gp180823/osgeo4w/apps/qgis/./python/plugins\processing\script\ScriptAlgorithmProvider.py", line 106, in
loadAlgorithms
    items = [f for f in os.listdir(folder) if os.path.isfile(os.path.join(folder, f))]
FileNotFoundError: [WinError 3] Das System kann den angegebenen Pfad nicht finden:
'C:\\tmp\\gp180828\\Home\\.qis3\\profiles\\default\\processing\\scripts'

Python-Version: 3.6.0 (v3.6.0:41df79263a11, Dec 23 2016, 07:18:10) [MSC v.1900 32 bit (Intel)]
QGIS-Version: 3.2.2-Bonn Bonn, 26842169e9

Python-Pfad:
C:/tmp/gp180823/osgeo4w/apps/qgis/./python
C:\tmp\gp180823\Home\.qis3\profiles\default/python
C:\tmp\gp180823\Home\.qis3\profiles\default/python/plugins
C:/tmp/gp180823/osgeo4w/apps/qgis/./python/plugins
C:\tmp\gp180823\osgeo4w\bin\python36.zip
C:\tmp\gp180823\osgeo4w\apps\Python36\DLLs
C:\tmp\gp180823\osgeo4w\apps\Python36\lib
C:\tmp\gp180823\osgeo4w\bin
C:\tmp\gp180823\osgeo4w\apps\Python36
C:\tmp\gp180823\osgeo4w\apps\Python36\lib\site-packages
C:\tmp\gp180823\Home\.qis3\profiles\default/python
```

As you can see, the error raises inside the list comprehension in ScriptAlgorithmProvider.py.

My suggestion is, to check if the pathes exist else fall back to default values, e.g. the pathes inside the active profile.
Because the values for these pathes are stored in ini files inside the profile folder, may be qgis could use relative pathes and expand them with the profile path?
There is also a global ini file (qgis_global_settings.ini) in apps/qgis/resources which may can provide default values?

I think the problem is not only related to my "custom portable qgis", but with cases where people have profiles or qgis installs on network drives and more.

**History**

**#1 - 2018-08-29 05:32 PM - Giovanni Manghi**

*- Category changed from Customisation Framework to Build/Install*

Maybe the category should be "Processing", not sure.

**#2 - 2018-08-29 05:33 PM - Giovanni Manghi**

*- Status changed from Open to Feedback*

Did it worked as expected on 2.18?

**#3 - 2018-09-04 01:22 PM - Andreas Mueller**

*- Assignee set to Giovanni Manghi*

Giovanni Manghi wrote:

> *Did it worked as expected on 2.18?*

Yes, the only absolute pathes i can find in QGIS2.ini are lastDirPath and alike. If they do not exists, it doesn't matter.

**#4 - 2018-09-04 04:36 PM - Giovanni Manghi**

*- Priority changed from Normal to High*
*- Regression? changed from No to Yes*
*- Status changed from Feedback to Open*
*- Assignee deleted (Giovanni Manghi)*

**#5 - 2019-02-12 05:28 PM - Luigi Pirelli**

*- Assignee set to Luigi Pirelli*

investigating

**#6 - 2019-02-13 06:59 PM - Luigi Pirelli**

*- Pull Request or Patch supplied changed from No to Yes*

proposed PR

https://github.com/qgis/QGIS/pull/9172

**#7 - 2019-02-13 07:01 PM - Luigi Pirelli**

please Andreas Mueller give a look of the related unit test if it cover your requirements

or better build with the path and check if it owrks in your use cases.


**#8 - 2019-02-14 11:38 AM - Andreas Mueller**

Thank you for your efforts Luigi,

i looked into the test, but i don't totally understand the code, I'm sorry. Also I never build qgis from source and it is not an option at the moment.

But i tried to use the new scripts ScriptAlgorithmProvider.py and ScriptUtils.py with my installed qqis (3.4.3) which gives an error, so i think there are other changes in the code since 3.4.3. Error is:

```
2019-02-14T10:57:07    WARNING    Traceback (most recent call last):
        File "H:/gp181030/osgeo4w/apps/qgis/./python\qgis\utils.py", line 309, in loadPlugin
        import(packageName)
        File "H:/gp181030/osgeo4w/apps/qgis/./python\qgis\utils.py", line 672, in import
         mod = _builtin_import(name, globals, locals, fromlist, level)
         File "H:/gp181030/osgeo4w/apps/qgis/./python/plugins\processing\_init__.py", line 29, in
        from processing.tools.general import * # NOQA
        File "H:/gp181030/osgeo4w/apps/qgis/./python\qgis\utils.py", line 672, in _import
        mod = _builtin_import(name, globals, locals, fromlist, level)
        File "H:/gp181030/osgeo4w/apps/qgis/./python/plugins\processing\tools\general.py", line 39, in
        from processing.core.Processing import Processing
        File "H:/gp181030/osgeo4w/apps/qgis/./python\qgis\utils.py", line 672, in _import
        mod = _builtin_import(name, globals, locals, fromlist, level)
        File "H:/gp181030/osgeo4w/apps/qgis/./python/plugins\processing\core\Processing.py", line 55, in
        from processing.script import ScriptUtils
        File "H:/gp181030/osgeo4w/apps/qgis/./python\qgis\utils.py", line 672, in _import
        mod = _builtin_import(name, globals, locals, fromlist, level)
        File "H:/gp181030/osgeo4w/apps/qgis/./python/plugins\processing\script\ScriptUtils.py", line 28, in
        from qgis.processing import alg as algfactory
        File "H:/gp181030/osgeo4w/apps/qgis/./python\qgis\utils.py", line 672, in _import
        mod = _builtin_import(name, globals, locals, fromlist, level)
        ModuleNotFoundError: No module named 'qgis.processing'
```

What i have done to overcome the originally issue is running a script to change entries in the ini-Files QGIS3.ini in Profiles/default/QGIS and qgis_global_settings.ini in apps/qgis/resources:

```
import os
from PyQt5.QtCore import QSettings
inipath_profile = os.path.join(os.environ['Home'],'.qis3/profiles/default/QGIS/QGIS3.ini')
if os.path.exists(inipath_profile):
  settings_profile = QSettings(inipath_profile, QSettings.IniFormat);
else:
  settings_profile = None
inipath_global =  os.path.join(os.environ['OSGEO4W_ROOT'],'apps/qgis/resources/qgis_global_settings.ini')
settings_global = QSettings(inipath_global, QSettings.IniFormat);
envdict = {}
try:
  home =os.environ['HOME'] # G:\\gp180823\\Home
  envdict["Processing/Configuration/MODELS_FOLDER"] = os.path.realpath(home + "\.qis3\profiles\default\processing\models")
  envdict["Processing/Configuration/OUTPUTS_FOLDER"] =  os.path.realpath(home + "\.qis3\profiles\default\processing\outputs")
  envdict["Processing/Configuration/SCRIPTS_FOLDERS"] =  os.path.realpath(home + "\.qis3\profiles\default\processing\scripts")
```

```
            envdict["qgis/projectTemplateDir"] =  os.path.realpath(home + "\.qis3\profiles\default/project_templates")
        except Exception as e:
            exit("Environment variable 'Home' not set!")
        try:
            prefix = os.environ['GISBASE'] # G:\gp180823\osgeo4w\apps\grass\grass-7.4.1
            envdict["Processing/Configuration/GRASS7_FOLDER"] = os.path.realpath(prefix)
            envdict["Processing/Configuration/GRASS_HELP_PATH"] =  os.path.realpath(prefix + "\docs\html")
        except Exception as e:
            print ("Environment variable 'GISBASE' not set!")
        for k in envdict.keys():
            settings_global.setValue(k, envdict[k])
            print('globals', k, envdict[k])
            if settings_profile is not None and settings_profile.contains(k):
                print('key %s exists in profile'%k)
                if not os.path.exists(settings_profile.value(k)):
                    print('path %s does not exists, writing default to profile'%settings_profile.value(k))
                    print('profiles', k, envdict[k])
                    settings_profile.setValue(k, envdict[k])
                else:
                    print('path %s exists, left it in profiles!'%settings_profile.value(k))
            else:
                print('key %s does not exists in profile, left empty', k)
    settings_global.sync()
    if settings_profile is not None:
        settings_profile.sync()
```

I know that's not a proper solution, but may be it shows better, what/where the issue is...


**#9 - 2019-02-14 01:18 PM - Luigi Pirelli**

Andreas Mueller wrote:

> *Thank you for your efforts Luigi,*
>
> *i looked into the test, but i don't totally understand the code, I'm sorry. Also I never build qgis from source and it is not an option at the moment.*


no problem

> *But i tried to use the new scripts ScriptAlgorithmProvider.py and ScriptUtils.py with my installed qqis (3.4.3) which gives an error, so i think there are other changes in the code since 3.4.3. Error is:*


confirmed... but the Patch is for master not for 3.4.x where ScriptUtils has a different code base... you should use qgis-dev in osgeo4w

> *What i have done to overcome the originally issue is running a script to change entries in the ini-Files QGIS3.ini in Profiles/default/QGIS and qgis_global_settings.ini in apps/qgis/resources:*
>
> *I know that's not a proper solution, but may be it shows better, what/where the issue is...*


my patch works only for Script path but the function I added can be used to reset any config path to the acrual profile path

**#10 - 2019-02-14 01:25 PM - Luigi Pirelli**

BTW no idea why you using .qgis3... scripts re usually saved in:

C:\Users\<yout user>\AppData\Roaming\QGIS\QGIS3\profiles\<yout profile>\processing\scripts

what kind of installer are you using? I'm using the advanced OSGeo4W installer (not the standalone application) that shoudl istall stuffs in the same paths

**#11 - 2019-02-14 01:57 PM - Andreas Mueller**

I use apt by Matt Wilkie (https://github.com/maphew/apt), which i changed to use modified postinstall batch-files for a installation on removable drives. But the reason why i use .qgis3 for profiles is that i wanted to store the profiles along with qgis on an usb-stick and I start qgis with --profiles-path. I used the according option under qgis2 too, then it pointed to .qgis2.

Since i have more "portable" software on usb sticks, i encountered, that it is possible to redirect even AppData through an environment variable, so this could also be an option. Some Qt-Applications I tested unfortunately don't use the environment variables APPDATA and LOCALAPPDATA and i didn't test it for qgis.

**#12 - 2019-02-14 02:30 PM - Luigi Pirelli**

I'll check if my patch works in your custom configuration

**#13 - 2019-04-29 10:50 AM - Luigi Pirelli**

partially fixed by https://github.com/qgis/QGIS/pull/9172 but IMHO I do not think it cover all. Please check @andreas

**#14 - 2019-05-01 05:59 PM - Giovanni Manghi**

*- Status changed from Open to Feedback*