
Subject: "Unable to find a valid Python installation" error, a python__define error ?
Posted by on Tue, 25 Aug 2015 11:16:27 GMT

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Dear all,

I had difficulties using the Python bridge with my own winpython installation and I received the 'Unable to find a valid Python installation.' error message.

Thus after spending a lot of time in Windows innards, I just opened the python__define.pro file and found the following piece of code :

```
; Determine which Python version to load.  
SPAWN, ['python', '--version'], stdout, stderr, /noshell  
if (stderr[0].Contains('Python 2.7')) then begin  
    DLM_LOAD, 'Python27'  
endif else if (stderr[0].Contains('Python 3.4')) then begin  
    DLM_LOAD, 'Python34'  
endif else begin  
    MESSAGE, 'Unable to find a valid Python installation.'  
endelse
```

Simply by replacing stderr[0] by the correct stdout[0] I succeeded in fully using Python in IDL as well as the IDL notebook.

What is strange is that a previous anaconda installation worked perfectly well, as well as an earlier winpython 2.7. I have no explanation.

By the way, the 3.5 Python will be released in one month, maybe you should update this piece of code ?

Hope it helps those with similar issues

Subject: Re: "Unable to find a valid Python installation" error, a python__define error ?

Posted by [chris_torrence@NOSPAM](#) on Tue, 25 Aug 2015 16:11:07 GMT

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On Tuesday, August 25, 2015 at 5:16:30 AM UTC-6, Kallisthène wrote:

> Dear all,

>

>

> I had difficulties using the Python bridge with my own winpython installation and I received the 'Unable to find a valid Python installation.' error message.

>

> Thus after spending a lot of time in Windows innards, I just opened the python__define.pro file

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> What is strange is that a previous anaconda installation worked perfectly well, as well as an
earlier winpython 2.7. I have no explanation.
>
> By the way, the 3.5 Python will be released in one month, maybe you should update this piece
of code ?
>
> Hope it helps those with similar issues
```

Hi Kallisthène,

Thanks for reporting this. For some reason different flavors of Python uses stdout or stderr, but not consistently. I'll go ahead and update the code to check both.

Cheers,
Chris

Subject: Re: "Unable to find a valid Python installation" error, a python__define error ?

Posted by _____ on Thu, 13 Oct 2016 15:08:19 GMT

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Dear Chris,

Thanks for updating the code, it works.

Unfortunately I needed to update the scipy svd function and thus tried your "recommended" solution of installing Anaconda.

Since Anaconda is now MKL-compiled for free it is indeed a good solution. BUT, Anaconda switched to Python 3.5 a year ago, and you still don't provide a idl_python35.dll for this new python flavor in your IDL install.

Thus, unless I am mistaking, all users trying to install your recommended solution will always fail !

Hope you'll find time to create one, as well as compiling IDL against MKL instead of providing third-party solution to your speed impediment.

Best regards

Subject: Re: "Unable to find a valid Python installation" error, a python__define error ?

Posted by [Dick Jackson](#) on Thu, 13 Oct 2016 15:36:53 GMT

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On Thursday, 13 October 2016 08:08:21 UTC-7, Kallisthène wrote:

> Dear Chris,
>
> Thanks for updating the code, it works.
> Unfortunately I needed to update the scipy svd function and thus tried your "recommended" solution of installing Anaconda.
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>
> Hope you'll find time to create one, as well as compiling IDL against MKL instead of providing third-party solution to your speed impediment.
>
> Best regards

Hi Kallisthène,

It's true that Anaconda installs Python 3.5 by default, but I've managed to get a new Anaconda (or Miniconda) installation to work by having it create another "environment" with Python 3.4, which works well with IDL 8.5.1. Use this command:

```
conda create -n py34 python=3.4
```

This will create a whole Python installation under ...Anaconda\envs\py34, and you'll need to make sure that environment variables are set correctly (your minutiae may vary):

```
set PATH=C:\Anaconda\envs\py34;C:\Program Files\Exelis\IDL85\bin\bin.x86_64;%PATH%
set PYTHONPATH=C:\Program Files\Exelis\IDL85\bin\bin.x86_64;C:\Program
Files\Exelis\IDL85\lib\bridges
set PYTHONHOME=C:\Anaconda\envs\py34
```

That last one, PYTHONHOME, is not described in IDL docs for Windows, but I can assure you that on one installation I had, if that was not set, creating the Python() object would load the DLL, but any request to Python would crash IDL. PYTHONHOME was required. I am told by a reliable

Exelis source that "you aren't supposed to need to do that, at least on Windows with Anaconda" so perhaps in a future release that won't be needed.

Cheers,
-Dick

Dick Jackson Software Consulting Inc.
Victoria, BC, Canada --- <http://www.d-jackson.com>

Subject: Re: "Unable to find a valid Python installation" error, a python__define error ?

Posted by [chris_torrence@NOSPAM](#) on Thu, 13 Oct 2016 16:02:54 GMT

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Hi Dick and Kallisthène,

That "reliable source" would be me.

For IDL 8.6 we have streamlined the Python bridge installation by adding a "setup.py" script that you can run. This will set up the Python path so you don't have to set it, and on the Mac, it will also eliminate the need to set DYLD_LIBRARY_PATH.

Unfortunately, given all of the different Python flavors, it is still true that you *may* need to set PYTHONHOME on different machines and different Python distributions. That's just the nature of the python beast.

Also for IDL 8.6 we have added support for Python 3.5.

We're hoping to release within a "few" weeks, but no firm date yet.

Cheers,
Chris
IDL Project Lead
Harris Geospatial

Subject: Re: "Unable to find a valid Python installation" error, a python__define error ?

Posted by _____ on Fri, 14 Oct 2016 07:02:59 GMT

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Le jeudi 13 octobre 2016 17:37:15 UTC+2, Dick Jackson a écrit :

> On Thursday, 13 October 2016 08:08:21 UTC-7, Kallisthène wrote:

>> Dear Chris,

>>

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>

> conda create -n py34 python=3.4

>

> This will create a whole Python installation under ...Anaconda\envs\py34, and you'll need to make sure that environment variables are set correctly (your minutiae may vary):

>

> set PATH=C:\Anaconda\envs\py34;C:\Program Files\Exelis\IDL85\bin\bin.x86_64;%PATH%

> set PYTHONPATH=C:\Program Files\Exelis\IDL85\bin\bin.x86_64;C:\Program Files\Exelis\IDL85\lib\bridges

> set PYTHONHOME=C:\Anaconda\envs\py34

>

> That last one, PYTHONHOME, is not described in IDL docs for Windows, but I can assure you that on one installation I had, if that was not set, creating the Python() object would load the DLL, but any request to Python would crash IDL. PYTHONHOME was required. I am told by a reliable Exelis source that "you aren't supposed to need to do that, at least on Windows with Anaconda" so perhaps in a future release that won't be needed.

>

> Cheers,

> -Dick

>

> Dick Jackson Software Consulting Inc.

> Victoria, BC, Canada --- <http://www.d-jackson.com>

Thank you for the information, I also tried to reverse to an older instance of Anaconda, but since I wanted to have the 0.18 scipy version in order to solve a SVD discrepancy, I simply installed WinPython 3.4 which is still maintained with up to date python library. In this case I didn't need to set a PYTHONHOME.

Thanks again

Best
