Centos7.6下安装Python3.7

前言

话说不会开发的运维不是一个好的DBA,所以我要开始学习python了,写博客记录一下我的学习过程,另外别欺负我新来的,那个每天更博的技术流ken是我哥。

不说了, 时间宝贵, 开整。

1.首先来看一下系统版本

```
[root@python3 ~]# cat /etc/redhat-release
CentOS Linux release 7.6.1810 (Core)
```

2.更新一下yum源,yum源我这里用的都是阿里云的源

```
[root@python3 ~] # cd /etc/yum.repos.d/
[root@python3 yum.repos.d] # mkdir bak
[root@python3 yum.repos.d] # mv * bak
[root@python3 yum.repos.d] # wget http://mirrors.aliyun.com/repo/Centos-7.repo
[root@python3 yum.repos.d] # wget http://mirrors.aliyun.com/repo/epel-7.repo
```

3.安装python3.7之前需要先安装一些依赖,,这也是上面更新yum源的原因

```
[root@python3 ~]# yum -y install zlib-devel bzip2-devel openssl-devel openssl-static ncurses-devel sqlite-devel readline-devel tk-devel gdbm-devel db4-devel libpcap-devel xz-devel libffi-devel lzma gcc
[root@python3 ~]# yum -y groupinstall "Development tools"
```

不安装也有可能不会报错, 但是安装了一定不会报错, 安不安装自己把握。

4.下载python3.7安装包,方法很多,我这里直接用wget从官网上下载

```
[root@python3 ~]# cd /usr/local/src/
[root@python3 src]# wget https://www.python.org/ftp/python/3.7.0/Python-3.7.0.tar.xz
```

将安装包下载到/usr/local/src/目录下

5.解压&&移动

```
[root@python3 src]# tar xvf Python-3.7.0.tar.xz
[root@python3 src]# mv Python-3.7.0 /usr/local/python-3.7
[root@python3 src]# cd /usr/local/python-3.7/
```

6.安装&&编译

```
[root@python3 python-3.7]# ./configure --prefix=/usr/local/sbin/python-3.7
```

将python3.7安装到/usr/local/sbin/python-3.7目录下

```
[root@python3 python-3.7]# make && make install
```

安装完成后, 若出现以下两行, 说明安装成功;

```
Installing collected packages: setuptools, pip
Successfully installed pip-10.0.1 setuptools-39.0.1
```

7.安装成功之后就能使用了

```
[root@python3 python-3.7]# /usr/local/sbin/python-3.7/bin/python3
Python 3.7.0 (default, Mar 15 2019, 00:44:37)
[GCC 4.8.5 20150623 (Red Hat 4.8.5-36)] on linux
Type "help", "copyright", "credits" or "license" for more information.
>>>

【此处退出的命令 exit()】

虽然能用了,但是命令较长使用起来并不方便,we konw 系统本身是带的有python的,看一下版本
[root@python3 ~]# python -V
Python 2.7.5
```

8.看一下python命令的绝对路径

```
[root@python3 ~]# which python

/usr/bin/python

[root@python3 ~]# 11 /usr/bin/ |grep python

-rwxr-xr-x. 1 root root 11312 Nov 14 00:00 abrt-action-analyze-python
lrwxrwxrwx. 1 root root 7 Mar 14 18:19 python -> python2
lrwxrwxrwx. 1 root root 9 Mar 14 18:19 python2 -> python2.7

-rwxr-xr-x. 1 root root 7216 Oct 31 07:46 python2.7
```

可以看到python命令是通过软链接连接到python2.7的,[做运维的小年轻]那我们现在安装了python3.7,是不是可以将python命令做一个软链接链接到python3,答案是肯定的昂。

9.将python命令通过软链接指向到python3命令(就是上面那一大串/usr/local/sbin/python-3.7/bin/python3)



```
[root@python3 ~]# rm -rf /usr/bin/python

[root@python3 ~]# ln -sv /usr/local/sbin/python-3.7/bin/python3 /usr/bin/python

'/usr/bin/python' -> '/usr/local/sbin/python-3.7/bin/python3'

[root@python3 ~]# ll /usr/bin/ |grep python

-rwxr-xr-x. 1 root root 11312 Nov 14 00:00 abrt-action-analyze-python

lrwxrwxrwx. 1 root root 38 Mar 14 19:24 python -> /usr/local/sbin/python-3.7/bin/python3

lrwxrwxrwx. 1 root root 9 Mar 14 18:19 python2 -> python2.7

-rwxr-xr-x. 1 root root 7216 Oct 31 07:46 python2.7
```

10.查看现在的默认版本

```
[root@python3 ~]# python -V
Python 3.7.0
```

11.修改完python默认版本之后,会存不能执行yum命令,需要做一些修改,如下:

```
①将/usr/bin/yum的顶部的:

!/usr/bin/python 改成 !/usr/bin/python2.7

②将/usr/libexec/urlgrabber-ext-down的顶部的:
/usr/bin/python 改为 /usr/bin/python2.7

③将/usr/bin/yum-config-manager的顶部的

#!/usr/bin/python 改为 #!/usr/bin/python2.7
```

12.最后将pip指向到python3.7

```
[root@python3 ~]# ln -s /usr/local/sbin/python-3.7/bin/pip3 /usr/bin/pip

[root@python3 ~]# pip --version
pip 10.0.1 from /usr/local/sbin/python-3.7/lib/python3.7/site-packages/pip (python 3.7)
```