创建自定义Chart签名打包

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安装GnuPG：

```
# 2.12.1
$ yum install gnupg2-2.0.22-5.el7_5.x86_64 -y  ## GnuPG 2.0.22
$ gpg --version
gpg (GnuPG) 2.0.22
libgcrypt 1.5.3
Copyright (C) 2013 Free Software Foundation, Inc.
License GPLv3+: GNU GPL version 3 or later
<http://gnu.org/licenses/gpl.html>
This is free software: you are free to change and redistribute it.
There is NO WARRANTY, to the extent permitted by law.


Home: ~/.gnupg
Supported algorithms:
Pubkey: RSA, ?, ?, ELG, DSA
Cipher: IDEA, 3DES, CAST5, BLOWFISH, AES, AES192, AES256, TWOFISH,
        CAMELLIA128, CAMELLIA192, CAMELLIA256
Hash: MD5, SHA1, RIPEMD160, SHA256, SHA384, SHA512, SHA224
Compression: Uncompressed, ZIP, ZLIB, BZIP2



######################################################################
#####
##        ###
$ gpg --gen-key        ##
gpg (GnuPG) 2.0.22; Copyright (C) 2013 Free Software Foundation, Inc.
This is free software: you are free to change and redistribute it.
There is NO WARRANTY, to the extent permitted by law.

Please select what kind of key you want:
   (1) RSA and RSA (default)
   (2) DSA and Elgamal
   (3) DSA (sign only)
   (4) RSA (sign only)
```

```
Your selection?          ## 1
RSA keys may be between 1024 and 4096 bits long.
What keysize do you want? (2048)      ##
Requested keysize is 2048 bits
Please specify how long the key should be valid.
         0 = key does not expire
      <n>  = key expires in n days
      <n>w = key expires in n weeks
      <n>m = key expires in n months
      <n>y = key expires in n years
Key is valid for? (0)         ##
Key does not expire at all
Is this correct? (y/N) y        ##


GnuPG needs to construct a user ID to identify your key.


Real name: HouFei          ##
Email address: houfeihi@sunline.cn
Comment: Chart needs to configure GunPG
You selected this USER-ID:
    "HouFei (Chart needs to configure GunPG) <houfei@sunline.cn>"


Change (N)ame, (C)omment, (E)mail or (O)kay/(Q)uit? O  ## O



## )


You need a Passphrase to protect your secret key.


We need to generate a lot of random bytes. It is a good idea to perform
some other action (type on the keyboard, move the mouse, utilize the
disks) during the prime generation; this gives the random number
generator a better chance to gain enough entropy.



##
gpg: key 20C5CD26 marked as ultimately trusted
public and secret key created and signed.

gpg: checking the trustdb
gpg: 3 marginal(s) needed, 1 complete(s) needed, PGP trust model
gpg: depth: 0  valid:   2  signed:   0  trust: 0-, 0q, 0n, 0m, 0f, 2u
pub   2048R/20C5CD26 2019-01-31        ## "ID"Hash"ID"gpg:  20C5CD26,
20C5CD26ID
      Key fingerprint = C502 775B C080 4273 BE22  B0CF DC2C 6162 20C5 CD26
uid                 HouFei (Chart needs to configure GunPG)
<houfei@sunline.cn>
sub   2048R/9E15C764 2019-01-31

######################################################
######      #########
```

```
gpg --list-keys    ##
gpg -k        ##
gpg --list-secret-keys ##
gpg -K        ##
gpg --armor --output public-key-gmail.txt --export MASTERKEYID    ##
gpg --armor --output secret-key-gmail.txt --export-secret-keys MASTERKEYID
##
```

```
gpg --export-secret-keys > secring.gpg          ## keyringgpg
```

自定义Chart，并打包签名

```
$ gpg --export-secret-keys > secring.gpg  ## gpg
$ helm create mychart        ## chart
  Creating mychart
$ helm  package --sign=true --key "HouFei" --keyring secring.gpg  mychart
##
 Successfully packaged chart and saved it to:
/root/.helm/cache/archive/mychart-0.1.0.tgz
Password for key "HouFei(Chart needs to configure GunPG)
<houfei@sunline.cn>" >  ##


$ ll
drwxr-xr-x. 4 root root     93 Jan 30 20:45 mychart
-rw-r--r--. 1 root root  2785 Jan 30 21:58 mychart-0.1.0.tgz        ##
-rwxr-xr-x. 1 root root   711 Jan 30 21:59 mychart-0.1.0.tgz.prov     ##
-rw-r--r--. 1 root root  2572 Jan 30 21:56 secring.gpg          ## gpg
```

上传并添加源

上传包和签名文件

mychart-0.1.0.tgzmychart-0.1.0.tgz.provHarbor chart
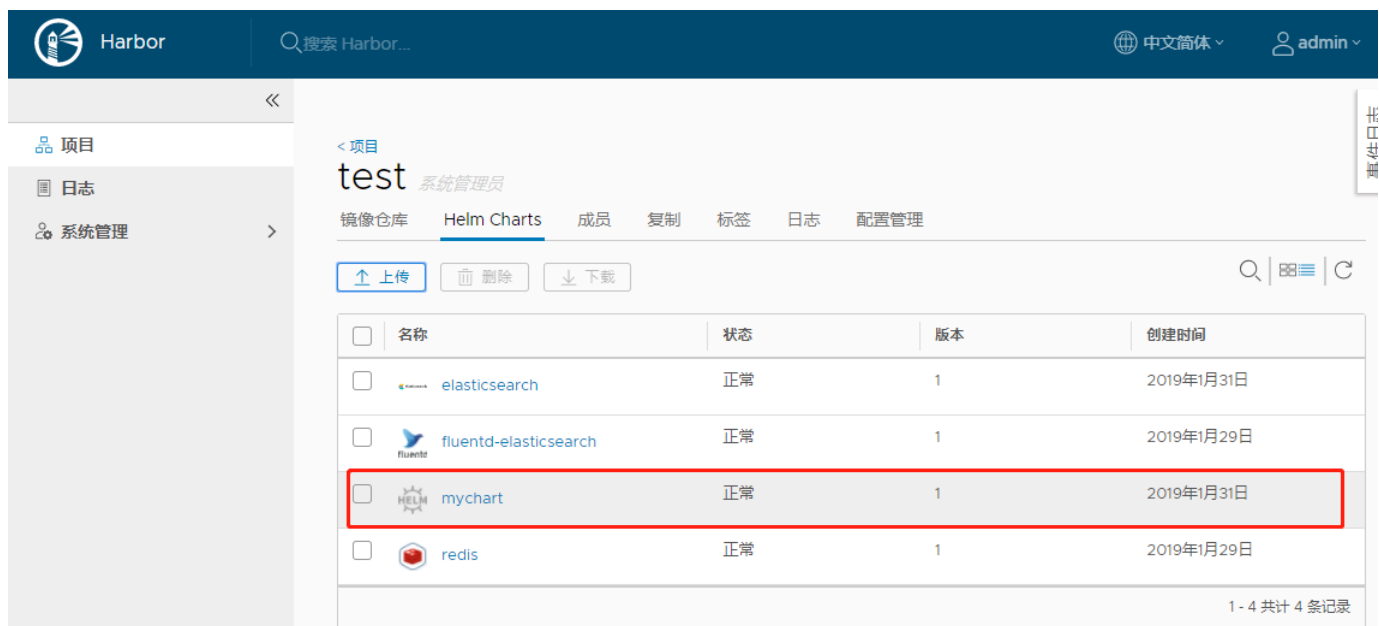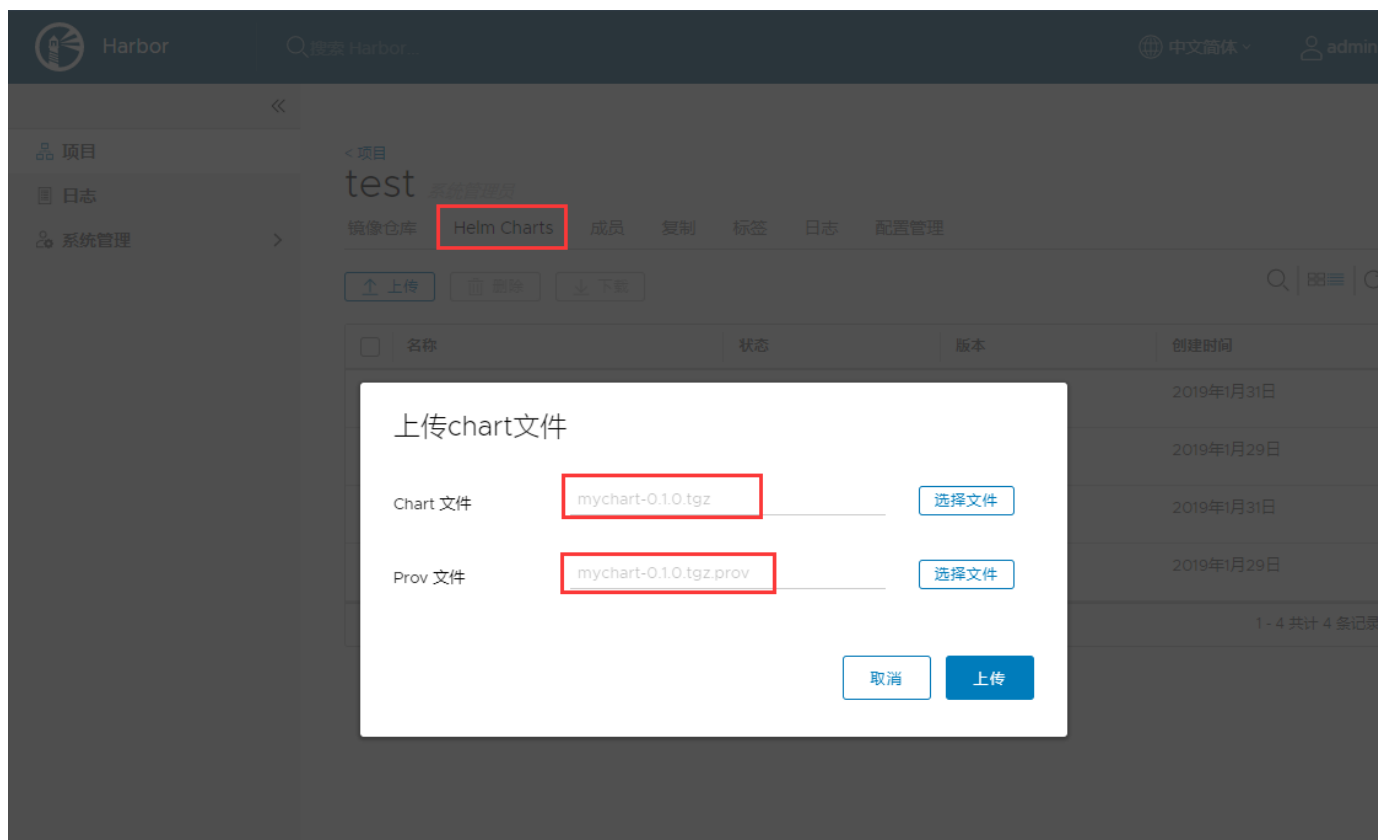
添加Chart仓库

```
$ helm repo add sunlinechart  --username admin --password Harbor12345
https://registry.odc.sunline.cn/chartrepo/test
"sunlinechart" has been added to your repositories
$ helm  search  mychart
NAME                  CHART VERSION APP VERSION DESCRIPTION
local/mychart         0.1.0         1.0         A Helm chart for Kubernetes
sunlinechart/mychart 0.1.0          1.0         A Helm chart for Kubernetes
```