# GCE Add SSH KEY

gce:          ssh-key-test
SSH位置：    /Users/junsong/.ssh
生成pubkey：  ssh-key-gce.pub

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## 1 mac 生成ssh key pair

```
ssh-keygen -t rsa -f ~/.ssh/ssh-key-gce -C junsong
```

```
 ssh-keygen -t rsa -f ~/.ssh/ssh-key-gce-root -C root
```

**查看生成的密钥对**

```
cd /Users/junsong/.ssh
```

```
+----[SHA256]-----+
[junsong-macbookpro:.ssh junsong$ ls
attcert                      google_compute_engine.pub      known_hosts                      ssh-key-gce.pub
corp_cert                    google_compute_known_hosts     ssh-key-gce
gNubbyKeyDaemon.gnubby.counter  id_rsa                      ssh-key-gce-root
google_compute_engine        id_rsa.pub                     ssh-key-gce-root.pub
[junsong-macbookpro:.ssh junsong$ cat ssh-key-gce-root.pub
ssh-rsa AAAAB3NzaC1yc2EAAAADAQABAAABAQDIVOY1pkhrXch9Vm3GkWhqdD0esFJATBhZTEcNnVZ0qw2OrRMS5mOgo5E5nrjGyBYD4aNps7Zl3
ArgJbrGdGzDoh1irV3fnf6Sh9xTsgWGMo2XGMkuDOgYmHhTEx6cS+y+Ng17fYs6CMP7mKAkM5o9I6QRRxm8rR3mzOI3PoRNrCVoABgH3cV8W2tOHt
4R7wxKfHv5WjvpYO2FnQOtbNaBn1jt48rxfNebtAdrSHX9z/dEH5ernqZhcl1ZZ7uTa22jiNTlkv+QH+jDJmh2UO6Ho/ys/V root
junsong-macbookpro:.ssh junsong$
```

生成公钥如下, 格式为：ssh-rsa [KEY_VALUE] [USERNAME]
junsong key

```
ssh-rsa
AAAAB3NzaC1yc2EAAAADAQABAAABAQCas6wmBz/FJzaTEcQfdCku/iLQT26roxUMa775ofTNepK
pgDl50k3fkMltWMcMmeXRiZjAJX9ygMy+6/zU/pjQhpSpZbO8frcPljIj6TfmIZVe4mnNMWNRHi
0v8GDw41nt1ZRKo78oRMC9eoxNMX9aO6TE/gERWwPHfVzgC24RvOr0iGUMJw8M1Glb0bsNPFXEz
Xh+MvpL5X58TEnkrZf/bwhePIvMq1nHijjhu1GSqm5p00cdZ/qmrzBXCEsjs/U1cMOXJyGlyzDu
Zi/6119OKRhr6ezgMvntn9C+Hhk2xI6o+YBm0zVqw3FUDTVp8w3OLHmH2873BGLK4kR0ePh3
junsong
```
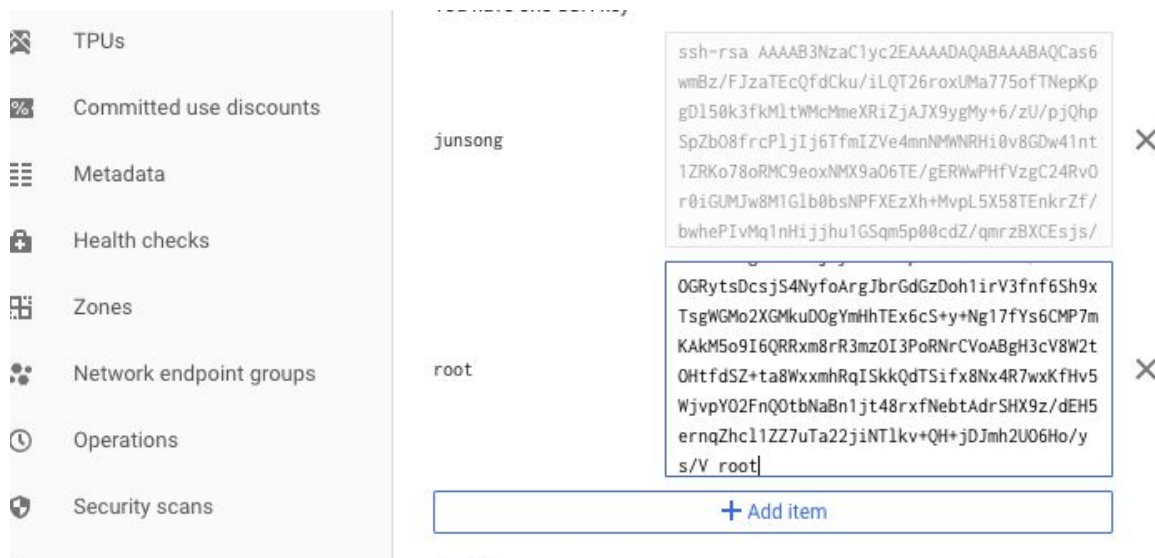
Root key

```
ssh-rsa
AAAAB3NzaC1yc2EAAAADAQABAAABAQDIVOY1pkhrXch9Vm3GkWhqdD0esFJATBhZTEcNnVZ0qw2
```

OrRMS5mOgo5E5nrjGyBYD4aNps7Zl3LHn0v5/ha2FzTOGRytsDcsjS4NyfoArgJbrGdGzDoh1ir
V3fnf6Sh9xTsgWGMo2XGMkuDOgYmHhTEx6cS+y+Ng17fYs6CMP7mKAkM5o9I6QRRxm8rR3mzOI3
PoRNrCVoABgH3cV8W2tOHtfdSZ+ta8WxxmhRqISkkQdTSifx8Nx4R7wxKfHv5WjvpYO2FnQOtbN
aBn1jt48rxfNebtAdrSHX9z/dEH5ernqZhcl1ZZ7uTa22jiNTlkv+QH+jDJmh2UO6Ho/ys/V
root

# 2 添加ssh 至GCE

## 2.1 检查22端口防火墙，默认打开

gce: ssh-key-test

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| default-aniq6e5jsedpd3hg2abwj3oy-1 | Ingress | Source resource: "corp/external/non_guest_nat"<br>Destination resource: "gcp/gce/gcct-demos-policy"<br>Exposure: "gcp/gce/gcct-demos-policy" | Apply to all | IP ranges: 1.255.24.224/30, 255 more ▾ | tcp:22,3389,8000,8081 | Allow | 1000 |
| default-aniq6e5jsedpd3hg2abwj3oy-2 | Ingress | Source resource: "corp/external/non_guest_nat"<br>Destination resource: "gcp/gce/gcct-demos-policy"<br>Exposure: "gcp/gce/gcct-demos-policy" | Apply to all | IP ranges: 104.132.215.64/27, 228 more ▾ | tcp:22,3389,8000,8081 | Allow | 1000 |
| default-dirukttxqpduqqjop6vkdjnb | Ingress | (non-flow term) gcp/folders/212894236552:folders/212894236552<br>tsunami_security_scanners_requests:tsunami-accept-from-scanners-udp-requests<br>Allow the tsunami scanners to send UDP packets to all GCP<br>projects | Apply to all | IP ranges: 34.82.160.0/24, 4 more ▾ | udp | Allow | 1000 |
| default-hdqidyey5ddfydsq36lf33n4 | Ingress | (non-flow term) gcp/folders/212894236552:folders/212894236552<br>tsunami_security_scanners_requests:tsunami-accept-from-scanners-tcp-requests<br>Allow the tsunami scanners to send TCP packets to all GCP<br>projects | Apply to all | IP ranges: 34.82.160.0/24, 4 more ▾ | tcp | Allow | 1000 |
| default-l5obi46qvk6ag6fxon3pbust | Ingress | Source resource: "prod/external"<br>Destination resource: "gcp/gce/gcct-demos-policy"<br>Exposure: "gcp/gce/gcct-demos-policy" | Apply to all | IP ranges: 108.170.224.0/19, 55 more ▾ | tcp:22,3389,8000,8081 | Allow | 1000 |

## 2.2 添加junsong key

## 2.2 root key



# 3 连接测试

## 3.1 普通用户junsong登陆



查看gce 证书配置：/home/junsong/.ssh

```
junsong@ssh-key-test:~/.ssh$ ls
authorized_keys
junsong@ssh-key-test:~/.ssh$ cat authorized_keys
# Added by Google
ssh-rsa AAAAB3NzaC1yc2EAAAADAQABAAABAQCas6wmBz/FJzaTEcQfdCku/iLQT26roxUMa775ofTNepKpgDl50k3fkMltWMcMmeXRiZjAJX9ygMy+6/zU/pjQhpSpZbO8frcPljIj6T
fmIZVe4mnNMWNRHi0v8GDw41nt1ZRKo78oRMC9eoxNMX9aO6TE/gERWwPHfVzgC24RvOr0iGUMJw8M1Glb0bsNPFXEzXh+MvpL5X58TEnkrZf/bwhePIvMq1nHijjhu1GSqm5p00cdZ/qm
rzBXCEsjs/U1cMOXJyGlyzDuZi/6119OKRhr6ezgMvntn9C+Hhk2xI6o+YBm0zVqw3FUDTVp8w3OLHmH2873BGLK4kR0ePh3 junsong
# Added by Google
ssh-rsa AAAAB3NzaC1yc2EAAAADAQABAAABAQDUwGvlqjSir00qtMAkna5e/QJpcrjrOlbaSMmCRyLdzoXUxPBpem57TmkAXh8TR7RcbKQTkNXglAob1q3qDLJ/J8r8o2AhfXhBx6emuW
w2el3yDxQbk8ZwpzS1itNtmG4tFTsi4IYcXfCdeSlwX2HOPsLzN+cgNsoJ1zlEKZozArbN8tx6YgbuBp9Eadoa6wTaQD+DceTfb7iPuFkg6XjnImlzNKdxm3WSKWf/jL0L+4wHyH/14U4f
nGwbXa5kA6nIWruAI6FeIrKbKnPAVS9ttMA4m3Psz+h5GQhaCi+DaS+Kt8H+zGRqfnAge8MJ1/2zjE56eLroChSbwZsD2kJX junsong@cs-6000-devshell-vm-0dcd6afc-38aa-43c
c-a414-3492b6b3d2e7
# Added by Google
ssh-rsa AAAAB3NzaC1yc2EAAAADAQABAAABAQC3coAeME2w651dog5tbAAFHJkskT0ENPri0xXcn+a5fNSxtbclNAO1XsdbFcVqhhZdWB86DahuRSQ5L4ZayvYgIW/y4y80v2wyzLdGvw
B/WQ6rsrCbgftZieD+NZUe0i6Pq9PB0JTFKn2PnwfbtoQ9iBR2BplX21SMQLO1k9CoC/kpTbPt+t+HJRk4bPGanSpxbdPqNt/PG7GSke849HOcjID5zqtuLP1sD+8sietNACHafo3ne4Ht
X91BkElvEqE2nyNgOrWVp72YZGEFjaatV8rSR+MX3KcT+1EeuxQcNH8Ef3Wx59We6Le0NHFvJExzlfOPbzlGGedf5WHqyGSr junsong@junsong-macbookpro.roam.corp.google.c
om
junsong@ssh-key-test:~/.ssh$ ▊
```

测试root 权限

```
permitted by applicable law.
junsong@ssh-key-test:~$ sudo su
root@ssh-key-test:/home/junsong# ls
root@ssh-key-test:/home/junsong# ▊
```

## 3.2 root用户登陆

打开root登陆权限后PermitRootLogin ssh 连接

```
ssh -i ssh-key-gce-root root@35.223.69.207
```

```
junsong-macbookpro:.ssh junsong$ ssh -i ssh-key-gce-root root@35.223.69.207
root@35.223.69.207: Permission denied (publickey).
junsong-macbookpro:.ssh junsong$ ssh -i ssh-key-gce-root root@35.223.69.207
Linux ssh-key-test 4.9.0-11-amd64 #1 SMP Debian 4.9.189-3+deb9u2 (2019-11-11) x86_64

The programs included with the Debian GNU/Linux system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/copyright.

Debian GNU/Linux comes with ABSOLUTELY NO WARRANTY, to the extent
permitted by applicable law.
root@ssh-key-test:~# ▊
```

注意：Root用户不允许登陆，默认ssh 不允许root用户直接登陆。

```
rRfwxRfHv3WJyvPtoZFHQocBNaBhIje48FXFNcDcAdFShX5Z/aEhSerhqzhct122rdTdZZjtNTtKV+Qhfji
junsong-macbookpro:.ssh junsong$ ssh -i ssh-key-gce-root root@35.223.69.207
root@35.223.69.207: Permission denied (publickey).
junsong-macbookpro:.ssh junsong$ ▊
```

普通用户登陆，修改配置如下：
PermitRootLogin no #允许root登录，修改为yes
 sudo vim /etc/ssh/sshd_config

```
# Authentication:

#LoginGraceTime 2m
PermitRootLogin yes
#StrictModes yes
#MaxAuthTries 6
#MaxSessions 10
```

重启服务

```
sudo /etc/init.d/ssh restart
```

重新登陆