# Manual

## Generate SSH-KEY

# Prerequisite

For windows download puttygen  from url https://www.ssh.com/ssh/putty/windows/puttygen
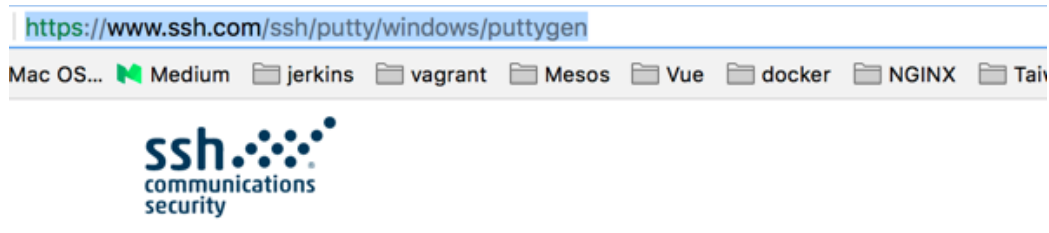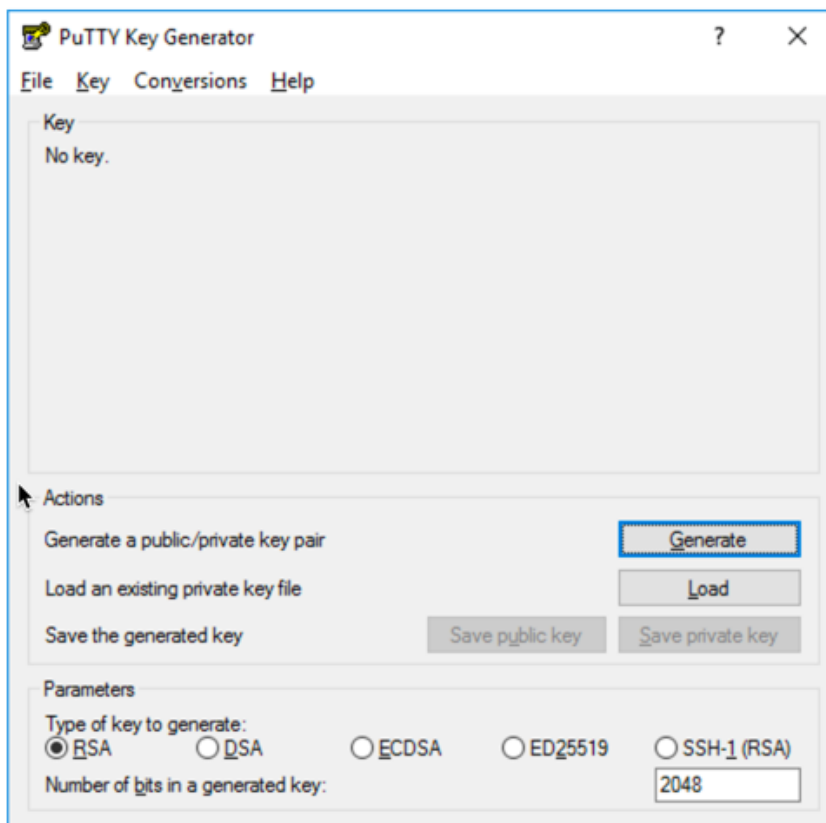
# Generate Key/Import to GCloud

1. Generate Key
   a. For MAC OS X:
      i. Generate key by command: ssh-keygen -t rsa -f ~/.ssh/[filename]  -C "[comment]" and input passphase for security

ii. Check private/public key on path with command: ls –lh ~/.ssh/

```
●●●                        .ssh — -bash — 80×10
[mac-clone:~ praparn$ cd ~/.ssh
[mac-clone:.ssh praparn$ ls
 gcloud_key          gcloud_key.pub
[mac-clone:.ssh praparn$ more gcloud_key.pub
 ssh-rsa AAAAB3NzaC1yc2EAAAADAQABAAABAQClsgtSZiUGUH0yv/jVS/ApOtT0QNemfxdBdPawvFHq
 ceuqL/VMt4u5I0DniOZGSXMH2ik3UE6KcM6f0xet9zFIW0+8n+CED4VklnA/hKicHk4LDtzGJS4GxZ12
 CjLnxv4HVvS73YP3ZhfIJHyH+UikS/5DF+dLvmWEgUEorEbd+Lb5tvKVGoHuXRqhOE+vSTugyxiHb9Dl
 0ntkF85akkQqTtWi5t96P/AXGsdUr2ss+ve18cZlv/zxU8u9AOMZq891MsRWoZXQsecg53uUxmTmDrxP
 SGm/tUif4WJKbegjfQhLZ0JGBzPLs8PJ7GlpkDjPH4xfzVqZfZWFRjf2jHGT praparn_mac
 mac-clone:.ssh praparn$ ▊
```

```
●●●                        .ssh — -bash — 80×32
[mac-clone:.ssh praparn$ more gcloud_key
 -----BEGIN RSA PRIVATE KEY-----
 Proc-Type: 4,ENCRYPTED
 DEK-Info: AES-128-CBC,60B0C764B677DF16E576BEA030FFB8F2

 JOSUQJsBpfdeuShweyXDmeumyf9i6xeSGa/N757Dx3NhcfwY5HWGR+FZE5/FaUcG
 8hZUMIaaZvorMTuvXID6kky23UTMeiLB1Ju3zNZmU6EzCR7zuKlDDBX9LgUVDzc6
 aryNhf6+DIDIws8zE/dnMPlrSkUU7Y0bNjZODQL1G39EaZgXIv36ciIjDETP0BH0
 wPzhNIxaF42DrDxk9Scpe53zeCLlR8G4A9oMr/LL76C8xOJmLFGymeCxmOSgxGP4
 K5z/vreUjJugwU6x4bTWXc9UmxKBtRNHCyC1Y4y2wje3vL/fk0SXWX7NKtiePg/I
 o6Q0DmjRdAS5r3BnOG3dejVwBH05mYGzKV1XxLUMvFIKtXGMS1KwZ7AcUBxBM9hG
 c48Vjn6OjsTkJiBOemaSFQunVvs+snzxBGRDDsSRTNDKZgfzVSUT5yZcLstZZELZ
 FX6ewBaTI7AO8W1KvgDEeB1Qv/lpXsTvYvF2BXqoW3byjHnUQHNikqMu7BQoIY7q
 d8nhVEVjHu+E/n/e2LAATfnyWIaFYBpudHU1a4rcGwnSc3WBM24pnW1QzZRONLHJ
 rxLiX3TKScVszwi9+5CI5U+qRco3svatD2VcM2hQG437Dj1bsvYLc7YMvMwbVZWD
 nAhwHk1KjQuoGgjepvHasdfVkVeElAnBydiMYerwliKngqmyeEHo6cXVcGBeMB2V
 FFN8g5NSjSE1pWbbvb8Cs3eBKmffLioCIQpYPtqvj3fFNitF2z04ysxhBf/eb/L/
 vffPpdrbeQIqdx38Ja/6Ya8CaU3N39LxenmCepCk6CAtenglVRo7YCBjYtri8gzZ
 tMkiiSdHJiXFXlTvOGv/3o3qLj04+kOODLxn6zDACiCBEeZ/xi8GmhpyCYGU0GPp
 sFiLRNivAOXakMLqMMhdAxh01jk8kQEEZK6PfktHwh9ggWfzon1ADTj++g/Evalp
 4ZB8ZytNaPB1mbBe55ILHFyb+4GfxMe+/f0TDRgTJwd2xnVZ3N82smxSug6EXwkJ
 DK7UsBcyxjPkVypjTmAtIgDbZd7F/JxlGRGTPMEDeGwxqvFtfyjf5CnSIs9yicZe
 juM+BJD/RYXqahhHmO/XjFHViO3YSr1IekzyWIWhbpZoamHczyFZtnRpx0OEQwxC
 r+J/uyE0b/bHx00ORPStiq40v0yNVI1fN5etGQ7OIpvFbhdq8EUXxCytwSewvgNn
 8UZVMPjCLVYENppluRle3A4RqZtaevaIxeU+S8YEkVty/N9He+x19vOArYWEWO5e
 jkVBjWxeaal0e7QeNf2DqUH1Hwvcnt4S79ins8rFJnGGgOTJs0UFmxsk8QV7gLxW
 J3vPR5/mJx6pB+2JJleBuW0pJKfMeU3J5ErwBzfFF/vkHkiQN/TUIKJ1YT57aQRl
 k8ccZ6dlXiWCl3KpJMVQE0r4bI+t/O+2KSK0xPd9YhV9mel2zdJN4itgEqRhayTU
 B39znGIC11ZRfs8bI2xzGVjWNKf8WMwrTA9LzfZaU/bwzBV5FIuyT6em3IGIz2+C
 qhRJJXGZbCpHSeQo2KV0DFz0CF9/gzWpPjjLUX0QUiT8qNmcYCIQ35kiHoli5cTG
 -----END RSA PRIVATE KEY-----
 mac-clone:.ssh praparn$ ▊
```
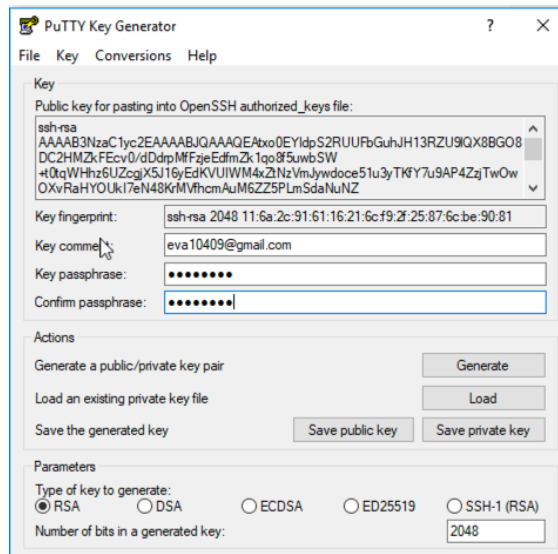
b. For Windows OS:

   i. Download and install "puttygen" https://www.ssh.com/ssh/putty/windows/puttygen

   ii. Open puttygen and click "generate"
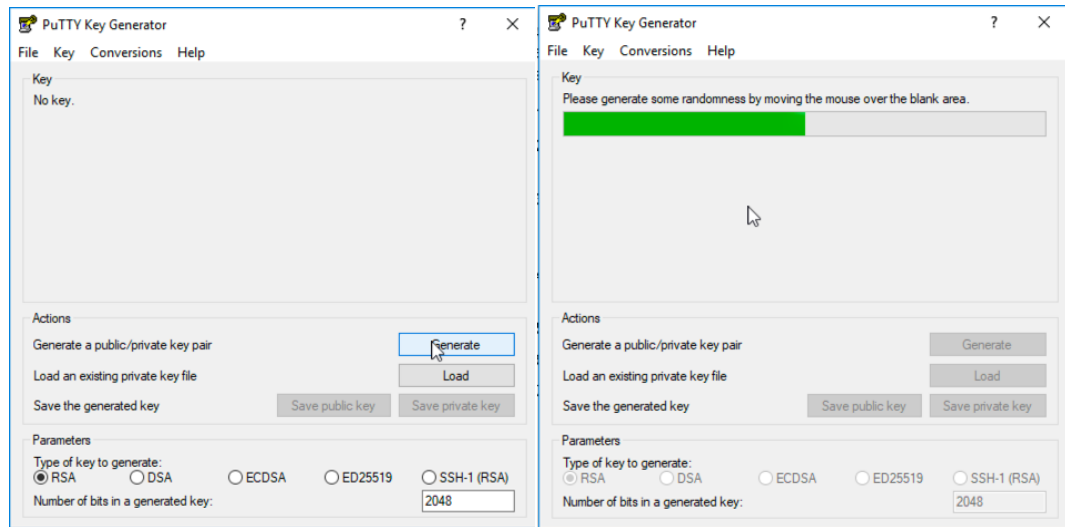


   iii. Input information for key

      1. Key comment: <input username>

      2. Key passphrase: <input passphrase for protect key>

iv. Click "Save private key" for key private key (.ppk) to  "C:\Users\<user>\.ssh"

v. Click "Save public key" for import to Google Cloud (.crt) to C:\Users\<user>\.ssh"