

生成密钥

```
ssh-keygen \  
  -m PEM \  
  -t rsa \  
  -b 4096 \  
  -C "laowang@qq.com" \  
  -N my_ssh_passwd
```

Install OpenSSH

```
# >>>  
Get-WindowsCapability -Online | Where-Object Name -like 'OpenSSH*'
```

```
<<<  
Name : OpenSSH.Client~~~~0.0.1.0  
State : NotPresent  
  
Name : OpenSSH.Server~~~~0.0.1.0  
State : NotPresent
```

```
# >>>  
# Install the OpenSSH Client  
Add-WindowsCapability -Online -Name OpenSSH.Client~~~~0.0.1.0  
  
# Install the OpenSSH Server  
Add-WindowsCapability -Online -Name OpenSSH.Server~~~~0.0.1.0
```

```
<<<  
Path :  
Online : True  
RestartNeeded : False
```

```
# >>>  
# Start the sshd service
```

```
Start-Service sshd

# OPTIONAL but recommended:
Set-Service -Name sshd -StartupType 'Automatic'

# Confirm the Firewall rule is configured. It should be created
automatically by setup. Run the following to verify
if (!(Get-NetFirewallRule -Name "OpenSSH-Server-In-TCP" -ErrorAction
SilentlyContinue | Select-Object Name, Enabled)) {
    Write-Output "Firewall Rule 'OpenSSH-Server-In-TCP' does not exist,
creating it..."
    New-NetFirewallRule -Name 'OpenSSH-Server-In-TCP' -DisplayName 'OpenSSH
Server (sshd)' -Enabled True -Direction Inbound -Protocol TCP -Action Allow
-LocalPort 22
} else {
    Write-Output "Firewall rule 'OpenSSH-Server-In-TCP' has been created
and exists."
}
```

Uninstall OpenSSH

```
# Uninstall the OpenSSH Client
Remove-WindowsCapability -Online -Name OpenSSH.Client~~~~0.0.1.0

# Uninstall the OpenSSH Server
Remove-WindowsCapability -Online -Name OpenSSH.Server~~~~0.0.1.0
```

Configuration OpenSSH

Default Terminal

```
New-ItemProperty -Path "HKLM:\SOFTWARE\OpenSSH" -Name DefaultShell -Value
"C:\Windows\System32\WindowsPowerShell\v1.0\powershell.exe" -PropertyType
String -Force
```

File

- `C:\ProgramData\ssh\administrators_authorized_keys`
- `C:\ProgramData\ssh\sshd_config`
- `C:\Users\\.ssh\authorized_keys`

Config

- `StrictModes no`
- `PubkeyAuthentication yes`
- `!!! PasswordAuthentication no !!!`
- `!!! PermiEmptyPasswords no !!!`
- `AuthorizedKeysFile __PROGRAMDATA__/ssh/administrators_authorized_keys`

Debug Model

```
Stop-Service sshd  
C:\Windows\System32\OpenSSH\sshd.exe -d
```

Other

```
Restart-Service sshd # 重启服务  
Stop-Service sshd # 停止服务  
Start-Service sshd # 开启服务
```