# Enabling and Using SSH-Agent on Windows PowerShell

This guide explains how to enable, start, and use the OpenSSH Authentication Agent on Windows to store SSH keys securely, so you don't have to type your passphrase every time you connect to a server.

## 1) Open PowerShell as Administrator

• Press the Windows key, type 'PowerShell', right-click on Windows PowerShell, and select 'Run as Administrator'.

## 2) Check if the ssh-agent Service Exists

Run the following command:  
```  
Get-Service ssh-agent -ErrorAction SilentlyContinue  
```  
If there is no output, the service may not be installed.

## 3) Install or Repair the OpenSSH Client

Run the following commands:  
```  
Get-WindowsCapability -Online | ? Name -like 'OpenSSH\*'  
Add-WindowsCapability -Online -Name OpenSSH.Client~~~~0.0.1.0  
```  
This installs the OpenSSH Client, which includes ssh-agent.

## 4) Enable and Start the ssh-agent Service

```  
Set-Service ssh-agent -StartupType Automatic  
Start-Service ssh-agent  
```  
Setting StartupType to Automatic ensures ssh-agent starts with Windows.

## 5) Add Your Private Key to the Agent

Replace the path with the location of your private key:  
```  
ssh-add "D:\Cloudpixel.dev\DigitalOcean\cloudpixel-backend-server\id\_rsa"  
ssh-add -l  
```  
`ssh-add -l` lists loaded keys.

## 6) Connect Without Entering Passphrase

```  
ssh root@<SERVER\_IP>  
```  
You should now be able to connect without typing the passphrase again during the same Windows session.

## 7) Optional: Create an SSH Shortcut

Edit or create the file `C:\Users\<YourUser>\.ssh\config` and add:  
```  
Host do-backend  
 HostName <SERVER\_IP>  
 User root  
 IdentityFile D:/Cloudpixel.dev/DigitalOcean/cloudpixel-backend-server/id\_rsa  
```  
Now you can connect with:  
```  
ssh do-backend  
```

## 8) Troubleshooting

• If `ssh-agent` won't start, ensure you're running PowerShell as Administrator.  
• Check the binary exists: `C:\Windows\System32\OpenSSH\ssh-agent.exe`.  
• To reset the service:  
```  
sc.exe delete ssh-agent  
Add-WindowsCapability -Online -Name OpenSSH.Client~~~~0.0.1.0  
```  
• If you prefer, you can remove the passphrase from your private key (less secure):  
```  
ssh-keygen -p -f "D:\Cloudpixel.dev\DigitalOcean\cloudpixel-backend-server\id\_rsa"  
```