# ssh-agent - How to configure ssh-agent forwarding?

493 Manu Chacko August 19, 2024 Tweaks & Configuration 42272

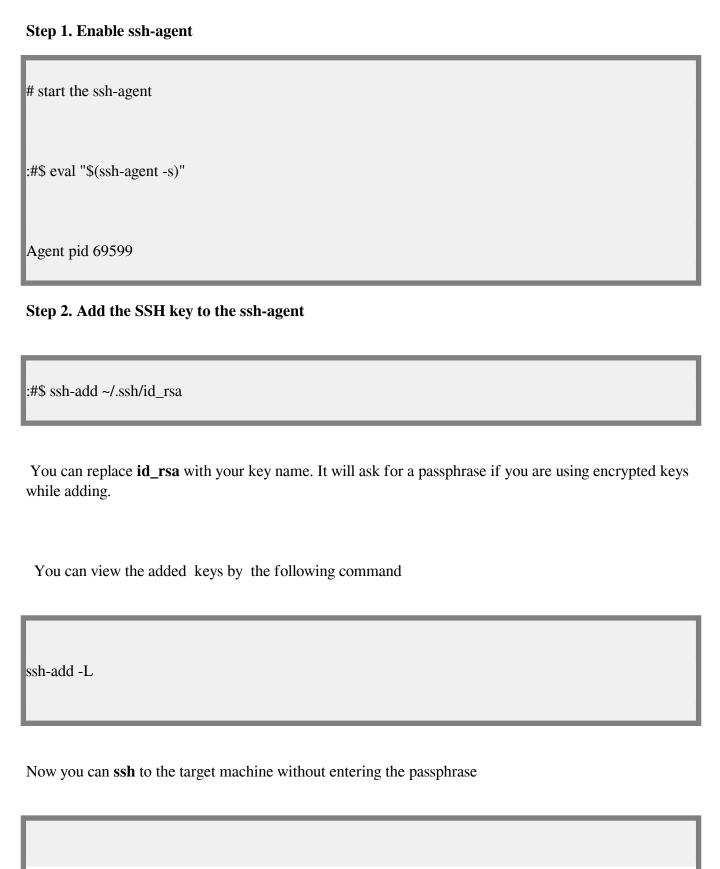


# Complete step by step tutorial on how to configure ssh-agent and sshagent forwarding

Overview: This article provides a complete step-by-step guide on configuring SSH agent and SSH agent forwarding, including enabling the SSH agent, adding keys, and securely forwarding SSH keys through an intermediary server.

## SSH Agent

**SSH agent** allows you to store ssh keys, and certificates on memory in unencrypted format. **ssh-agent** acts as an **ssh key** manager which allows you to use **ssh keys** without entering a passphrase every time you log in.



ssh username@target_machine
You can use the following command to remove the added keys from <b>ssh-agent</b>
ssh-add -D
You can stop <b>SSH Agent</b> by the following command
:~\$ eval "\$(ssh-agent -k)"  Agent pid 182 killed

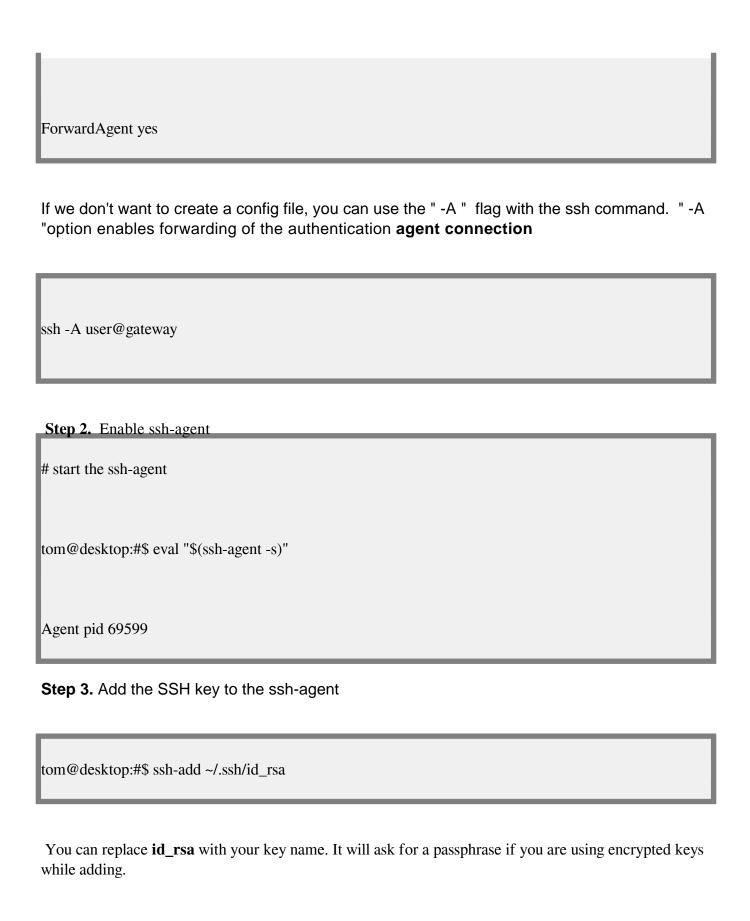
## SSH agent forwarding

**SSH** agent forwarding will allow you login to a distant remote machine by forwarding the **SSH** keys stored on your local **SSH** agent onto a host to which you are connecting. For example, you need to connect to your production servers via your gateway server. Then you can add your SSH key to your local desktop **ssh-agent** and it will forward to your production servers via your **gateway** server. So you need not add your **SSH** key to your **gateway server**.

Step 1. Create or open up the file at ~/.ssh/config

Enter the following text, and replace gateway with your server domain name or IP.

Host gateway



Step 4. SSH to your gateway machine. You can use -A option or you need to enable forwarding as

mentioned in step 1.

tom@desktop:~# ssh -A user@gateway
user@gateway:~#

#Now you can ssh to your production server
user@gateway:~# ssh user@production\_server
user@production\_server:~#

You are successfully authenticated with the SSH key on your Desktop Machine.

# Read more about on SSH-Agent forwarding

**Tutorial on SSH-Agent forwarding** 



#### FREQUENTLY ASKED QUESTIONS

### 1. What is SSH Agent?

An SSH agent, also known as an SSH authentication agent, acts as a secure key management tool for SSH keys. SSH agent securely stores SSH keys and certificates in memory in an unencrypted format. As a key manager, it eliminates the need to type the passphrase multiple times when logging in with an SSH key.

### 2. What is SSH agent forwarding?

SSH agent forwarding protocol allows secure access to remote servers through an intermediary server. This feature allows you to maintain the ability to authenticate using the SSH keys stored on your local SSH agent while navigating through the intermediate server.

### 3. Difference between SSH agent and SSH add?

ssh-add is a command line tool that helps to add private SSH keys to the SSH agent. When you run the ssh-add command, it will prompt you for a passphrase if you have set one which is needed to unlock your private key. Once you provide the passphrase, the command proceeds to integrate your private key into the ssh-agent. The passphrase acts as an additional layer of security and encryption for your private key. Adding your private key to the agent enables easy SSH authentication without repeatedly entering the passphrase.

#### **Related Articles**

How to add ssh public key for passwordless authentication in ssh

Slowness while doing ssh

#### Online URL:

https://www.ezeelogin.com/kb/article/ssh-agent-how-to-configure-ssh-agent-forwarding-493.html