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# Could not open a connection to your authentication agent

I am running into this error of:

\$ git push heroku master
Warning: Permanently added the RSA host key for IP address '50.19.85.132' to the list
of known hosts.
! Your key with fingerprint b7:fd:15:25:02:8e:5f:06:4f:1c:af:f3:f0:c3:c2:65 is not
authorized to access bitstarter.

I tried to add the keys and I get this error below:

\$ ssh-add ~/.ssh/id\_rsa.pub
Could not open a connection to your authentication agent.

ssh ssh-agent



asked Jul 24 '13 at 23:26

Danny Dai Smith

2,564 • 3 • 5 • 3

2 Please note that this question contains answers that were merged in from at least two other duplicate questions. – Cupcake Jul 24 '14 at 20:22

Question: once you've gone through EVERY answer on this page, and none of them work. What can you do next? - Brandon Bertelsen May 7 at 2:08

@BrandonBertelsen posta new question referring to this question and showing what you tried and what happened when you tried it - M.M May 12 at 4:10

I feel like it would automatically be marked as duplicate. Because it's literally just the title of this question over and over and over. Does anyone know if ssh-agent.exe relies on any windows services? – Brandon Bertelsen May 12 at 4:54

#### 25 Answers

# Did You Start ssh-agent ?

You might need to start ssh-agent before you run the ssh-add command:

```
eval `ssh-agent -s`
ssh-add
```

Note that this will start the agent for **msysgit Bash on Windows**. If you're using a different shell or operating system, you might need to use a variant of the command, such as those listed in the other answers.

See the following answers:

- 1. ssh-add complains: Could not open a connection to your authentication agent
- Git push requires username and password (contains detailed instructions on how to use ssh-agent)
- 3. How to run (git/ssh) authentication agent?.
- 4. Could not open a connection to your authentication agent

#### Why do we need to use eval instead of just ssh-agent?

To find out why, see Robin Green's answer.

### **Public vs Private Keys**

Also, whenever I use ssh-add, I always add private keys to it. The file ~/.ssh/id\_rsa.pub looks like a public key, I'm not sure if that will work. Do you have a ~/.ssh/id\_rsa file? If you open it in

a text editor, does it say it's a private key?



edited Jul 24 '14 at 20:22

answered Jul 25 '13 at 3:37

Cupcake

45.8k • 14 • 107 • 129

- (2) @xtian I'm not sure that I understand the issue. I don't know the exact details, but I'm guessing that the private key is never sent over the network. I think ssh-add merely decrypts an encrypted private key on the host machine, so that it can be used locally...it's never sent to anyone. I'm guessing that only the public keys are ever sent over a network. Is my understanding incorrect? Cupcake Oct 5 '13 at 20:00
- You're too kind Cupcake. You're absolutely right. My bad. ex here; ssh-add adds the private key for the user's ssh-agent (running process) can act on the client/host's behalf with the server accepting rsa-whatever keys. Geez. I don't know what made me so excited. xtian Oct 6 '13 at 0:16
- this works, but why? Ali Jan 3 '14 at 17:59
- 2 I'm curious why eval ssh-agent -s works, but ssh-agent on it's own doesn't. DanielM Mar 7 '14 at 15:30
- @DanielM: SSH needs two things in order to use ssh-agent: an ssh-agent instance running in the background, and an environment variable set that tells SSH which socket it should use to connect to the agent ( SSH\_AUTH\_SOCK | IIRC). If you just run | ssh-agent | then the agent will start, but SSH will have no idea where to find it. Matthew Phipps Apr 28 '14 at 16:44

I tried the other solutions to no avail. I made more research and found that the following command worked. I am using Windows 7 and Git Bash.

eval \$(ssh-agent)

More information in: https://coderwall.com/p/rdi\_wq



answered Feb 20 '14 at 13:34





- 13 Worked on Windows 8 too. Andreas Rudolph Mar 17 '14 at 7:35
- 12 Works on Windows 8.1 too, thank you. :) Yenthe Apr 16 '14 at 12:40
- 6 it worked on win 7, thanks Hoto Aug 29 '14 at 10:25
- 4 Win 7 and Git Bash here... Cupcake's answer did NOT work for me but this one did. Thanks. user34124 Sep 8 '14 at 19:02
- 2 Tried the @Cupcake answer with Git Bash on Win 7 and Win 8, both did NOT work. Had to use this answer. Jeremy Lee Jan 9 at 8:44

The following command worked for me. I am using CentOS.

exec ssh-agent bash

edited Dec 9 '13 at 23:26

Robin Kanters

1.542 • 7 • 20

answered Dec 5 '13 at 15:10



- Thanks, this worked for me, I ran 'exec ssh-agent zsh' for my shell. jasonmcclurg Feb 19 '14 at 9:49
- 10 Config this solution works for my for Ubuntu 12.04 LTS. Paul L Mar 2 '14 at 8:13

According to this deleted "answer", it works on Amazon Linux AMI too. I guess it's a Unix/Linux/\*nix solution. — Cupcake Apr 19 '14 at 19:00

I ssh'ed into a docker container and ssh-add my.id\_rsa would fail on me. But exec ssh-agent zsh gave a environment where I could ssh-add with no problem. And I'm inside my docker container:) — markuz-gj Jun 12 '14 at 2:33

Worked for me on Windows 7. - Qing Jan 9 at 6:32

#### **MsysGit or Cygwin**

If you're using Msysgit or Cygwin you can find a good tutorial at SSH-Agent in msysgit and cygwin

and bash:

- 1. Add a file called .bashrc to your home folder.
- 2. Open the file and paste in:

```
#!/bin/bash
eval `ssh-agent -s`
ssh-add
```

- This assumes that your key is in the conventional ~/.ssh/id\_rsa location. If it isn't, include a
  full path after the ssh-add command.
- 4. Add to or create file ~/.ssh/config with the contents

```
ForwardAgent yes
```

In the original tutorial the ForwardAgent param is Yes, but it's a typo. Use all lowercase or you'll get errors.

Restart Msysgit. It will ask you to enter your passphrase once, and that's it (until you end the session, or your ssh-agent is killed.)

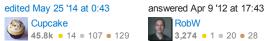
## Mac/OS X

If you don't want to start a new ssh-agent every time you open a terminal, check out Keychain. I'm on a Mac now, so I used the tutorial *ssh-agent with zsh & keychain on Mac OS X* to set it up, but I'm sure a Google search will have plenty of info for Windows.

Update: A better solution on Mac is to add your key to the Mac OS Keychain:

```
ssh-add -K ~/.ssh/id_rsa
```

Simple as that.



```
1 FYI: merged from stackoverflow.com/questions/4083079/... — Shog9 ♦ Jul 24 '14 at 19:02

When I do eval `ssh-agent -s` the process does not stop when I exit cygwin. — Kiril Aug 23 '14 at 18:16

Is there a way to setup the config for Windows / gitbash so you dont have to do it every time? — mix3d Jul 31 at 19:05

It should be ps -u $(whoami) | grep ssh-agent &> /dev/null || eval $(ssh-agent) - otherwise a new ssh-agent is started everytime. Killed my machine every now and then when user had cronjobs. — shredding Aug 13 at 7:46

@shredding, if that command is universal, feel free to edit my answer and add it in the appropriate place. — RobW Aug 19 at 15:25
```

I faced the same problem for Linux, and here is what I did:

Basically, the command ssh-agent starts the agent, but it doesn't really set the environment variables for it to run. It just outputs those variables to the shell.

You need to:

```
eval `ssh-agent`
```

and then do ssh-add. See Could not open a connection to your authentication agent.

```
edited Feb 2 at 22:04 answered Jul 19 '13 at 6:12

Peter Mortensen
8,711 • 10 • 58 • 95

Peter Mortensen
1,028 • 11 • 22

1 FYI: merged from stackoverflow.com/questions/4083079/... - Shog9 • Jul 24 '14 at 19:02

1 This answer should be accepted, solved my problem. Thanks - reformed Feb 23 at 14:10

Didn't solve mine, the problem still persists - Brovoker Mar 27 at 7:55
```

Worked for me too while having problem using boot2docker on Windows. - Veve May 9 at 12:00

This was what it took for me. - Tom Jul 27 at 10:43

Try to the following steps:

- 1) Open Git Bash and run: cd ~/.ssh
- 2) Try to run agent: eval \$(ssh-agent)
- 3) Right now, you can run the following command: ssh-add -1

edited Nov 10 '14 at 8:54

Joetjah

3,861 • 3 • 30 • 64

answered Nov 26 '13 at 13:47
ChechoroArtem
731 • 3 • 5

- 6 This is the only solution here that worked for me (on windows 7). First I used the ps aux | grep ssh and the kill command in Rick's answer to kill the agents. After that ssh-add worked without the -I switch (Using -I gave an error). eval 'ssh-agent' as in Rick's answer did not work, I had to use eval \$(ssh-agent) like in Chechoro's answer here. Frug Jan 9 '14 at 19:39 &
- 5 +1 I had the exact same problem as OP (Windows 7) and this is the only solution that worked for me. Weblurk May 30 '14 at 16:16
- 1 FYI: merged from stackoverflow.com/questions/4083079/... Shog9 ♦ Jul 24 '14 at 19:02

Tried all the others and this worked for me! - honeycomb Nov 19 '14 at 19:22

1 @Frug It is backticks, not apostrophes; in shell script that means to execute what's contained inside. \$(ssh-agent) is equivalent to `ssh-agent` but more readable. — M.M May 12 at 4:09 \$\textit{\sigma}\$

# Could not open a connection to your authentication agent

To resolve this error:

bash:

```
$ eval `ssh-agent -s`
```

tcsh:

```
$ eval `ssh-agent -c`
```

Then use ssh-add as you normally would.

I was always forgetting what to type for the above ssh-agent commands, so I created an alias in my .bashrc file like this:

```
alias ssh-agent-cyg='eval `ssh-agent -s`'
```

Now instead of using ssh-agent , I can use ssh-agent-cyg

E.g.

```
$ ssh-agent-cyg
SSH_AUTH_SOCK=/tmp/ssh-n16KsxjuTMiM/agent.32394; export SSH_AUTH_SOCK;
SSH_AGENT_PID=32395; export SSH_AGENT_PID;
echo Agent pid 32395;
$ ssh-add ~/.ssh/my_pk
```

Original Source of fix:

http://cygwin.com/ml/cygwin/2011-10/msg00313.html

edited Aug 29 at 18:21



Is that permanent? - CMCDragonkai Nov 13 '13 at 2:18

you will need to run the eval command every time you would have previously ran ssh-agent. I use an alias now, see the updated answer for how I do this. — Chris Snow Nov 13 '13 at 7:48

1 FYI: merged from stackoverflow.com/questions/4083079/... - Shog9 ♦ Jul 24 '14 at 19:02

ssh-add and ssh (assuming you are using the openssh implementations) require an environment variable to know how to talk to the ssh agent. If you started the agent in a different command prompt window to the one you're using now, or if you started it incorrectly, neither ssh-add nor ssh will see that environment variable set (because the environment variable is set *locally* to the command prompt it's set in).

You don't say which version of ssh you're using, but if you're using cygwin's, you can use this recipe from *SSH Agent on Cygwin*:

This will start an agent automatically for each new command prompt window that you open (which is suboptimal if you open multiple command prompts in one session, but at least it should work).





1 FYI: merged from stackoverflow.com/questions/4083079/... - Shog9 ♦ Jul 24 '14 at 19:02

I was linked here from another SO question. Can I ask why it's necessary to add this to the Bash config file? On my machine all I need to do is run eval \$(ssh-agent) and I can use password-less ssh for every new terminal window. — Andy J Dec 9 '14 at 6:11

That shouldn't be possible, unless you're launching new terminals from that terminal. - Robin Green Dec 9 '14 at 8:00

To amplify on n3o's answer for Windows 7...

My problem was indeed that some required environment variables weren't set, and n3o is correct that ssh-agent tells you how to set those environment variables, but doesn't actually set them.

Since Windows doesn't let you do "eval," here's what to do instead:

Redirect the output of ssh-agent to a batch file with

```
ssh-agent > temp.bat
```

Now use a text editor such as Notepad to edit temp.bat. For each of the first two lines: - Insert the word "set" and a space at the beginning of the line. - Delete the first semicolon and everything that follows.

Now delete the third line. Your temp.bat should look something like this:

```
set SSH_AUTH_SOCK=/tmp/ssh-EorQv10636/agent.10636
set SSH_AGENT_PID=8608
```

Run temp.bat. This will set the environment variables that are needed for ssh-add to work.

answered Dec 19 '13 at 14:57

Steve Saporta

650 • 4 • 11

FYI: merged from stackoverflow.com/questions/4083079/... - Shog9 ♦ Jul 24 '14 at 19:02

One thing I came across was that eval did not work for me using Cygwin, what worked for me was ssh-agent ssh-add id\_rsa.

After that I came across an issue that my private key was too open, the solution I managed to find for that (from here):

chgrp Users id\_rsa

as well as

chmod 600 id rsa

finally I was able to use:

ssh-agent ssh-add id rsa

edited Jun 5 '14 at 14:46

Cupcake **45.8k** • 14 • 107 • 129 answered May 28 '14 at 4:17



Did you use eval `ssh-agent`, with the backticks ` around ssh-agent , as shown in my answer? That worked just fine for me in Cygwin. You seem to be right that ssh-agent ssh-add also works though, at least in the msysgit Bash. However, note that id\_rsa is the default key that's used, so you don't need to specify it with ssh-agent ssh-add id\_rsa . - Cupcake Jun 5 '14 at 14:58 🖋

I believe I had used the backticks, but for me still no dice - Vnge Jun 5 '14 at 20:23

OMG YOU SOLVED MY FEW HOURS FRUSTATION. Thanks! - Chee Loong Soon Aug 17 at 4:47

I just got this working. Open your ~/.ssh/config file.

Append the following-

Host github.com IdentityFile ~/.ssh/github\_rsa

The page that gave me the hint Set up SSH for Git said that the single space indentation is important... though I had a configuration in here from Heroku that did not have that space and works properly.

edited Feb 25 '14 at 4:45



45.8k • 14 • 107 • 129

answered Feb 25 '14 at 3:42



- This does not help with entering the passphrase for the SSH key. alesch Apr 23 '14 at 9:38
- If you don't want to enter the passphrase, create a key without one. There is no point in having a passphrase if you're just going to store it in your script anyway. - Paul Becotte Apr 23 '14 at 16:15

That is the whole point of using ssh-agent. The password to your keys is stored in a secure keychain, handled by ssh-agent. - alesch Apr 24 '14 at 7:07

This is the best answer for me here. Had lots of problems with ssh-agent starting thousands of times in Windows 7 and that kill trap didn't do the trick. I don't mind having no passphrase on my personal computer at home - Fleshgrinder Apr 7 at 19:05

Let me offer another solution. If you have just installed Git 1.8.2.2 or thereabouts, and you want to enable SSH, follow the well-writen directions.

Everything through to Step 5.6 where you might encounter a slight snag. If an SSH agent is already be running you could get the following error message when you restart bash

Could not open a connection to your authentication agent

If you do, use the following command to see if more than one ssh-agent process is running

ps aux | grep ssh

If you see more than one ssh-agent service, you will need to kill all of these processes. Use the kill command as follows (the PID will be unique on your computer)

kill <PID>

Example:

```
kill 1074
```

After you have removed all of the ssh-agent processes, run the *px aux* | *grep ssh* command again to be sure they are gone, then restart Bash.

Voila, you should now get something like this:

```
Initializing new SSH agent...
succeeded
Enter passphrase for /c/Users/username/.ssh/id_rsa:
```

Now you can continue on Step 5.7 and beyond.



```
i get a sh.exe": kill: (5624) - Not owner error...:\ - Jason May 26 '13 at 2:12

got me passed roadblock, tyvm - Jason Fingar Jun 29 '13 at 19:46

Just wanted to add that in my case one of the items listed is the grep process that we are doing the searching with, but it is already killed after its execution. No pun intended. - Unipartisandev Dec 9 '13 at 21:29

FYI: merged from stackoverflow.com/questions/4083079/... - Shog9 ◆ Jul 24 '14 at 19:03
```

If you follow these instructions, your problem would be solved.

If you're on a Mac or Linux machine, type:

```
eval "$(ssh-agent -s)"
```

If you're on a Windows machine, type:

```
ssh-agent -s
```



answered Nov 8 '14 at 13:20



**Note:** this is an answer to this question, which has been merged with this one. That question was for Windows 7, meaning my answer was for Cygwin/MSYS/MSYS2. This one seems for some unix, where I wouldn't expect the SSH agent needing to be managed like this.

This will run the SSH agent and authenticate *only the first time you need it*, not every time you open your Bash terminal. It can be used for any program using SSH in general, including sshitself and scp. Just add this to /etc/profile.d/ssh-helper.sh:

```
ssh-auth() {
    # Start the SSH agent only if not running
    [[ -z $(ps | grep ssh-agent) ]] && echo $(ssh-agent) > /tmp/ssh-agent-data.sh

# Identify the running SSH agent
    [[ -z $SSH_AGENT_PID ]] && source /tmp/ssh-agent-data.sh > /dev/null

# Authenticate (change key path or make a symlink if needed)
    [[ -z $(ssh-add -1 | grep "/home/$(whoami)/.ssh/id_rsa") ]] && ssh-add
}

# You can repeat this for other commands using SSH
git() { ssh-auth; command git "$@"; }
```

edited Dec 10 '14 at 17:54

answered Jun 22 '14 at 1:22



FYI: merged from stackoverflow.com/questions/4083079/... - Shog9 ♦ Jul 24 '14 at 19:03

this is awesome! thanks - GottZ Nov 7 '14 at 12:43

ssh-agent process do not seems to be associated with the same terminal used to run it. I guess ps -A | grep ssh-agent or ps h -C ssh-agent should be used instead of ps | grep ssh-agent - alexis

Mar 30 at 15:02

Using a hyphen in the function name might not be recommended. I don't know why, but read this. For instance, I found that echo ssh-auth | bash will fail. – alexis Mar 30 at 22:40 &

In Windows 10 I tried all answers listed here but none of them seemed to work. In fact they give a clue. To solve a problem simply you need 3 commands. The idea of this problem is that sshadd needs SSH\_AUTH\_SOCK and SSH\_AGENT\_PID environment variables to be set with current ssh-agent sock file path and pid number.

```
ssh-agent -s > temp.txt
```

This will save output of ssh-agent in file. Text file content will be something like this:

```
SSH_AUTH_SOCK=/tmp/ssh-kjmxRb2764/agent.2764; export SSH_AUTH_SOCK; SSH_AGENT_PID=3044; export SSH_AGENT_PID; echo Agent pid 3044;
```

Copy something like "/tmp/ssh-kjmxRb2764/agent.2764" from text file and run following command directly in console:

```
set SSH_AUTH_SOCK=/tmp/ssh-kjmxRb2764/agent.2764
```

Copy something like "3044" from text file and run following command directly in console:

```
set SSH_AGENT_PID=3044
```

Now when environment variables (SSH\_AUTH\_SOCK and SSH\_AGENT\_PID) are set for current console session run your ssh-add command and it will not fail again to connect ssh agent.

edited Jun 21 at 16:44

answered Jun 12 at 13:58



Thank you! This was exactly what I needed. - Isochronous Jul 9 at 17:36

I had this problem, when I started ssh-agent, when it was already running. Gets confused. To see if this is the case, use

```
eval $(ssh-agent)
```

to see if this is the same as what you thought it should be. In my case, it was different than the one I just started.

To further verify if you have more than one ssh-agent running, you can review:

ps -ef | grep ssh

edited Jul 4 '14 at 21:40

Cupcake 45.8k • 14 • 107 • 129 answered Jul 4 '14 at 8:48



I think running eval \$(ssh-agent) is supposed to create a new agent with a different PID every time, though I could be wrong. — Cupcake Jul 4 14 at 21:44

Try the following:

ssh-agent sh -c 'ssh-add && git push heroku master'

answered Mar 26 at 21:13



Read @cupcake's answer for explanations. Here I only try to automate the fix.

If you using Cygwin terminal with BASH, add the following to \$HOME/.bashrc file. This only starts ssh-agent once in the first Bash terminal and adds the keys to ssh-agent. (Not sure if this is required on Linux)

```
# start ssh-agent for
# ssh authentication with github.com
SSH AUTH SOCK FILE=/tmp/SSH AUTH SOCK.sh
if [ ! -e $SSH AUTH SOCK FILE ]; then
   # need to find SSH_AUTH_SOCK again.
   # restarting is an easy option
   pkill ssh-agent
fi
# check if already running
SSH_AGENT_PID=`pgrep ssh-agent`
if [ "x$SSH\_AGENT\_PID" == "x" ]; then
   echo "not running. starting
   eval $(ssh-agent -s) > /dev/null
   rm -f $SSH_AUTH_SOCK_FILE
   echo "export SSH_AUTH_SOCK=$SSH_AUTH_SOCK" > $SSH_AUTH_SOCK_FILE
   ssh-add $HOME/.ssh/github.com_id_rsa 2>&1 > /dev/null
#else
   echo "already running"
fi
source $SSH_AUTH_SOCK_FILE
```

DONT FORGET to add your correct keys in "ssh-add" command.

edited Jul 9 at 6:06



Using Git Bash on Win8.1E, my resolution was as follows:

```
eval $(ssh-agent) > /dev/null
ssh-add ~/.ssh/id_rsa

edited Jul 4 '14 at 21:41

Cupcake
45.8k • 14 • 107 • 129

answered Jun 25 '14 at 18:47

Figure 12:41

Answered Jun 25 '14 at 18:47
```

Why is it necessary to output to /dev/null? Your answer basically does the exact same thing as this one. — Cupcake Jul 4 '14 at 21:12

Also, I'd like to point out that ~/.ssh/id\_rsa is the default key, so you shouldn't have to specify ssh-add ~/.ssh/id\_rsa, just ssh-add should work. — Cupcake Jul 4 '14 at 21:41 &

I tried your solution in this same environment @Cupcake, it doesn't work. I don't get why this is the answer either, but unless I did it this way it never worked. — nighliber Jul 20 at 17:10

I had a similar problem when I was trying to get this to work on Windows to connect to stash via

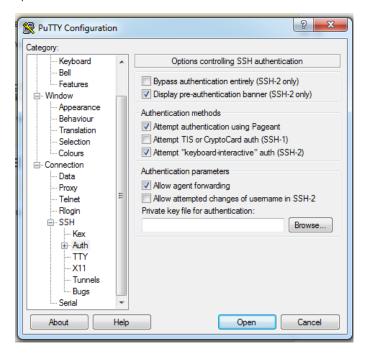
Here is the solution that worked for me.

- 1. Turns out I was running Pageant ssh agent on my Windows box I would check what you are running. I suspect it is Pageant as it comes as default with Putty and winScp
- 2. The ssh-add does not work from command line with this type of agent
- 3. You need to add the private key via pageant UI window which you can get by doublicking the Pageant icon in the taskbar (once it is started).
- Before you add the key to Pageant you need to convert it to PPK format. Full instructions are available here How to convert SSH key to ppk format
- That is it. Once I uploaded my key to stash I was able to use SourceTree to create a local repo and clone the remote.

Hope this helps...



If you are using Putty, perhaps you need to set the "Connection/SSH/Auth/Allow agent forwarding" option to "true".





This worked for me.



I resolved the error by force stopping (killed) git processes (ssh agent), then uninstalling Git, and then installing Git again.



1 I suspect that all you needed to do was just kill any existing agent processes, then restart one, instead of having to reinstall Git. - Cupcake Jul 4 '14 at 21:13

In my case, my Comodo firewall had sandboxed the ssh agent. Once I disabled sandboxing I was able to clone the repository.

FYI, I am using Comodo firewall on Windows 7.



answered Apr 25 '14 at 14:13 user3472699 Even I was getting "Could not open a connection to your authentication agent." on running the command while generating and adding SSH key: ssh-add ~/.ssh/id\_rsa . I resolved it by stopping the multiple ssh-agent instances running on my machine and then uninstalled the Git from control panel on my windows machine and then again installed Git and things were working

edited Jul 7 '14 at 2:46

Cupcake

45.8k • 14 • 107 • 129

answered Apr 19 '14 at 10:24



FYI: merged from stackoverflow.com/questions/4083079/... - Shog9 ♦ Jul 24 '14 at 19:03

#### protected by durron597 Aug 5 at 19:47

Thank you for your interest in this question. Because it has attracted low-quality answers, posting an answer now requires 10 reputation on this site.

Would you like to answer one of these unanswered questions instead?