

Git error: "Host Key Verification Failed" when connecting to remote repository

Asked 12 years, 10 months ago Modified 1 year, 4 months ago Viewed 1.1m times



I am trying to connect to a remote Git repository that resides on my web server and clone it to my machine.

586

I am using the following format for my command:



```
git clone ssh://username@domain.example/repository.git
```



This has worked fine for most of my team members. Usually after running this command Git will prompt for the user's password, and then run the cloning. However, when running on one of my machines I get the following error:

```
Host key verification failed.
```

```
fatal: Could not read from remote repository.
```

We are not using SSH keys to connect to this repository, so I'm not sure why Git is checking for one on this particular machine.

git

ssh

ssh-keys



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at 10:29

ermiller ♦

96 ● 116

asked Nov 13, 2012 at 15:26



bootsz

5,971 ● 3 ● 15 ● 4

your URL begins with `ssh://` – Brandon

te solution in their blog post. See

[Ryan Shillington](#) Mar 26, 2023 at 5:01

vn hosts file), and git synced yesterday, but

g is meant to be a persistent solution, correct?

33 Answers

Sorted by: Highest score (default)

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As I answered previously in [Cloning git repo causes error - Host key verification failed. fatal: The remote end hung up unexpectedly](#), add GitHub to the list of known hosts:

974



```
ssh-keyscan -t rsa github.com >> ~/.ssh/known_hosts
```



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edited Oct 13, 2021 at 0:44

answered Apr 1, 2015 at 0:17



user3064538



Tupy

12.8k 4 21 11



- 4 This is the most secure way, short of already having the key present. That's assuming you only run it once, not every time you connect to the server. – Zenexer Aug 13, 2015 at 13:49
- 1 My company's private fit repository is using ecdsa as key, so if the solution isn't working, maybe it is because the algorithm isn't correct – Fendy Apr 12, 2016 at 3:07
- 2 worked for me too, I was wondering why I couldn't clone my own repo – StackAttack Nov 16, 2018 at 16:34
- 14 If you're using Windows, the easiest is to install git-for-windows(download) and open Git Bash . Inside this console you can use the ssh-keyscan command – Rafael Araújo Mar 25, 2019 at 14:51
- 3 You don't know how many years of frustration your answer could save. It also fixed the authentication errors of github desktop. I need to try it with my flu as well XD – Diaa Jul 25, 2021 at 2:18



You are connecting via the SSH protocol, as indicated by the `ssh://` prefix on your clone URL.

... host key associated with a particular ... change. This prevents man in the middle

... does not seem fishy to you, remove the

... known_hosts to remove the line for

... h

... urself with

... hosts

... ect with `git fetch`, `git pull`, or `git`

... push (or even a plain ol' `ssh domain.example`) by answering yes when prompted

```
The authenticity of host 'domain.example (a.b.c.d)' can't be established.
RSA key fingerprint is XX:XX:...:XX.
Are you sure you want to continue connecting (yes/no)?
```

The reason for this prompt is `domain.example` is no longer in your `known_hosts` after deleting it and presumably not in the system's `/etc/ssh/ssh_known_hosts`, so `ssh` has no way to know whether the host on the other end of the connection is really `domain.example`. (If the wrong key is in `/etc`, someone with administrative privileges will have to update the system-wide file.)

I strongly encourage you to consider having users authenticate with keys as well. That way, `ssh-agent` can store key material for convenience (rather than everyone having to enter her password for each connection to the server), and passwords do not go over the network.

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edited Jun 20, 2022 at 10:29

answered Nov 13, 2012 at 15:59



Stephen Ostermiller ♦

25.7k ● 18 ● 96 ● 116



Greg Bacon

140k ● 34 ● 196 ● 252

- 8 Fun fact, running `sudo ssh-keygen -R domain.com` can rename your existing `known_hosts` file to be `known_hosts.old`, and create a copy *that is only readable by root*. (`-rw----- root root`) You can easily `chown` this back to the appropriate user, but you also might waste an afternoon debugging why git is broken. :D – [Andrew Rueckert](#) Feb 28, 2020 at 23:39
- 33 Are you sure you want to continue connecting (yes/no)? . Don't make the same mistake as me. You need to type `yes`. Simply hitting enter doesn't select yes by default – [JolonB](#) May 24, 2020 at 22:20
- 3 For CI environments, like Jenkins, you can not answer yes when prompted to. So, make sure that: 1. you have the ssh keys correctly created and in the `.ssh` dir inside your home. 2. the target domain added to `known_hosts` as stated here. – [Sebastian Juarez](#) Aug 25, 2020 at 19:47 ✎



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remote repository: `ssh-keyscan -p 8888 -t`
r 15, 2021 at 23:53

adding `sudo` to the beginning of commands

's answer, above, I figured out that the
b.com not being present in the list of

hosts

ssh/id_rsa.pub and copy it.

5. Add the `id_rsa.pub` key to SSH keys list on your GitHub profile.

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edited May 26, 2019 at 9:53

answered Apr 28, 2015 at 0:16



Own Rodriguez

3 ● 1 ● 3



Saran

1,395 ● 1 ● 10 ● 11

2 @OJFord FYI: I have edited the original answer in a way that makes your comment obsolete. TBH and with all due respect it wasn't entirely correct in the first place. The `touch` command would fail in case `~/.ssh` directory does not exist, so step 1 was still required. Also you don't need to `touch` the file before using `>>` redirection. It will be created if necessary (but just the file, not entire path, so still `mkdir -p` is needed). The `-p` option make it work in case the directory already exists. – [Tad Lispy](#) Jun 10, 2018 at 17:14

2 It's the #2 `ssh-keyscan` that's missing from the Github docs on adding a new ssh key. – [Max Phillips](#) Oct 14, 2019 at 15:03

3 I was having issues with my `Dockerfile` having a lack of permission. Adding the 2nd step here fixed that problem! Thank you for the great work – [Spencer Pollock](#) Feb 16, 2020 at 9:56

I followed the above step and failed as I was giving github.com as the hostKey in spring config server properties files. Those who are failing to connect spring.cloud.config-server to fetch from git, see this [tranhoangminh.wordpress.com/2018/09/14/...](http://tranhoangminh.wordpress.com/2018/09/14/) Well explained here. – [SHAKU](#) Mar 20, 2021 at 17:42



This is happening because github is not currently in your known hosts.

81

You should be prompted to add github to your known hosts. If this hasn't happened, you can run `ssh -T git@github.com` to receive the prompt again.



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edited Jul 11, 2018 at 9:55

answered Nov 1, 2017 at 9:46



Powderham

1,660 ● 15 ● 14

[agemann](#) Jul 7, 2018 at 8:23

Simply using this answer works for me.

Is "Are you sure you want to continue

answered Aug 2, 2017 at 22:51



Code-Apprentice

83.9k ● 26 ● 162 ● 288



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- 2 This answer lead me to realize I had to manually clone my repo on my build server in order to type 'yes' and get my bitbucket server added to my known_hosts – [Sashah](#) Nov 20, 2017 at 20:34
- 2 @Sashah If all you need is the bitbucket server in known_hosts, you can edit the file manually. No need to clone the repo if this is the only reason to do so. – [Code-Apprentice](#) Dec 13, 2017 at 16:03
- 3 Wow, I was stuck on this for the past hour and this solved it. Thank you! – [Akanksha Atrey](#) Jun 2, 2022 at 16:58



When the terminal shows:

31

Are you sure you want to continue connecting (yes/no)?



DO NOT I repeat **DO NOT** just press `Enter` .

You **MUST TYPE** `yes` first in the terminal, then press `Enter` .



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edited Apr 29, 2024 at 20:45

answered Jan 30, 2023 at 12:47



[ludog](#)
150 ● 2 ● 13



[Muhammad Fauzi Masykur](#)
2,272 ● 1 ● 19 ● 18



If you are in office intranet (otherwise dangerous) which is always protected by firewalls simply have the following lines in your `~/.ssh/config` .

16

```
Host *
  StrictHostKeyChecking no
  UserKnownHostsFile=/dev/null
```



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0:15

answered Mar 4, 2017 at 1:40



[sunil](#)
516 ● 5 ● 11

11 ● 793

How do you know you're talking to the real
17, 2018 at 20:42

ever opensource one. Worst case .ssh config
fig lines for ssh to choose more specific

no)?



Type **yes** as the response



That is how I solved my issue. But if you try to just hit the enter button, it won't work!



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answered Apr 22, 2019 at 7:10



Victor Bruce

207 ● 2 ● 12



I got the same problem on a newly installed system, but this was a udev problem. There was no `/dev/tty` node, so I had to do:

10

```
mknod -m 666 /dev/tty c 5 0
```



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answered Aug 6, 2013 at 12:04



Jaffa

12.7k ● 5 ● 54 ● 103

2 It worked for me because `/dev/tty` was created as a file, very odd! (so you have to remove it then recreate it with `mknod`) – [Doomsday](#) Nov 2, 2014 at 14:31

[@Geoffroy](#) , I removed `/dev/tty` and now when do `sudo` , I face this error : `sudo: sorry, you must have a tty to run sudo` – [Milad](#) Dec 17, 2014 at 12:29

[@xe4me](#) I never said you should remove it, depending on the system it is actually required. Reboot should fix it. – [Jaffa](#) Dec 17, 2014 at 17:33

[@Geoffroy](#) , actually the first commentator , said I have to remove and the recreate :d Nope , rebooting didn't work , I had to tell the root , he fixed it :d – [Milad](#) Dec 18, 2014 at 9:58



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new computer, I followed these
I'm on Win10, I had to do all these
ular DOS cmd Shell).

repo that I had problems with, and in my
had it locally and didn't want to lose my

question might be this one:

(no)?

I typed "yes" and it finally worked, you should typically get a message similar to this:

Warning: Permanently added '[your repo link]' (ECDSA) to the list of known hosts.

Note: if you are on Windows, make sure that you use Git Bash for all the commands, this did not work in regular cmd shell or powershell, I really had to do this in Git Bash.

Lastly I deleted the second clone repo (myRepo2 in the example) and went back to my first repo and I could finally do all the Git stuff like normal in my favorite editor VSCode.

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answered Jan 21, 2018 at 21:18



ghiscoding

13.4k ● 8 ● 76 ● 120

Indeed, my Cygwin prompt looks nearly exactly like my git bash prompt, but it only works in the git bash prompt! – Josiah Yoder Aug 2, 2018 at 18:00



When the remote server wants to connect to the private repo, it would authenticate via ssh. Create the private-public key pair with ssh-keygen or if you already have the public-private key. copy&paste the public key in the Settings of the private repo.

6



YourPrivateRepo -> Settings -> Deploy Keys -> Add deploy key -> Paste the public key.



Now the remote server would be able to connect to the private repo.



NOTE: The deploy keys has access only for reading the repo. Need to explicitly allow write access.

answered Jul 18, 2019 at 11:31



Sandy

1,062 ● 1 ● 12 ● 15

or git push



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at 12:49

ki
6 ● 64

answered Aug 9, 2020 at 23:27



Lamri Djamal

301 ● 2 ● 10



If you are using git for Windows.

5

- Open the git GUI.
- Open the local git repository in git GUI.
- Add the remote or push if the remote already exists.
- Answer "yes" to the question about whether you want to continue.



The GUI client adds the key for you to `~/.ssh/known_hosts`. This is easier to remember if you don't do it often and also avoids the need to use the git command line (the standard Windows command lines don't have the `ssh-keyscan` executable).

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answered Apr 5, 2018 at 16:51



Julian Knight

4,941 ● 2 ● 35 ● 47



The solutions mentioned here are great, the only missing point is, what if your public and private key file names are different than the default ones?

4

Create a file called "config" under `~/.ssh` and add the following contents



```
Host github.com
  IdentityFile ~/.ssh/github_id_rsa
```



Replace `github_id_rsa` with your private key file.

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answered Jul 19, 2020 at 18:57



RP-

5,837 ● 2 ● 32 ● 48



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add the port number for your repository

sh/known_hosts

ess you can find the port number by

sa

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edited Jun 20, 2022 at 10:31

answered Apr 15, 2021 at 23:59

 **Stephen Ostermiller** ♦
25.7k ● 18 ● 96 ● 116

 **andrew**
4,089 ● 1 ● 27 ● 39



You can use your "git url" in "https" URL format in the Jenkinsfile or wherever you want.

3

```
git url: 'https://github.com/jglick/simple-maven-project-with-tests.git'
```



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answered May 11, 2016 at 9:58

 **Nitin**
11.4k ● 4 ● 19 ● 36



I was facing the same error inside DockerFile during build time while the image was public. I did little modification in Dockerfile.

3

```
RUN git clone https://github.com/kacole2/express-node-mongo-skeleton.git /www/nodejs
```



This would be because using the git@github.com:... syntax ends up > using SSH to clone, and inside the container, your private key is not > available. You'll want to use RUN git clone > <https://github.com/edenhill/librdkafka.git> instead.



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answered Jul 30, 2018 at 13:16

 **Adiii**
60.8k ● 10 ● 177 ● 172



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th the user's (~/.ssh/known_hosts) and

ts. When I removed it as root with `sudo` it changed permissions on that file to any other user it failed with "Host key

8:59

answered Jan 26, 2022 at 12:19

 **EMO**
6,485 ● 8 ● 59 ● 101



Dashboard > Manage Jenkins > Configure Global Security > Git Host Key Verification Configuration. Then in Host Key Verification Strategy select Accept first connection.

3

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answered Sep 16, 2022 at 1:42



Abd Abughazaleh

5,701 ● 5 ● 59 ● 60



I just cleared out my known host file and that seemed to do the trick.

3

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answered Apr 6, 2023 at 20:13



Daniel L. VanDenBosch

2,795 ● 7 ● 45 ● 68



if anyone is wondering why this could be a solution, when the remote repository changes its ssh public key (but you still have the old one stored under .ssh\known_hosts) - emptying known_hosts file content will trigger to store the new key in your known_hosts. – LeTex May 24, 2023 at 22:17



Its means your remote host key was changed (May be host password change),

2

Your terminal suggested to execute this command as root user



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website.net]

your pc/server. Copy that suggested

// Login as a root

website.net] // Terminal suggested

CDSA

sts.old

// Exist from root

Try Again, Hope this works.

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answered Aug 14, 2016 at 5:02



Jaykumar Patel

27.7k ● 12 ● 79 ● 76

Note: depending on your shell, you may have to escape the square brackets \[and \] or use quotes.

– Phlarx Jan 16, 2017 at 19:38



Reason seems to be that the public key of the remote host is not stored or different from the stored one. (Be aware of security issues, see Greg Bacon's answer for details.)

2

I was used to `git clone` prompting me in this case:



```
The authenticity of host 'host.net (10.0.0.42)' can't be established.  
ECDSA key fingerprint is 00:00:00:00:00:00:00:00:00:00:00:00:00:00:00.  
Are you sure you want to continue connecting (yes/no)?
```



Not sure, why this error is thrown instead. Could be the configuration of your shell or the git SSH command.

Anyhow, you can get the same prompt by running `ssh user@host.net`.

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answered Oct 13, 2020 at 8:28



TheHowlingHoaschd

716 ● 7 ● 13

A other alternative worked for me, instead of cloning the SSH link



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ed for me

answered Apr 14, 2021 at 17:39



u_pendra

948 ● 1 ● 10 ● 27



If you are not using a Windows Session to update the code, and you use `PortableGit`, you need to set the `HOME` environment variable before running the git command.

2



This example fits better [for other use case](#), but I think it is a good of proof-of-concept for this post.



```
$env:HOME="\\.\Users\Administrator";C:\path\to\PortableGit\bin\git.exe -C
C:\path\to\repository.git pull'
```

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answered May 19, 2021 at 1:28



Tk421

6,438 ● 6 ● 40 ● 51



Pushing to Git returning Error Code 403 fatal: HTTP request failed

2



Check if there is Billing issue. Google Cloud stops uploading files to <https://source.cloud.google.com/>

I got this problem went away after Payment issue was fixed. But did not change the Keys.



Thanks

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answered Jun 11, 2021 at 14:06



K D

215 ● 4 ● 10



Alternatively, if you're using `MSYS2` terminals (on Windows*) and a passphrase, it might be that you are not running it properly, thus denying access to SSH.

or Powershell to get the prompt and `MSYS`.)

answered Sep 26, 2021 at 11:21



Prometheus II

384 ● 4 ● 16



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ad from remote repository.

nd the repository exists.



Solution: I've checked all the settings and also checked the key settings in GitHub. Finally, I changed the Git URL from `"git@github.com:palvsv/travelo-moon.git"` to `"https://github.com/palvsv/travelo-moon.git"` in `.config` file `"yourprojectdirectory/.git/config"` and it works.



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answered Oct 8, 2021 at 8:56



TRUPAL VASAVA

69 ● 6

- 3 This simply changes the authentication method from SSH to HTTPS - this is not a solution if you're actually trying to use SSH keys, which the OP was not, however a bunch of other people here are, so I would say this isn't extremely valid for 90% of use cases. – [Arcsector](#) Feb 9, 2022 at 22:58



0

After generating a SSH key pair you need to add your key to the ssh-agent:

1 - start the ssh-agent in the background (*this depends on your environment*)

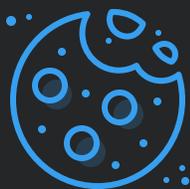
```
$ eval "$(ssh-agent -s)"
> Agent pid 59566
```



2 - Add your SSH key to the ssh-agent

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

3 - add the SSH private key to your remote git account



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[connecting-to-github-with-ssh/generating-a-](#)

answered Apr 20, 2024 at 13:25



Souhail Benhachemi

303 ● 3 ● 8

`/known_hosts` file to avoid manually

```
gH5C9okwi0dh219GKJ1
```

```
ABBBEmKSENjQEez0mxkZMy7opKgwFB9nkt5YRrY
```

```
rQPEiiphnt+VTTvDP6mHBL9j1aNUkY4Ue1gvwnG
```

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answered Jan 30, 2024 at 14:11



Mykhaylo Adamovych
21.2k ● 26 ● 109 ● 150



I had the similar issue, unfortunately I used the GitExtensions HMI and forgot that I wrote a passphrase. With HMI.... forget it ! Do not enter passphrase when you generate your key !

-3

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answered Jan 22, 2016 at 18:28



Jerome Vacher
324 ● 1 ● 7



- 1
- 2
- Next

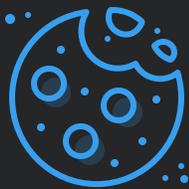
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