

Installing Backpack

Install instructions for the backpack system

Quick start CS Lab (onyx.boisestate.edu)

- [Setup your personal Git settings](#)
- [Download the installer from your instructors email and run the installer](#)
- [HELP!!! IT DID NOT WORK!!!](#)

Overview

The Backpack submission system uses the Git version control software to manage project assignment and submission. At the beginning of the semester you should have received an email from your instructor with instructions and an attachment named **backpack.tgz**.

Git is already installed for you in the CS Lab (onyx.boisestate.edu). You only need to install Git if you want to work on your **personal machine**. If you do try to install Git on a lab machine you may see the message below:

```
[shanepanter@onyx ~]$ sudo install git
```

```
We trust you have received the usual lecture from the local System Administrator. It usually boils down to these three things:
```

```
#1) Respect the privacy of others.
```

```
#2) Think before you type.
```

```
#3) With great power comes great responsibility.
```

```
[sudo] password for shanepanter:
```

```
shanepanter is not in the sudoers file. This incident will be reported.
```

If you see this message you are NOT in trouble! Its OK! This is just the standard message that is present on ALL Linux systems. Your instructor has already installed all the software you need on the CS lab machine all you have to do is configure the software.

Setting up Git

1. On one of the lab machines, open a console. (These steps can also be done over ssh). [How do I open a console in the lab?](#)
2. Tell Git your name so your commits will be properly labeled:

```
git config --global user.name "YOUR NAME"
```



3. Tell Git the email address that will be associated with your Git commits. This should be your Boise State University e-mail address (youremail@u.boisestate.edu).

```
git config --global user.email "YOUR EMAIL ADDRESS"
```

Installing Backpack

1. After you have setup Git, you will need to run the install script that was sent to your **@u.boisestate.edu** email account. If you can't find the email, search your inbox for "Welcome to Backpack at Boise State University" (the name of the email). Make sure and check your spam folder! If you still can't find the email, contact your instructor. **Each installer is custom built for every student. Whoever you share the file backpack.tgz with, will be able to access all of your personal information. You need to treat the files in backpack.tgz just like your ATM pin number.**
2. To install your backpack key, download the key attachment from your email and navigate to the directory that contains the downloaded file and execute the following command:

```
tar xzf backpack.tgz && ./install
```

3. This will copy your keys into the correct location and set up the correct permissions. Note that in a shell, the && means to run the **./install** command only if the **tar** command before it succeeds. The steps are the same for Windows (using git-bash), MacOS, or any Linux flavor.



HELP!! I have an ERROR!!

Running as root

If you are running as root the installer will not put the keys in the correct directory. You must be running as a normal user.

```
[root@event_horizon Documents]# ./install  
ERROR: You are logged in as root!  
ERROR: This installer can NOT be ran as root!  
ERROR: Exit from root and try again!
```

SOLUTION

Don't run as root. You should never be running as root unless you absolutely have to. This script does not need root permissions and should be executed under your local user account. Run the exit command to log out of the root account. All modern Linux installers (CentOS, Fedora, Ubuntu, etc.) create a normal user account as part of the setup process use that account instead.

exit

Existing .ssh folder

When running the installer you may see output below:

```
[user@onyxnode42 Downloads]$ tar xzf backpack.tgz && ./install  
ERROR: Found existing SSH keys. Backpack install abandoned!  
ERROR: You have two options:  
ERROR: 1. Remove the .ssh folder and re-install.  
ERROR: 2. Email your existing public key to the instructor to use with backpack.
```

SOLUTION

Issue the command:



```
rm -rf $HOME/.ssh
```

Then re-run the installer.

Known hosts error

The CS department upgrades the hardware that backpack runs on quite often. Whenever this happens you may see an error similar to what is shown in the screenshot below. Normally this error is quit serious as it indicates someone may be trying to steal your data. However, in this case you are **completely safe**. You may also encounter this error if you have not taken a CS class in a long time as things tend to change from semester to semester.

```
@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@
@      WARNING: POSSIBLE DNS SPOOFING DETECTED!      @
@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@
The ECDSA host key for nullptr.boisestate.edu has changed,
and the key for the corresponding IP address 132.178.215.64
is unknown. This could either mean that
DNS SPOOFING is happening or the IP address for the host
and its host key have changed at the same time.
@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@
@      WARNING: REMOTE HOST IDENTIFICATION HAS CHANGED!      @
@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@
IT IS POSSIBLE THAT SOMEONE IS DOING SOMETHING NASTY!
Someone could be eavesdropping on you right now (man-in-the-middle attack)!
It is also possible that a host key has just been changed.
The fingerprint for the ECDSA key sent by the remote host is
SHA256:yV7BeMOM0fJQHTuoYWWyacoXKRhhBYRgFGhIcrp0gW0.
Please contact your system administrator.
Add correct host key in /home/[REDACTED]/.ssh/known_hosts to get rid of this message.
Offending ECDSA key in /home/[REDACTED]/.ssh/known_hosts:1
ECDSA host key for nullptr.boisestate.edu has changed and you have requested strict checking.
Host key verification failed.
fatal: Could not read from remote repository.

Please make sure you have the correct access rights
and the repository exists. _
```

SOLUTION

```
rm $HOME/.ssh/known_hosts
```



Installing Git on your personal machine (Laptop or desktop)

NOTE: Git is already installed in the lab machines! Only follow these instructions if you want it on your local machine. If you would like to install Git on your **personal machine** so you can work on your projects locally you can obtain Git from <https://git-scm.com/> . Detailed install instructions for multiple operating systems are in the [Pro Git book chapter 1.5](#).

