Installing Backpack

Install instructions for the backpack system

Backpack - online project submission

The Backpack submission system uses the Git version control software to manage project assignment and submission. You should receive an email from your instructor (youremail@u.boisestate.edu) with instructions for cloning your personal backpack repository. You may use the same repository in several courses, so you will only need to set it up once. Support is only provided for the CS department labs.

Setting up Git

1. In one of the lab machines, open a console. Or you can ssh into the onyx server and do the commands below in that console.
2. Tell Git your name so your commits will be properly labeled. Type everything after the $ into your terminal window:

   $ 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"
4. If you have a personal Linux system, then repeat the above steps there as well. You may have to install the Git software on it first.

Installing Backpack

1. After you have setup Git, you will need to run the install script that was sent to your boisestate.edu email account. If you can't find the email, search your inbox for "Welcome to Backpack at BSU" (the name of the email). Make sure and check your spam folder! If you still can't find the email, contact your instructor. This key will allow you to access your repository without using a password. **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 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.
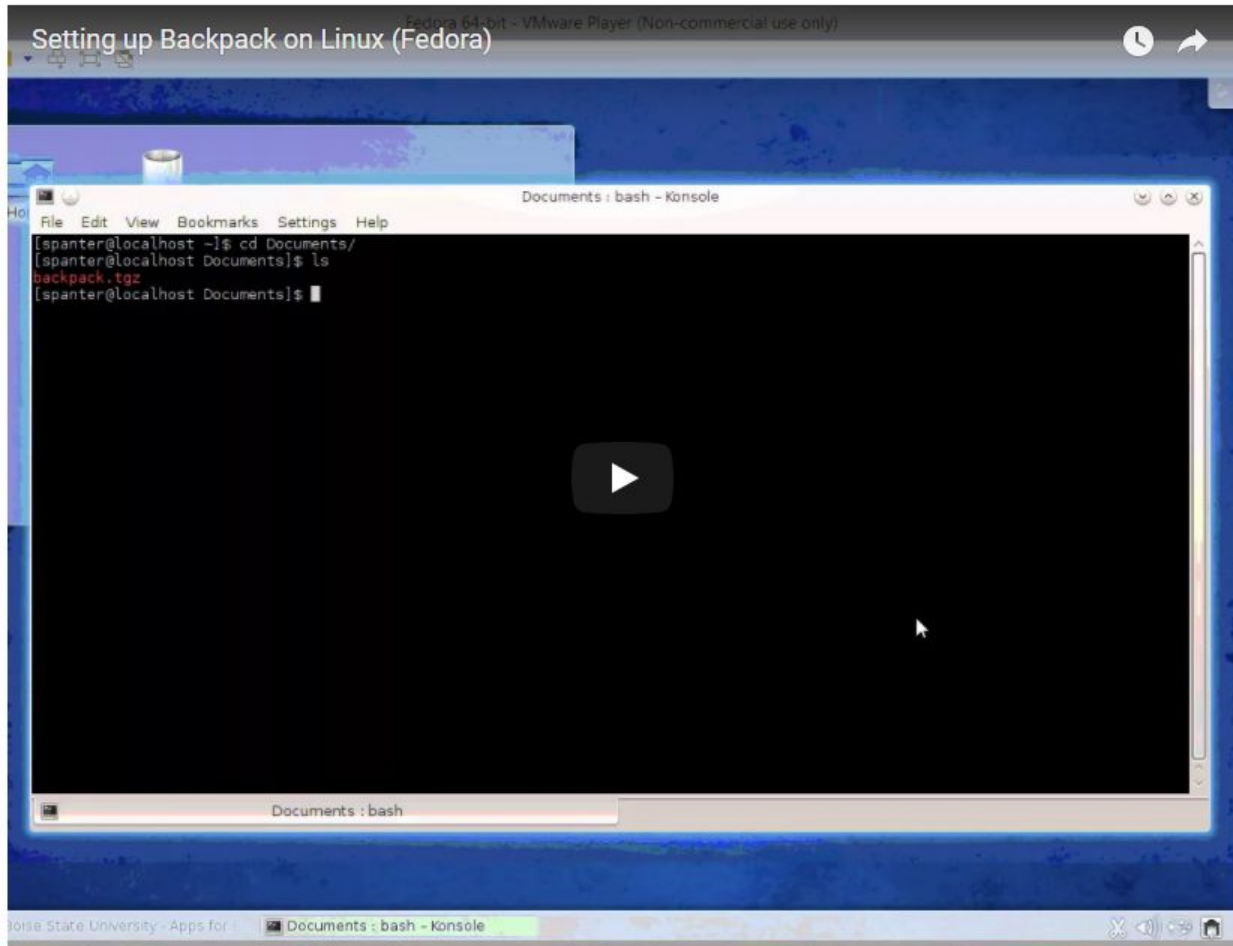
Common Issues

Unprotected Private Key File

You may see the following error when you attempt to clone your repository.

[you@domain github]$ git clone
git@nullptr.boisestate.edu:YOUR_REPO_NAME_FROM_THE_WELCOME_EMAIL
Cloning into 'YOUR_REPO_NAME_FROM_THE_WELCOME_EMAIL'...
The authenticity of host 'nullptr.boisestate.edu (132.178.226.85)'

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can't be established.
ECDSA key fingerprint is 36:c6:5b:1a:db:08:29:9b:98:dc:9b:08:fd:26:84:15.
Are you sure you want to continue connecting (yes/no)? yes
Warning: Permanently added 'nullptr.boisestate.edu' (ECDSA) to the list
of known hosts.
@@@
@@@@@@@@@@@@
@   WARNING: UNPROTECTED PRIVATE KEY FILE!   @
@@
@@@@@@@@@@@@
Permissions 0660 for '/home/you/.ssh/id_rsa' are too open.
It is required that your private key files are NOT accessible by others.
This private key will be ignored.
bad permissions: ignore key: /home/you/.ssh/id_rsa
git@nullptr.boisestate.edu's password:

Solution: Update the permissions on your private key file using the following command.

   $ chmod 600 ~/.ssh/id_rsa

Prompted for Password

If your ssh keys are set up correctly, you should not be prompted for a password. If you are asked for you password as shown below, follow the suggested solution.

$ git clone git@nullptr.boisestate.edu:YOUR_REPO_NAME_FROM_THE_WELCOME_EMAIL
Cloning into 'YOUR_REPO_NAME_FROM_THE_WELCOME_EMAIL'...
git@nullptr.boisestate.edu's password:

Solution: Remove any existing keys from your .ssh directory and re-run the installer.

   $ rm ~/.ssh/id_rsa*

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.

root$ exit

Working on your Project

After you check out your repository, you will see a directory called **YourName@u.boisestate.edu.** Each project directory will include all the necessary starter files for each project that you will be working on this semester. You can work on your files in this directory since they are your own copies. You don't need to worry about copying them to a different directory. You can push your changes to the repository as often as you would like to save versions of your work.