Advanced ssh: keys and hostnames

Adapted from materials by Dr. Carrier

Issues with ssh

Issues with ssh

- Lots of typing

Issues with ssh

- Lots of typing
- Have to remember eos##.cis.gvsu.edu

Issues with ssh

- Lots of typing
- Have to remember eos##.cis.gvsu.edu
- Have to type password, can't see it or *

>:^U

Issues with ssh

- Lots of typing
- **Have to remember eos##.cis.gvsu.edu**
- Have to type password, can't see it or *

>:^U

ssh hostname aliasing

- In ~/.ssh

ssh hostname aliasing

- In ~/.ssh
  - Create / edit a file named `config` (no extension)

ssh hostname aliasing

- In ~/.ssh
    - Create / edit a file named `config` (no extension)
    - Add to ~/.ssh/config:

ssh hostname aliasing

- In ~/.ssh
    - Create / edit a file named `config` (no extension)
    - Add to ~/.ssh/config:

`Host eos01`

ssh hostname aliasing

- In ~/.ssh
    - Create / edit a file named `config` (no extension)
    - Add to ~/.ssh/config:

```
Host eos01
Hostname eos01.cis.gvsu.edu
```

ssh hostname aliasing

- In ~/.ssh
    - Create / edit a file named `config` (no extension)
    - Add to ~/.ssh/config:

```
Host eos01
Hostname eos01.cis.gvsu.edu
User exampleusername
```

ssh hostname aliasing

- In ~/.ssh
    - Create / edit a file named `config` (no extension)
    - Add to ~/.ssh/config:

```
Host eos01
Hostname eos01.cis.gvsu.edu
User exampleusername
```

- How to use?
    - Simple! Type: `ssh eos01`

ssh keys 🔑🔑

Idea: how to verify users with files on their system?

ssh keys 🔑🔑

Idea: how to verify users with files on their system?

We leverage public/private key encryption!

Using ssh keys

1. Generate the keys
   a. `ssh-keygen`
2. Share the public key
   a. `ssh-copy-id -i path_to_key username@server`

Common issues with ssh keys

- Errors with `authorized_keys` file
  - Make sure the file exists: `touch ~/.ssh/authorized_keys`
  - Wrong permissions
    - `chmod 600 ~/.ssh/authorized_keys`
    - `chmod 700 ~/.ssh`
- If you have `ssh` and `ssh-keygen` but not `ssh-copy-id`
  - We can manually copy the key and add it to the file
    - `scp ~/.ssh/id_rsa.pub username@hostname:~`
  - Login to server via ssh
    - `cat id_rsa.pub >> ~/.ssh/authorized_keys`