Login to UA HPC

Version 2

Forked from ssh to UA HPC

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ABSTRACT

This describes setting up ssh keys and configuration to avoid having to use your NetID+ 2-factor authentication every time you log into the HPC. Windows users will need to install a free Unix-like environment that provides a terminal so as to avoid using an ssh client like Putty (for example: Cygwin (http://www.cygwin.com)). Cygwin users must be sure to install the 'ssh' tools which are not installed by default.

PROTOCOL STATUS

Working

We use this protocol in our group and it is working

GUIDELINES

This protocol is designed for students at the University of Arizona. Students must have a netid to access the UA high-performance compute cluster for this protocol.

BEFORE STARTING

You must have received access to the UA high-performance compute cluster by the instructor: Dr. Bonnie Hurwitz

1 Sign up for NetID+ https://webauth.arizona.edu/netid-plus/

2 **Initial login**

Open a terminal and type 'ssh <NetID>@hpc.arizona.edu'. Enter your NetID password and then follow the instructions for 2-factor authentication. You will be presented with a menu that says:

==========
HPC.ARIZONA.EDU
==========
Please select a target system to connect to:

(1) Ocelote
(2) El Gato
(Q) Quit
(D) Disable menu

Select "D" to disable the menu

Disabling menu...

3 Copy public key to speed up login

Open a second terminal on your *local* machine and 'cd ~/.ssh'. If that directory does not exist, execute 'ssh-keygen' to create local keys; accept all defaults by pressing <Enter>. Then copy your *public* key:

```
$ cat ~/.ssh/id_rsa.pub
```

Copy and paste that text. On MacOS, you can use the 'pbcopy' (pasteboard copy) command:

```
$ pbcopy < ~/.ssh/id_rsa.pub
```

In the HPC terminal from your initial login (@gatekeeper), open '~/.ssh/authorized_keys' and add the line of text from the 'id_rsa.pub.' If the file does not exist, create it. Ensure that the permissions on the file are 600 ('chmod 600').

4 Test no-password login

Back in your *local* terminal, test that you can login without 2-factor auth by executing 'ssh <NetID>@hpc.arizona.edu'. If you were logged in automatically, you are all set.

5 Create login alias

In your *local* terminal, open '~/.ssh/config' and add the following lines:

```
Host hpc
Hostname hpc.arizona.edu
User <NetID>
```

Now on your local machine, you can "ssh hpc" to get a terminal on the HPC.