Login 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 Cygwin (http://www.cygwin.com), a free Unix-like environment that provides a terminal so as to avoid using an ssh client like Putty. Cygwin users must be sure to install the 'ssh' tools which are not installed by default.

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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 start

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

Protocol

Step 1.

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

Step 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.

Step 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, 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').

Step 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.

Step 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.