Overview
Logging in to the HPC supercomputers starts with your UArizona NetID and password with two-factor authentication enabled. Logging in will first connect you to something called the bastion host, a computer that provides a gateway to our three clusters: Ocelote, ElGato, and Puma. This is the only function the bastion host serves. It is not for storing files, running programs, or accessing software.

A more comprehensive walkthrough of this process is on the Puma Quick Start page. Here is a shorter description:

Login Procedure

As simple as...

1. Obtain an SSH Client: Before any login sessions can be initiated, a working SSH v2 client needs to be present on your local machine. For more information on SSH clients for these OS types and how to log in, select your OS from the links below:
   - Windows
   - Mac OS
   - Linux

2. NetID+: To ensure secure login sessions to HPC systems, users must enable NetID+ as 2-factor authentication is required.

3. Access to the HPC systems is through a bastion host (ssh netid@hpc.arizona.edu):

   Example:
$ ssh netid@hpc.arizona.edu

Password:
Duo two-factor login for netid

Enter a passcode or select one of the following options:

1. Duo Push to XXX-XXX-XXXX
2. Phone call to XXX-XXX-XXXX
3. SMS passcodes to XXX-XXX-XXXX (next code starts with: X)

Passcode or option (1-3): <enter option>

Success. Logging you in...

Last login:
This is a bastion host used to access the rest of the RT/HPC environment.

Shortcut commands to access each resource
-----------------------------------------
Ocelote:
$ ocelote

El Gato:
$ elgato

Puma:
$ puma

FAQ - I am having trouble with ...

X11 Forwarding

The key to make forwarding work successfully is to include the -X at each login step.

On a Mac, if you get a blank response to "echo $DISPLAY, you might need this line in your .ssh/config file: ForwardX11Trusted yes

This is a simple example with quick tests:
laptop prompt$ ssh -X netid@hpc.arizona.edu
Password:
Duo two-factor login for netid
Enter a passcode or select one of the following options:

1. Duo Push to XXX-XXXX-8969
2. Phone call to XXX-XXXX-8969
3. Phone call to XXX-XXXX-0502
4. SMS passcodes to XXX-XXXX-8969

Passcode or option (1-4): 1
Success. Logging you in...
Last login: Fri Nov 4 08:13:11 2016 from dhcp-135-102.uits.arizona.edu
This is a bastion host used to access the rest of the environment.

Shortcut commands to access each resource
-----------------------------------------
Ocelote:                El Gato:
$ ocelote               $ elgato
[netid@gatekeeper ~]$ echo $DISPLAY
localhost:13.0

[netid@gatekeeper ~]$ ssh -X elgato-login  # or "elgato -X"
Last login: Fri Nov 4 08:13:50 2016 from gatekeeper.hpc.arizona.edu

[netid@elgato-login ~]$ echo $DISPLAY
localhost:18.0

[netid@elgato-login ~]$ xterm &
[1] 28196