

Initial Instruction Set: How to use the gateway computers from a Windows PC

We have generated a ssh key for your account. It will look something like:

```
-----BEGIN RSA PRIVATE KEY-----
Proc-Type: 4, ENCRYPTED
DEK-Info: DES-EDE3-CBC,6658F63B18AB5FBD

z4bz90adsf789023nJ3Ojpx+SUFkWIDG4IgfQzR3fuccJrLtTtyeG7z/Dye6yT9/
UUIVzxpnrJfJsJwQh74aax0YDZjY3ek4b+k0qH9KY2ObV1oC0476EEG2tHTdt09ew
h/4yd3vl+4XTT1ir2pN9mirrx8VfHF9SVjEhbd1vusAP351jfCrTiTwye7nsXr9
EhlaesYCN50sQbdxnIU8lALWyZaub9sd0tKNyEshDyXGWzGsfE1SCo8bE5bF05bi
LYAdkOLUuHyUNBEXbXcGasFuywlZkBTYc9aANgMo0EY9Nm0iI3wyg/Lt839PJWOr
FrZpfdkkuB/kI/2XUwnkkvOxizkWo5o0A4+RcAOUaP1XTuC7yvPwD1KqeUASbUOD
2t7q2JP127kP6dO2+bYSKa0YD6bIN4UldjiB7/cOQaUSJtD3Rfn5Bc73FxnY2ah
vKxv9VrLuP/nJI2831yu89adsfCUUcGh132vu9js0daNb+PU6mpX1gQwFWdd9tJI
dYYxtCNHkCbceXnvkAIzToTNjnd7SBfETs62883FFJf7FeT1/5UVu43MrqNdeEZ5
GwqMy4SqzthFTHvInofew/Np0QRTQj+/5gwlInDfMV0VebeNoJMBcLbjm0nFJzKF
HzjEdCEeYb/oJ9Lgiy6zGmB36mFNTc8mD4My43KXss9xYTL0aXWBPC+fsgPN7/Fm
Ti2XSR8gRb/siopdsabhioHPxzH/Lbz52fcrQIKEY+RP613/h*kaAFIr8HLV5ZKmg
HsGI2RO/kr4KKr16C6NHomwDP24CBdJRikHiNPD4tA=
-----END RSA PRIVATE KEY-----
```

Please contact us at (310)825-2418 during normal business hours to obtain the passphrase for your key.

1) Converting your key

If you are using a windows machine, please copy/paste the key into a text file and save it (we suggest calling it `id_rsa`). Please remember where you have saved the file, and what you have named it.

Depending on which ssh program you use, you might have to convert this text file into a keyfile format. In our examples, we will use the program PuTTY, which uses the ppk key format. If you use PuTTY, you must first convert the key via the PuTTYgen.exe program before you can use it. The latest version of PuTTY and PuTTYgen can be downloaded for free at:

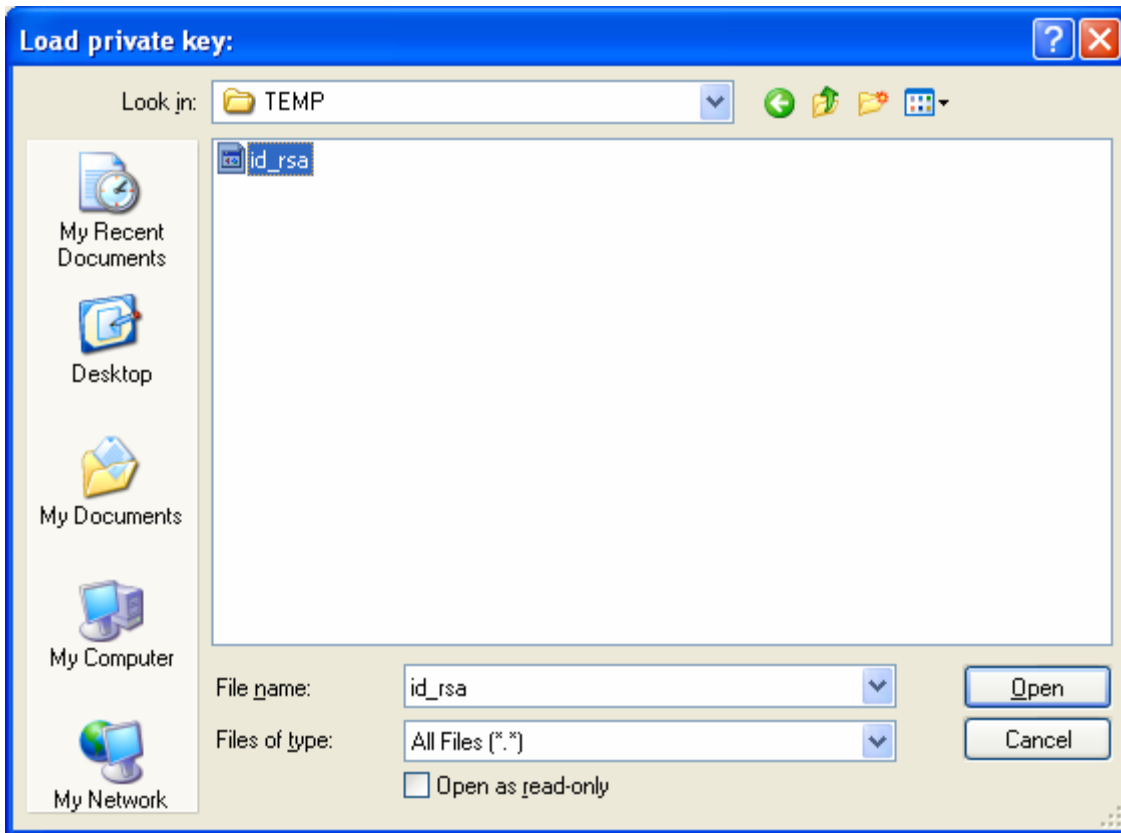
<http://www.chiark.greenend.org.uk/~sgtatham/putty/download.html>

To convert your keyfile to a ppk keyfile:

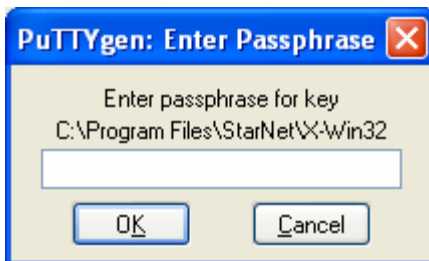
First, open up the PuTTYgen program:



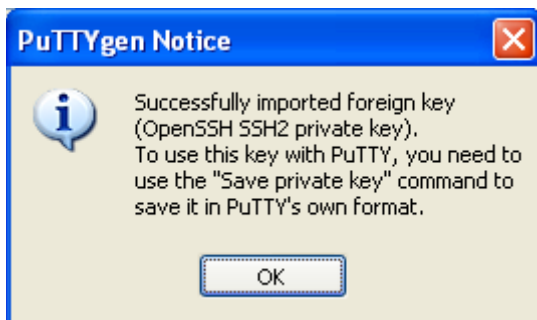
Click on the Load button, a new window will popup. Select the saved key file, and click Open

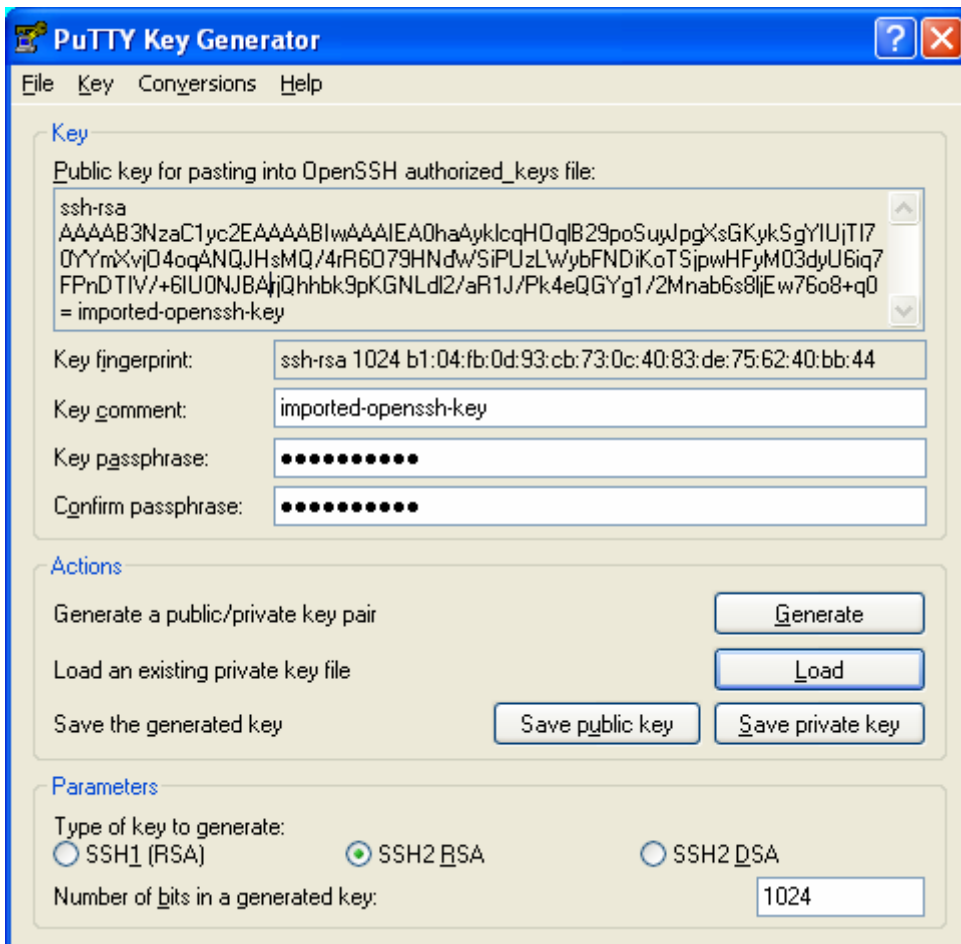


It will prompt you for your passphrase (the passphrase we gave you). Enter in the password, and click ok

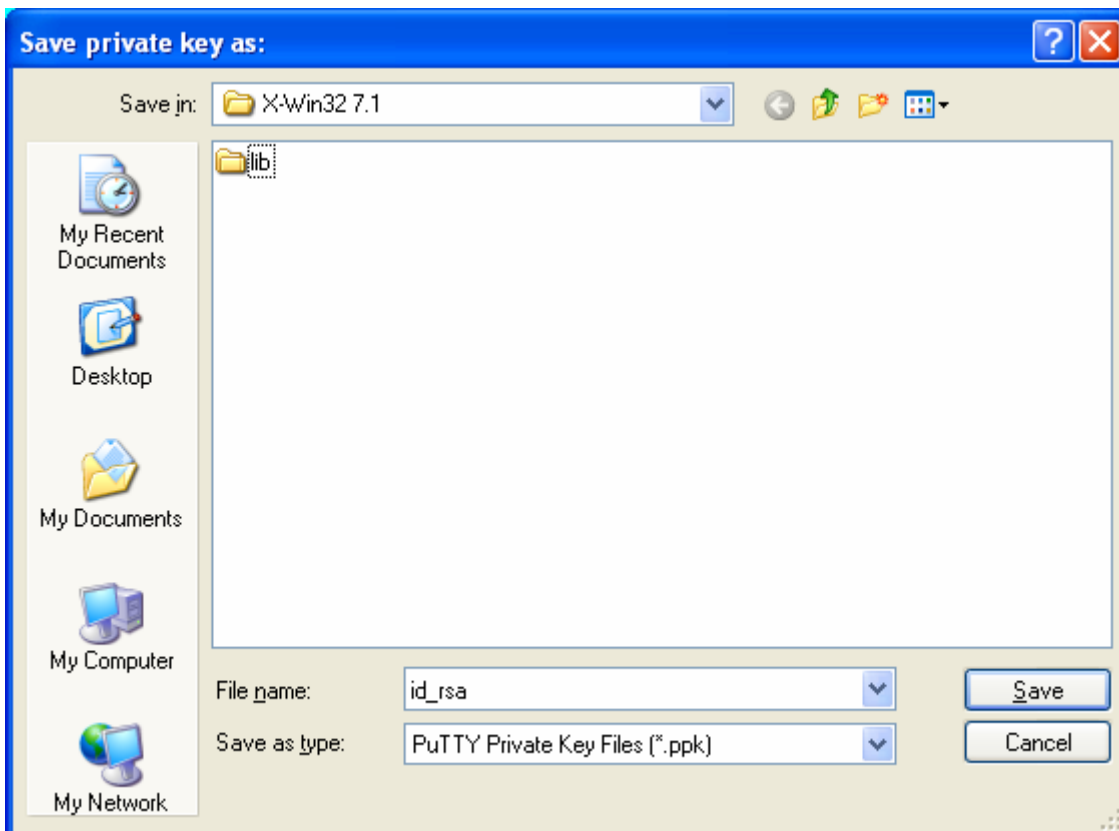


It will then give you a notice that your key was accepted. Click ok.





Then click the Save private key button, and enter a file name for the key file, and click the Save key.

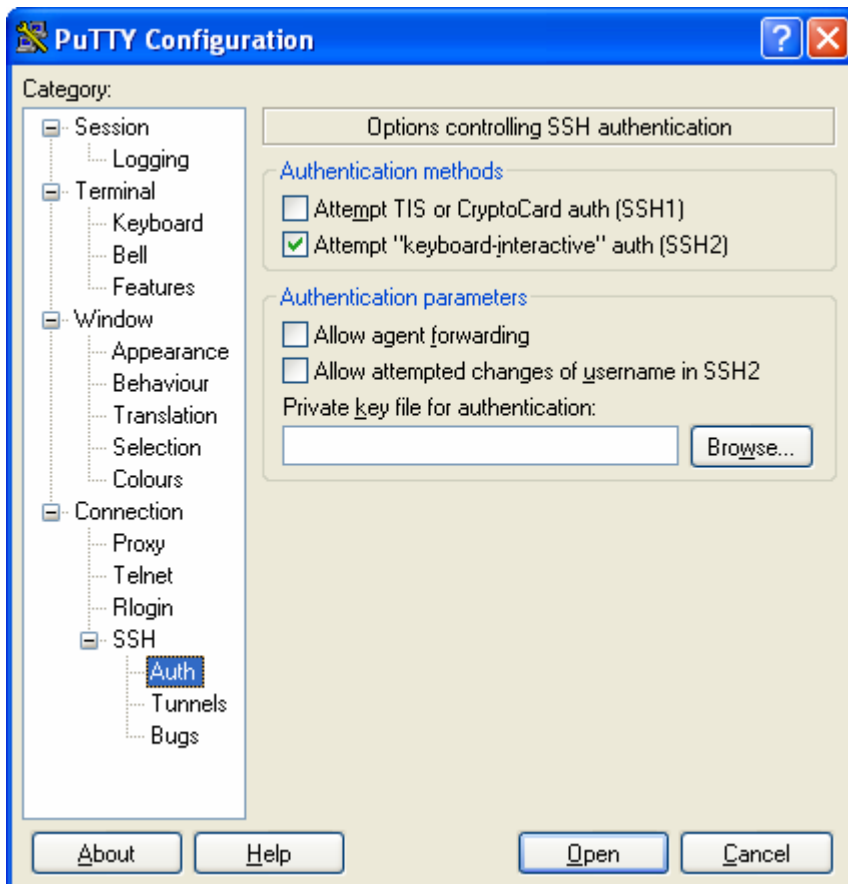


After you save the newly generated ppk key, you are ready to start connecting to the gateway.

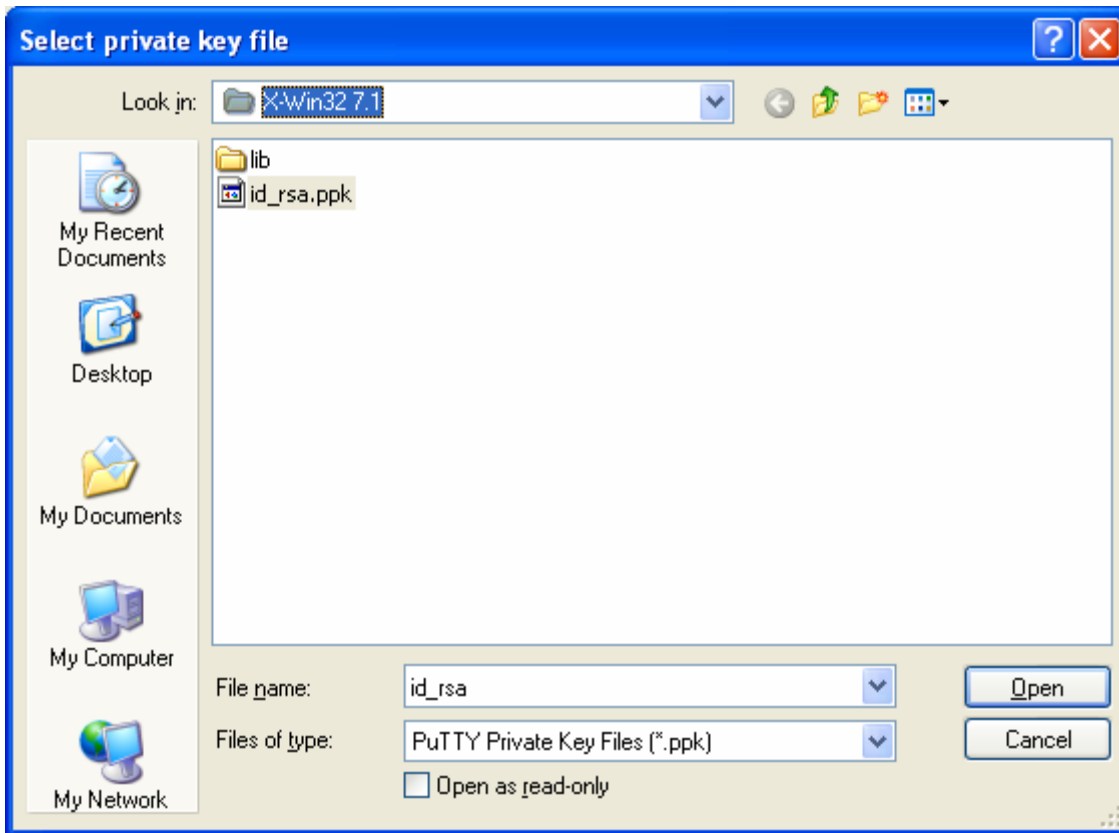
2) Connecting to the gateway machines

You must use ssh to connect to the gateway machines (gate1.atmos.ucla.edu and gate2.atmos.ucla.edu). For windows users, this means using a program like PuTTY.

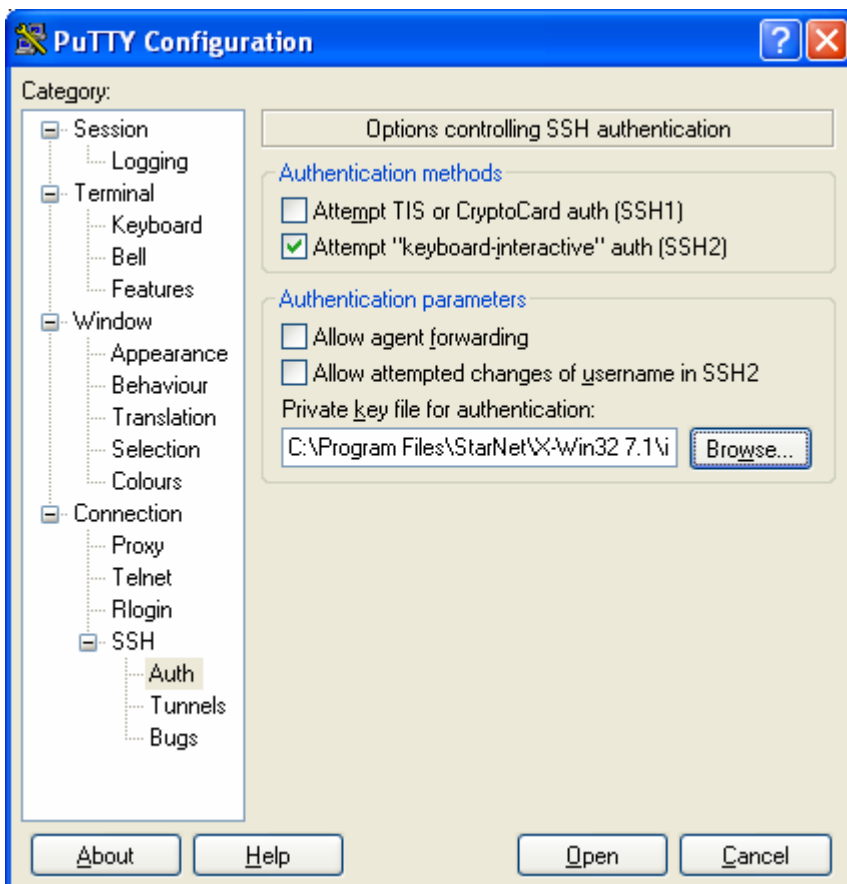
You will use the program PuTTY with the key you just generated. Start up PuTTY, click on the Auth sub category of SSH (which is the subcategory of Connection) in the category window.



Then click on the Browse button for the Private key file for authentication section, and select the appropriate saved SSH key. Click open



That brings you back to the main putty window:



Then click on Session in the Category window (left hand window). Enter in gate1.atmos.ucla.edu or gate2.atmos.ucla.edu, and port 22 under Port. Click open, and a window pops open, asking for your login. Enter it:



It will prompt you for your password (associated with your ssh key). Enter it, and press enter. If you successfully entered the passphrase, you should be logged in and greeted by the gate prompt:

```
gate (h for help) >
```

You are now on the gateway machine, and can login to your machines on the departmental network.

3) *Logging into a departmental computer from the gateway:*

--SSH into the gateway (as in step 1).

--At the gate prompt, enter the name of the workstation you want to login to, and enter the password when prompted. You can omit the domain name from the machine (e.g. for a machine named work.atmos.ucla.edu, you would only enter work at the prompt).

Example: Connecting to work.atmos.ucla.edu

Login to gate1 via ssh (using PuTTY), and at the gate prompt:

```
gate (h for help) > work
```

you would then be prompted for a password by the workstation work, and after successfully entering the password for your account, you would be connected to that workstation.

4) Using public key authentication for login from gate1 or gate2 to another departmental machine

You can setup keys from the gateway onto your departmental workstations. If you do this, you will no longer be prompted for a password when logging in from the gateway to your departmental machine (though you will still be prompted for your passphrase when logging into the gateways).

--ssh to one of the gate machines

--At the gate prompt enter "k" followed by the computer for which you like to use public key authentication. Example: To install a public key on work:

```
gate (h for help) > k work
```

You will be asked twice for your password for this computer. From that point on, when you login to gate, and type the name of that workstation (in this case, work), it will automatically log you in without prompting you for a password.

5) List of commands on the gateways:

h	Print help message.
hostname	Connect to hostname via ssh.
g	Generate a new password list.
G	Generate a new password list using only small letters and digits.
a	Activate a previously generated password list.
c	Copy password list to your Sun home directory.
p	Print password list.
e	Exit (logout).
k	Install an ssh public key on an Atmos. Sc. computer. You will be asked for the hostname of the computer and twice for your password for the machine. When done you will never again have to enter your password for this computer when logging in from a gate machine.
r	Replace/install your public-key for future login into gate1. (See ssh's documentation on public-key authentication.)

Example:

```
gate (h for help) > work  
Connects to work.atmos.ucla.edu via ssh
```