

## Get Connected Guide – Setting up ssh keys using Mindterm or PuTTY

Below are instructions for setting up optional ssh key-pair authentication using Windows ssh clients Mindterm and PuTTY.

### Mindterm Instructions

We highly recommend using Mindterm from a company called AppGate. It is free for individuals and has a limited free license for companies. Mindterm is a well supported Java implementation of SSH. We use it extensively at Sabalcore. It also includes an sftp plugin so you can easily transfer files from your Windows drives to your Sabalcore account. You will need java 1.3 or greater installed on your PC to use Mindterm.

Prerequisites: You will need a working JRE (java runtime environment) installation to use MindTerm. We suggest using the latest version of J2SE from <http://java.sun.com>.

1. Download the mindterm application. You can get mindterm from here: [http://www.appgate.com/index/products/mindterm/mindterm\\_download.html](http://www.appgate.com/index/products/mindterm/mindterm_download.html)
2. Unzip the file you just downloaded and copy the mindterm.jar file to a location from which you would like to run the application. All you need is the mindterm.jar file. You do not need a signed applet to use MindTerm as a customer to log into Sabalcore.
3. Launch mindterm.jar by double clicking its icon. Depending on your system, you may need to launch mindterm.jar manually. See the Readme.txt file that was included with MindTerm for more details.
4. To use the application, you must agree to the License Agreement.
5. Create the MindTerm home directory by selecting "yes" to the default location.
6. Select File->Create Keypair...
7. Mark the OpenSSH .pub format and enter a passphrase for the key. Note: this is unique and not the same as your password we supplied in your email. Choose the following options (these should be the default). The comment is optional.

Key type/format: DSA (ssh2)

Key length (bits): 1024

Identity file: identity

8. Click on "Generate" to create the key. You must move your mouse randomly inside the window to produce a unique key.
9. The public key is automatically copied to your clipboard. Open your email program and use Ctrl-v to paste your public key in the main body of a new message. If for some reason you loose the copy, go back to step 8 and generate a new key.
10. Email your public key to support@ sabalcore .com. Please include your name, day phone number, and the account name assigned to you in the message.
11. We will reply to your email once your key has been installed. You may then log into scicluster.com using your new key.
12. Once your key has been installed on Sabalcore, select "Settings->New Server" from the MindTerm menubar.
13. Enter scicluster.com for the server and your Sabalcore account name for the Username. Also select publickey for the Authentication. Then click on Connect.
14. Select "Yes" to create the hostskeys file if prompted.
15. Select "Yes" to add scicluster.com to your set of known hosts if prompted.
16. Once you are logged in, select "File->Save Settings" to save these options for later use.
17. You may now use MindTerm to log into Sabalcore by entering scicluster.com as the server when you launch MindTerm.

Note: If you use a different computer, you can take your private key with you, or generate a new key pair for the new computer. We will add additional public keys for you.

## PuTTY Instructions

Recommended: Connecting to Sabalcore securely by using an ssh key pair.

1. Download putty.exe, puttygen.exe, psftp.exe (and/or pscp.exe), pagent.exe from <http://www.chiark.greenend.org.uk/~sgtatham/putty/>
  2. Run puttygen.exe by double clicking it.
  3. Click "Generate" to generate a new key pair. You'll have to move your mouse randomly over the window while it generates the key.
  4. Enter your name and Sabalcore user account name in the Key comment, e.g. "my name, mnufchmo1". Note: you will see a default comment (something like rsa-key-20060502) but replace it with yours.
  5. Enter a Key passphrase. The passphrase should be unique and be any easy to remember phrase or sentence. Note: this is not the same as your password supplied in your email.
  6. Click on "Save public key" to save the public key to a file, e.g. sabalcore-key.pub
  7. Click on "Save private key" to save the private key to a file, e.g. sabalcore-key.ppk
  8. Close the PuTTY Key Generator window.
  9. Email the public key (sabalcore-key.pub) to support@sabalcore.com with subject "public key". We will install your key and email you when you can use it to log in. Return to step 10 after you receive email notification that your key has been installed.
  10. Run pagent by double clicking it. A small icon will appear in the system tray.
  11. Right click on the pagent icon in the system tray and select "Add Key".
  12. Select your saved private key and click open.
  13. Enter your passphrase and click ok.
  14. Run putty.exe by double clicking it.
  15. Enter username@scicluster.com for the Host Name, where username is your Sabalcore username.
  16. Click Open to connect to Sablecore's login server.
- You should be logged into Sabalcore at this point. pscp.exe and psftp.exe should automatically use your private key if the pagent is still running.