

How to Access Development Environment

This article describes how a developer user can access virtual machines (aka docker containers) for development.

Quick Summary

Example:

DevOps administrator created a Linux virtual machine (docker container) called gmat01 under the parent host (IP **192.168.1.10**) with SSH port **8901**.

Developer: user id=audacy, password=xxx (default password)

How to access:

For Mac or Linux users:

```
%ssh -p 8901 audacy@192.168.1.10
```

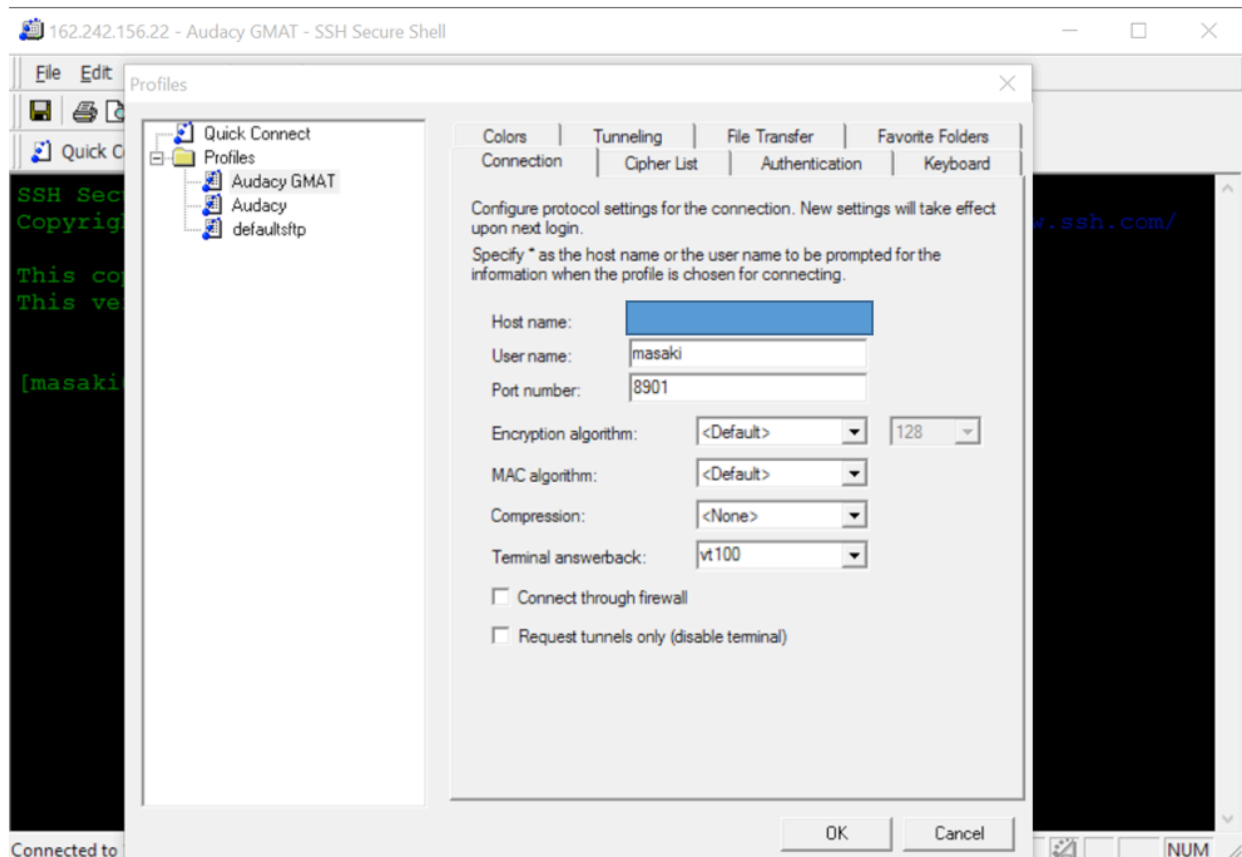
For Windows users:

You can install and use putty.exe (<http://www.putty.org/>). Once you open putty, you can create a SSH profile by specifying the following information:

Host name: 192.168.1.10

User name: audacy

Port number: 8901



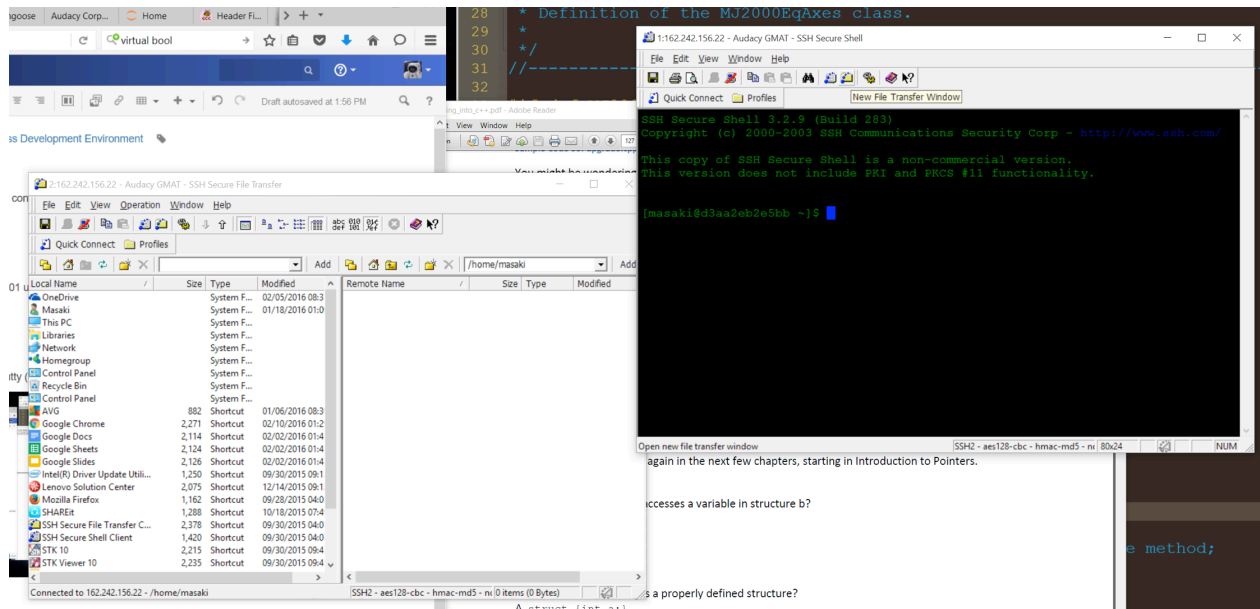
You can then click this profile to connect to the Linux machine. The latter will prompt you for the password.

How to copy files to/from the Linux host:

For Windows users:

You can re-use the same tool putty.exe to do file transfer between the Linux host and your laptop. From your putty application, select your SSH profile (defined for the Linux host earlier), and click the File Transfer icon. It will then bring up a window, which you can drag files from your laptop (left hand side) to the Linux host (right hand side), or vice versa.

I want to...	Linux Command Examples	Similar Windows Terminal Command Examples
list or show my files	<pre>%ls -al</pre> <pre>%ls -al /home/myUserName</pre>	<pre>\$dir/p</pre> <pre>\$dir/w</pre> <pre>\$dir \home\myUserName</pre>
find out how much memory I have or how many processes I run	<pre>%top</pre>	Open Task Manager (Control-Alt-Del key, or Windows All Apps Windows System Task Manager), look for the Processes or Performance tab.
change my login password	<pre>%passwd</pre>	From Windows Settings Accounts Sign-in options Password, you can change your password.
copy files between folders	<pre>%cp sourceFile destinationFile</pre>	<p>From File Manager, copy or drag files to your target folder.</p> <p>Alternatively, use the command "copy", e.g. copy sourceFile destinationFile.</p>
execute commands using root administrative access rights, add the prefix "sudo"	<pre>%sudo mv oldFileName newFileName</pre> <pre>%sudo mkdir -p newFolderName"</pre>	You need to login as administrator (assuming you have the id and password).
compile your c programs, e.g. "gcc hello.c". If you create a Makefile, issue the command "make".	<pre>%gcc hello.c</pre> <pre>%make</pre>	You can install Visual Studio to compile your C/C++ programs.
change ownership (access rights) of your file or folder, e.g. sudo chown -R xxx:xxx <filename>" where xxx is your user id, and -R is recursive (good for changing all files within a folder). For example, "sudo chown -R masaki:masaki /opt/gmat" will change all files under the folder /opt/gmat to the user 'masaki'.	<pre>%sudo chown -R audacy:audacy /opt/gmat</pre>	You need to login as administrator (assuming you have the id and password).



Summary of Linux Commands for Quick Access

Once you login to your Linux host (docker container), you can use these commands for your day to day use:

You may notice that:

- Your home directory is usually /home/xxx (where xxx is your user name).
- Shared folders may reside in /opt/xxx, e.g. /opt/gmat (In future, we'll back up this shared folder periodically)
- If your Linux system complains access denied or insufficient access issue, you can use 'sudo' (add sudo prefix to your command). You may also check if you have sufficient access rights in your shared folder.