

Command Line SSH

☞ Secure Shell Access

Command line access via a Unix terminal/shell is the most reliable, powerful method of accessing CEMC systems remotely.

NOTE: As of 2021, secure shell remote access to CEMC systems is only available 1) from other CEMC computers, such as those in Studios B, C, and D, or by using Cornell's VPN. The VPN must be running on your system before following the steps below. More information here:

<https://it.cornell.edu/cuvpn>

To login to CEMC computers remotely, open a terminal shell (on Mac, Applications --> Terminal; on Windows use Cygwin; on Linux use the standard terminal). Then at the command prompt type:

```
ssh USERNAME@REMOTE_MACHINE_NAME
```

...where USERNAME is the username you intend to use remotely and REMOTE_MACHINE_NAME is the name of the machine you wish to access, for example `studiouser@digital.music.cornell.edu`.

CEMC systems are named as follows:

studioa-kme32.digital.music.cornell.edu (B27 studio system)
digital.music.cornell.edu (CEMC main server)

Once logged in, you will be able to access CEMC's unix environment for music, including generating and even playing audio files.

☞ Secure Shell Copying

To copy files to and from local or remote computers, use the scp (secure copy) command. The syntax is identical to ordinary copying with cp.

```
scp FILE_TO_COPY DESTINATION
```

Unlike cp, the file to copy and/or their destination may be a remote computer. The user must specify the remote machine name and directory as a prefix. So for example, to copy a local file named myfile to my remote home directory on digital.music.cornell.edu, I would type:

```
scp myfile digital.music.cornell.edu:/home/kevinernste/
```

Note the colon ":" between the machine name and the directory in the destination argument. This syntax should be followed carefully.

As with cp (and other Unix commands), all unix "wildcards" will work, so:

```
scp * digital.music.cornell.edu:/home/kevinernste/
```

...will copy all files in the current directory to the destination directory on digital. To copy directories and subdirectories, just add "-r" (for "recursive"), so:

```
scp -r * digital.music.cornell.edu:/home/kevinernste/
```

☞ *GUI SSH software*

If you wish, there are also several graphical SSH/SCP/SFTP clients available. Most are limited to simple file copying, but some include terminal shell functions as well. To peruse the list of clients available for your operating system of choice, please visit openssh.com and follow the links in the left-hand panel.