

CAAM519, Homework #2: L^AT_EX Submission

qc18

September 30, 2021

1 Communicating with remote machines via ssh

1. ssh qc18@ssh.clear.rice.edu

2.

Warning: Permanently added the ECDSA host key for IP address '128.42.124.179' to the list of known hosts.

The Rice University Network - Unauthorized access is prohibited

qc18@ssh.clear.rice.edu's password:

Permission denied, please try again.

qc18@ssh.clear.rice.edu's password:

Last failed login: Wed Oct 13 20:46:17 CDT 2021 from 104-190-24-17.lightspeed.hstntx.sbcglobal.net on

There was 1 failed login attempt since the last successful login.

Last login: Tue Sep 14 14:34:09 2021 from 104-190-24-17.lightspeed.hstntx.sbcglobal.net

The Rice University Network

=====

Unauthorized use is prohibited.

This computer system is for authorized users only. Individuals using this system without authority or in excess of their authority are subject to having all their activities on this system monitored and recorded or examined by any authorized person, including law enforcement, as system personnel deem appropriate. In the course of monitoring individuals improperly using the system or in the course of system maintenance, the activities of authorized users may also be monitored and recorded. Any material so recorded may be disclosed as appropriate. Anyone using this system consents to these terms.

Problems and/or questions should be submitted via the problem tracking system form: <http://helpdesk.rice.edu>

CURRENT USAGE AND LOAD ON THE COMPUTE NODES:

Wed Oct 13 20:45:01 CDT 2021

System	# Users	Load (5, 10, 15 minute)
agate.clear.rice.edu	4	0.09, 0.18, 0.20
amber.clear.rice.edu	7	0.08, 0.10, 0.11
cobalt.clear.rice.edu	0	0.01, 0.02, 0.05
jade.clear.rice.edu	5	0.09, 0.05, 0.05
onyx.clear.rice.edu	1	0.10, 0.08, 0.09
opal.clear.rice.edu	9	0.58, 0.45, 0.71
pyrite.clear.rice.edu	4	0.01, 0.05, 0.06

NOTE: !!!

Please log an RT ticket for any issues you may have.

Please log a ticket at <https://help.rice.edu> if you have any of the following:
Feel documentation is lacking.
Have trouble getting into the system.
Feel the system is missing a tool.

NOTE: svn.rice.edu is now READ ONLY in preparation for removal from service on January 8th, 2022

NOTE: If you don't have a home drive when using Clear, please create a ticket in help.rice.edu Be sure to put "need clear home directory" in the subject and one will be setup for you.

NOTE: New tools available. Maven 3.8.2, gcc 9.3.1, java 11, clang 11.0.1, julia 1.6.1, python 3.9.1, vim 8.2 w/ python support.
Plus special purpose applications:
Circuit Design (ngspice, magic), Network Simulation (ns-3).
See kb.rice.edu for details.

CLEAR NEWS -- <https://kb.rice.edu/internal/page.php?id=71856>
Tips and Hints -- <https://kb.rice.edu/internal/page.php?id=71857>

3. \$ echo \$HOSTNAME
onyx.clear.rice.edu

4. \$ PS1=">"

2 A script to build a latex document while hiding auxiliary files

```
#!/bin/bash

#make a hidden directory in the current directory named .build and
mkdir -p .build

#comple the project.tex
pdflatex -output-directory=.build $1.tex

#check for file not of type ".tex" and ".pdf" and move them into .b
for file in $1.*
do
if [[ $file != "$1.tex" && $file != "$1.pdf" ]]
then
mv $file .build
fi
done
```

Listing 1: Content of "clean-build.sh"

3 Critiques of my code

1. If someone else uses my shell script without permission, it may fail.
2. If someone input the project name with ".tex", it may fail since we append ".tex" in the script.