

COMP 696: Advanced Parallel Computing

Lecture : X11 Forwarding with SSH

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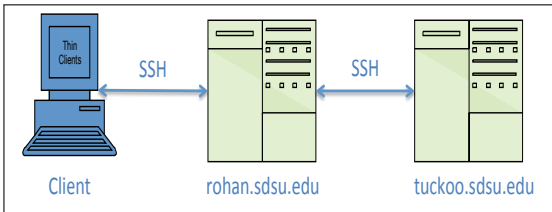
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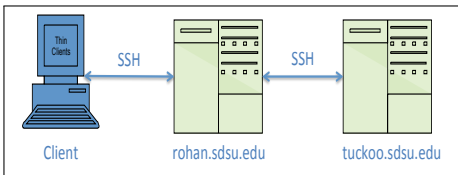
- 1 SSH Forwarding

SSH login to tuckoo.sdsu.edu



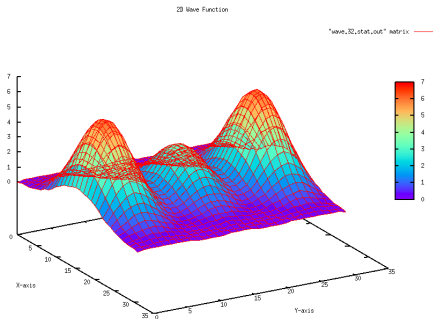
- tuckoo.sdsu.edu is on the SDSU internal network
- rohan.sdsu.edu is accessible from external networks
- Launch an *SSH* terminal on your computer
- *SSH* onto rohan:
`%ssh rohanUserName@rohan.sdsu.edu`
- *SSH* onto tuckoo:
`%ssh tuckooUserName@tuckoo.sdsu.edu`

Setting up X11 (xterm) using SSH Forwarding



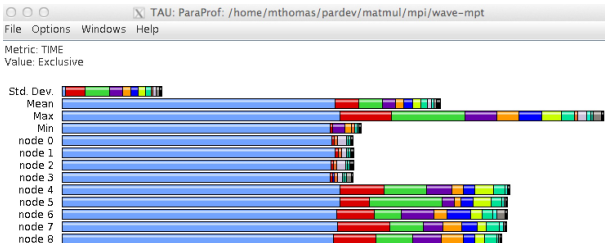
- Launch *SSH* X11 terminal on your computer
- *SSH* onto rohan (OS X):
`%ssh -Y rohanUserName@rohan.sdsu.edu`
- *SSH* from rohan to tuckoo:
`%ssh -Y tuckooUserName@tuckoo.sdsu.edu`
- Software required: some for of X11 window application
 - OSX: XQuartz X Window System
 - Windows: Xming or PuTTY (select Connection/SSH/X11)
- To Test, run the command `% xclock &`

Visualize interactive Gnuplot images



"Wave" Generator using parallel MPI code, wave-dyn.c, running on tuckoo to caculate Airy Disk Function ($N=32, f=0.5, g=0.25, s=4$)

TAU Profiler: ParaProf



Profile of time spent in functions for wave-dyn.c, running on tuckoo to calculate Airy Disk Function ($N=32, f=0.5, g=0.25, s=4$)

SSH / X11 Refs

- <http://www.seas.upenn.edu/cets/answers/x11-forwarding.html>
- <http://en.tldp.org/HOWTO/XDMCP-HOWTO/ssh.html>
- <http://www.arsc.edu/arsc/knowledge-base/ssh-and-x11-forwarding-us/index.xml>