

## Tutorial on Linux Sockets Programming....

We use two examples:

- UDPEcho2.tar.gz : a simple UDP-based ping program
- perfTool.tar.gz : builds on the UDP ping program, to provide an assessment tool involving the sending and reception of a stream of UDP packets

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# Overview

## Downloading the code....UDPEcho2.tar.gz

On the machine you will use to build and run the code, start a term session

- >wget <http://www.cs.clemson.edu/~jmarty/courses/SocketsTutorial/code/UDPEcho2.tar.gz>
- >ls -lt UDPEcho2.tar.gz
- >gzip -d UDPEcho2.tar.gz
- >tar -tf UDPEcho2.tar
- >tar -xf UDPEcho2.tar
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Building the code- assumes Linux (modify Make.defines if on MAC OS)

- -edit Makefile and find the line "DO NOT DELETE" and delete all lines after this (yes...confusing!!)
- -To build:
- >make clean

- >make
- -Issue an ls -lt and verify ./client and ./server were generated

## Running the code

- -First, make sure the server is started. On the server (assume its name is mymachine.clemson.edu and we want to run the server on port 5000)
- >./server 5000
- -Next, start the client on whatever machine you like. Note....it must have connectivity with the server. To test....issue a ping mymachine.clemson.edu)
- >./client mymachine.clemson.edu 5000 1 1000 100

# Downloading the code....perfTool.tar.gz

On the machine you will use to build and run the code, start a term session

- >wget <http://www.cs.clemson.edu/~jmarty/courses/SocketTutorial/code/perfTool.tar.gz>
- >ls -lt .tar.gz
- >gzip -d 2.tar.gz
- >tar -tf .tar
- >tar -xf .tar
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Building the code- assumes Linux (modify Make.defines if on MAC OS)

- -edit Makefile and find the line "DO NOT DELETE" and delete all lines after this (yes...confusing!!)
- -To build:
- >make clean
- >make
- -Issue an ls -lt and verify ./perfClient and ./perfServer were generated

## Running the code

-First, make sure the server is started. On the server (assume its name is mymachine.clemson.edu and we want to run the server on port 5000)

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