

Overview

In this assignment you will create a networked date/time server and a client to access the server.

The basic interaction between the client and server should be as follows:

- Server establishes connection and listens for incoming client requests.
- Client connects to server and sends ASCII request "What is the current date and time?"
- Server responds with "Current Date and Time – 09/29/2016 09:00:01"
- Client closes connection, server stays running listening for next connection

Detailed Requirements

Server

- Only required to handle one client interaction at a time
- Can listen on any IP & port you choose
- Must respond to invalid requests with an error message
- Valid request is "What is the current date and time?"
- Response to valid request must be in the format:
"Current Date and Time – MM/DD/YYYY hh:mm:ss"

Client

- Allows user to enter text commands to be sent to the server
- Displays response back from server

Note - You can use the Python_Server.py and Python_Client_py files from Assignment #1 as your starting point or you can start from scratch if you prefer.

Procedure

Part A – Develop your Applications

Using the information above, design and implement your applications using Python. (As discussed in class you can use Python 3 or 2.7 but please make sure to indicate the version when you submit the assignment!)

You will be graded on the following:

- Design and function of your applications
- Documentation within your applications (Yes, it is important. No one wants to work on undocumented apps)

Part B – "Sniff" Request/Response between Server and Client apps

Using Wireshark (running on the machine hosting the Server app), capture the traffic between your client and server applications and take a screen shot of the TCP packet showing the response back from the server. The response will contain the Date/Time data.: