

Andrew HYTE
CS 360
hytea
2/24/14

Report on scientific data in relation to the download accelerator

Method:

The data was collected running the downloadAccelerator.py which I wrote with a program called Experiment.py which was provided to me by my professor. Experiment.py runs the download for each file size 10 times with 1, 2, 3, 5, and 10 threads and writes the data including download time to a file. Totaling 150 downloads worth of data. That is given to a plot.py which takes that data and plots it on a chart giving us the visuals attached.

I ran the programs on a linux machine in the BYU Talmage Building at approx. 1Pm on 2/24/2014.

I ran the experiment.py on the files hosted at corbt.com:

Input:

List of URLs to download (corbt VPS) -- try these first

```
("small","http://corbt.com/files/design-philosophy-sigcomm-88.pdf"),  
("medium","http://corbt.com/files/Delta-Rae-Morning-Comes-Live.mp3"),  
("large","http://corbt.com/files/poster.pdf")
```

Results and Conclusions:

By looking at the data and visuals it is apparent that the download times decreased as the number of threads increased. The graphs show the decrease in download times best on the medium sized file download graph. It is visually apparent that as the number of threads increases the time to download also decreases. This is most likely due to the division of the files and bandwidth allotment from the corbt.com servers since BYU's maximum bandwidth allotment is most likely very high at any time. I think the experiment gave me good data because of this difference in bandwidth from those servers to BYU. It would not have been as good of data if I were on a slow internet connection to a fast internet connection.