
Subject: Re: Socket Communication 101

Posted by [nlneilson](#) on Tue, 16 Apr 2013 20:43:45 GMT

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Thanks for the link.

The socket is just 'sending' data from the Upp app to a Java app.

There is no internet connection necessary but I do have a 100 MB connection.

The errors were shown up in the Java display app.

Here are a few lines from a file I open in Upp

```
// SW corner 35.028940,-117.970440,804.4 from S20 35.028928,-117.970460
```

```
35.04361500,-117.96188300
```

```
c,35.036235,-117.961830,35.036335,-117.961730
```

```
c,35.043615,-117.961883,35.028850,-117.961610 // correct ?? N 1/4 corner
```

```
c,35.043617,-117.962056,35.028850,-117.961610 // old      N 1/4 corner
```

```
c,35.036291,-117.970649,35.036184,-117.952831
```

```
c,35.028940,-117.970440,35.028759,-117.952780
```

```
c,35.028759,-117.952780,35.043566,-117.952887
```

```
c,35.043663,-117.970880,35.043617,-117.962056
```

```
c,35.043617,-117.962056,35.043566,-117.952887
```

```
c,35.028940,-117.970440,35.043663,-117.970880 //W
```

```
// Farm
```

```
c,35.036291,-117.970649,35.036235,-117.961830
```

```
c,35.036235,-117.961830,35.037156,-117.961853
```

```
c,35.037156,-117.961853,35.037189,-117.966238
```

```
c,35.037189,-117.966238,35.039954,-117.966357
```

```
c,35.039982,-117.970770,35.039954,-117.966357
```

Each line that starts with c, is a path with two points and the other lines are ignored. Sometimes survey data is represented degrees, minutes and seconds rather than decimal degrees so the data is 'formatted' to decimal degrees and checked for like a latitude greater than 90 degrees, etc..

Most survey data is E->W or N->S that I am using.

Sending the data as a packet for each line without an adequate Sleep time many of the paths are diagonal as the points are out of order. Using print statements shows the data is not in order also.

Putting all the data in one buffer and sending in one packet all the data is received and displayed correctly.

Using shared memory between C++ and Java may be faster but was more complicated so a socket is being used.

This is displayed correctly, the two diagonal lines near the bottom is intended.
<http://www.nlneilson.com/wwposts/Survey-Paths.png>

The upper left is the Upp app.

This displays the errors:

<http://www.nlneilson.com/wwposts/Survey-Paths-errors.png>
