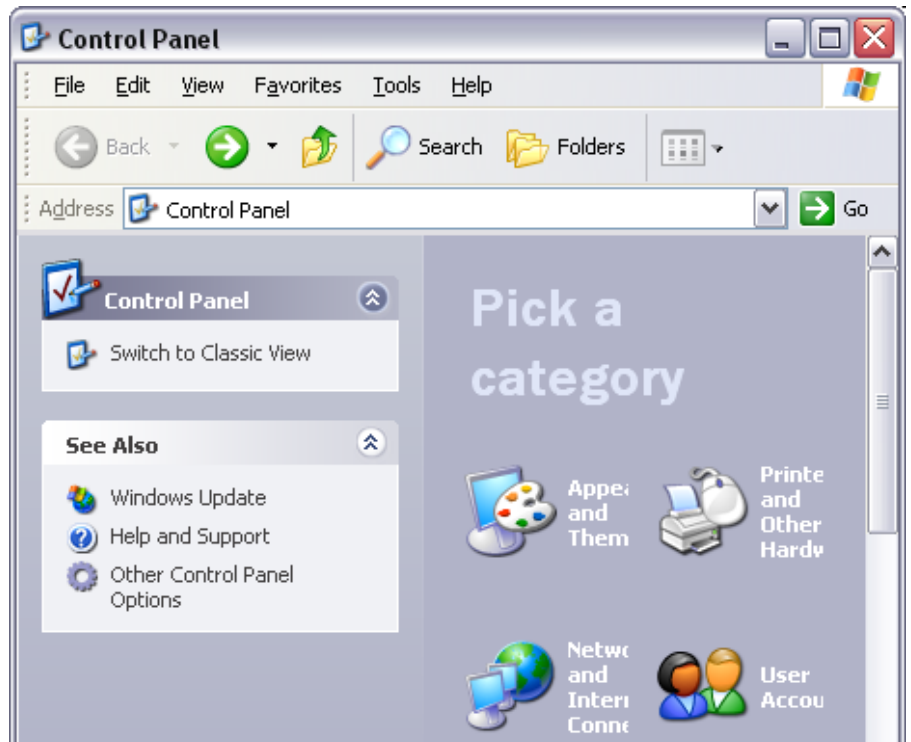


Using RUINET to Edit the Config.csv File and Verify PT Link Communications

1. Copy the contents of the PT Link CD to your PC's Desktop. You can also download the files here, <http://orioncontrols.com/software/PT-LinkApps-5-04-10.zip>. It is easiest to unzip the files to your Desktop.
2. You now need to connect the Crossover Ethernet cable between your PC and the PT Link and change your IP Address. To change your IP Address click your start button and then click on your Control Panel.



3. If you see this window, click the link on the left to 'Switch to Classic View'

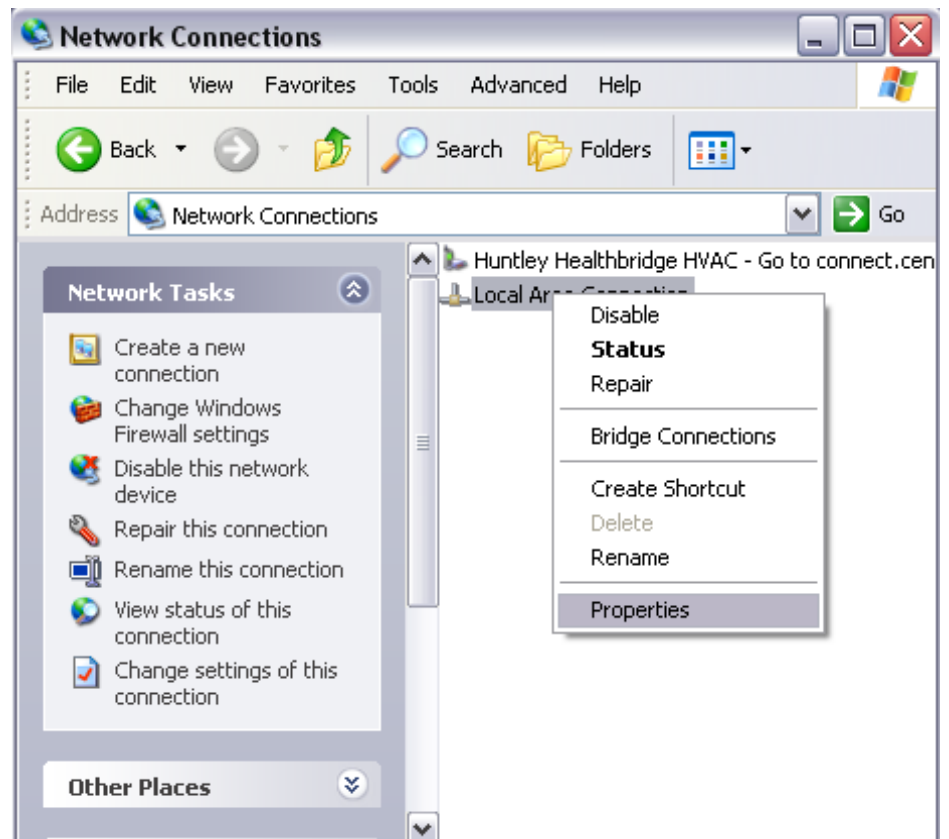


Using RUINET to Edit the Config.csv File and Verify PT Link Communications

4. Once in Classic View, double-click on 'Network Connections'

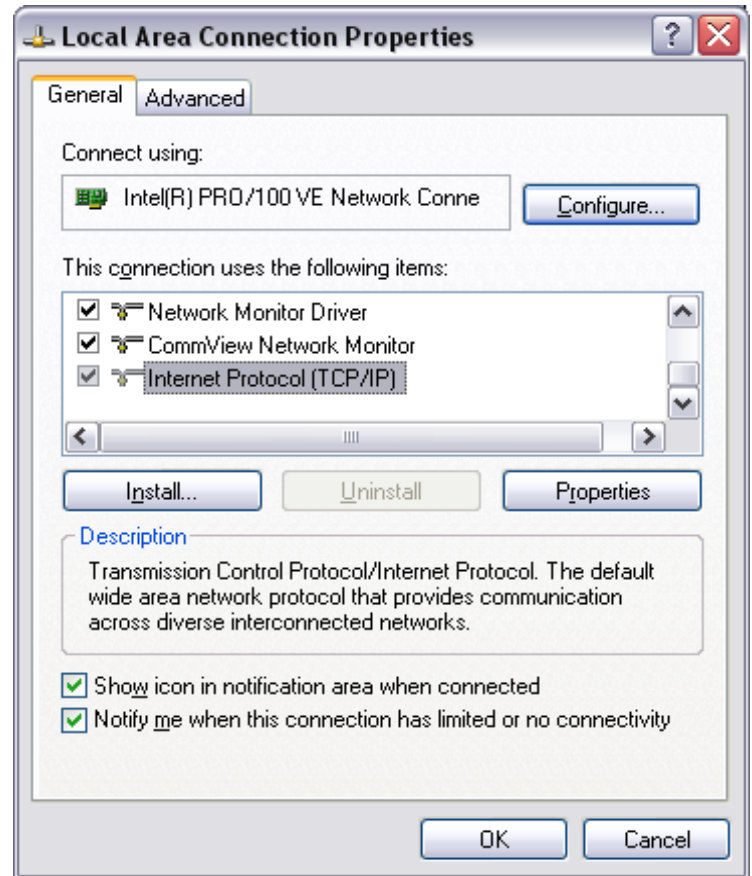


5. Now right-click on Local Area Connection and select Properties



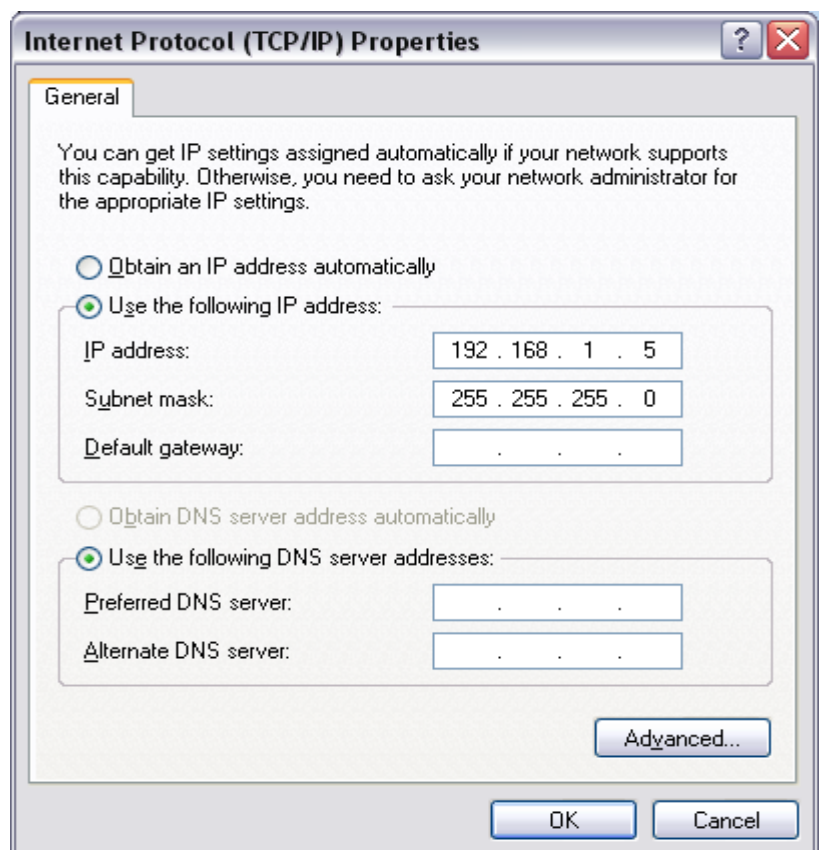
Using RUINET to Edit the Config.csv File and Verify PT Link Communications

- Left-click on Internet Protocol so it is highlighted and click properties.



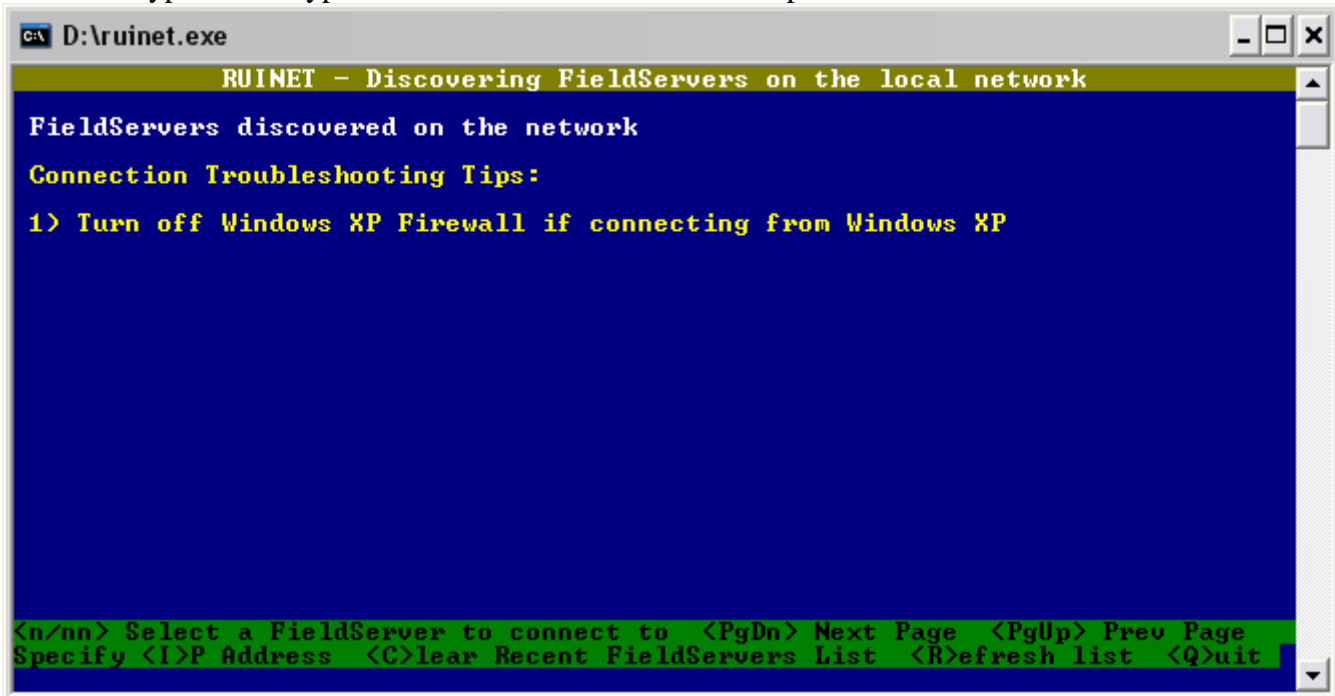
- Click 'Use the following IP Address' and enter the following, then click OK.

*Make a note of your default settings so that once you are done configuring the PT Link you can return to them.



Using RUINET to Edit the Config.csv File and Verify PT Link Communications

- Open RUINET. You may not immediately connect to the PT Link and see this screen. If you see this screen type 'I' and type the IP Address 192.168.1.24 and press 'Enter'.



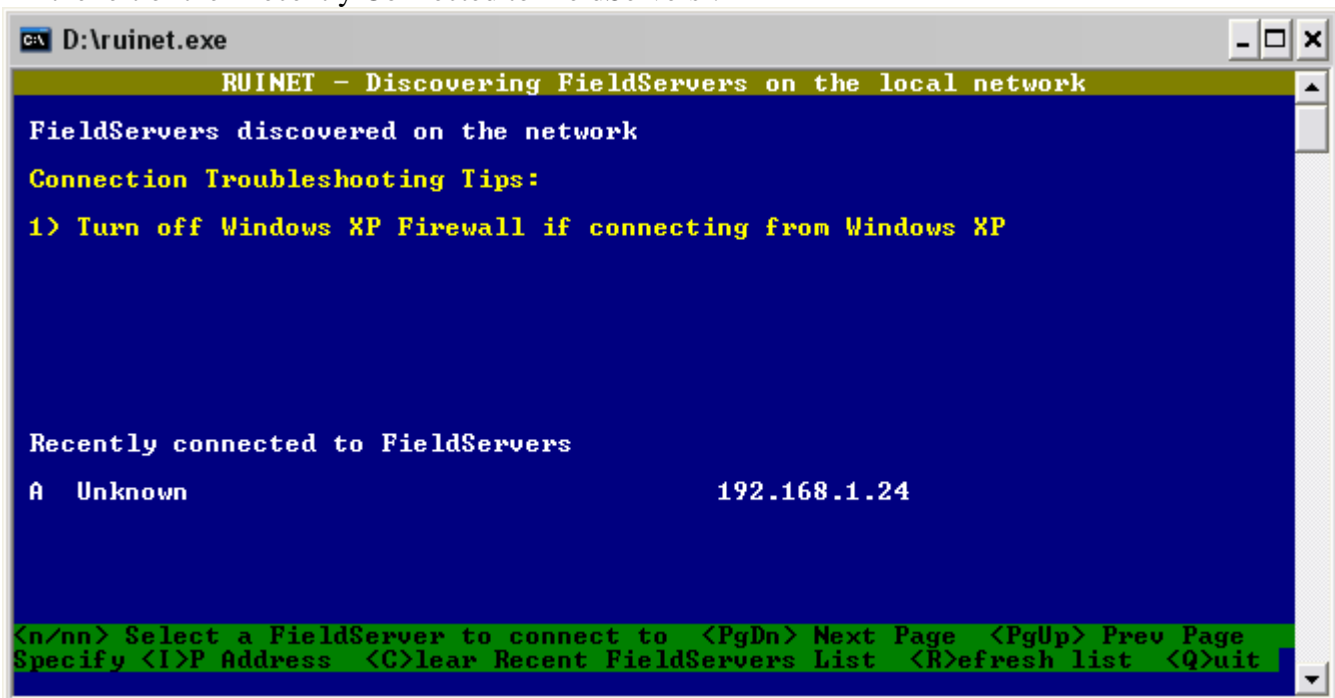
```

c:\ D:\ruinet.exe
RUINET - Discovering FieldServers on the local network
FieldServers discovered on the network
Connection Troubleshooting Tips:
1) Turn off Windows XP Firewall if connecting from Windows XP

<n/nn> Select a FieldServer to connect to <PgDn> Next Page <PgUp> Prev Page
Specify <I>P Address <C>lear Recent FieldServers List <R>efresh list <Q>uit

```

- On subsequent connections you may see this screen. From here you can type the letter 'A' which you see to the left of the 'Recently Connected to FieldServers'.



```

c:\ D:\ruinet.exe
RUINET - Discovering FieldServers on the local network
FieldServers discovered on the network
Connection Troubleshooting Tips:
1) Turn off Windows XP Firewall if connecting from Windows XP

Recently connected to FieldServers
A Unknown 192.168.1.24

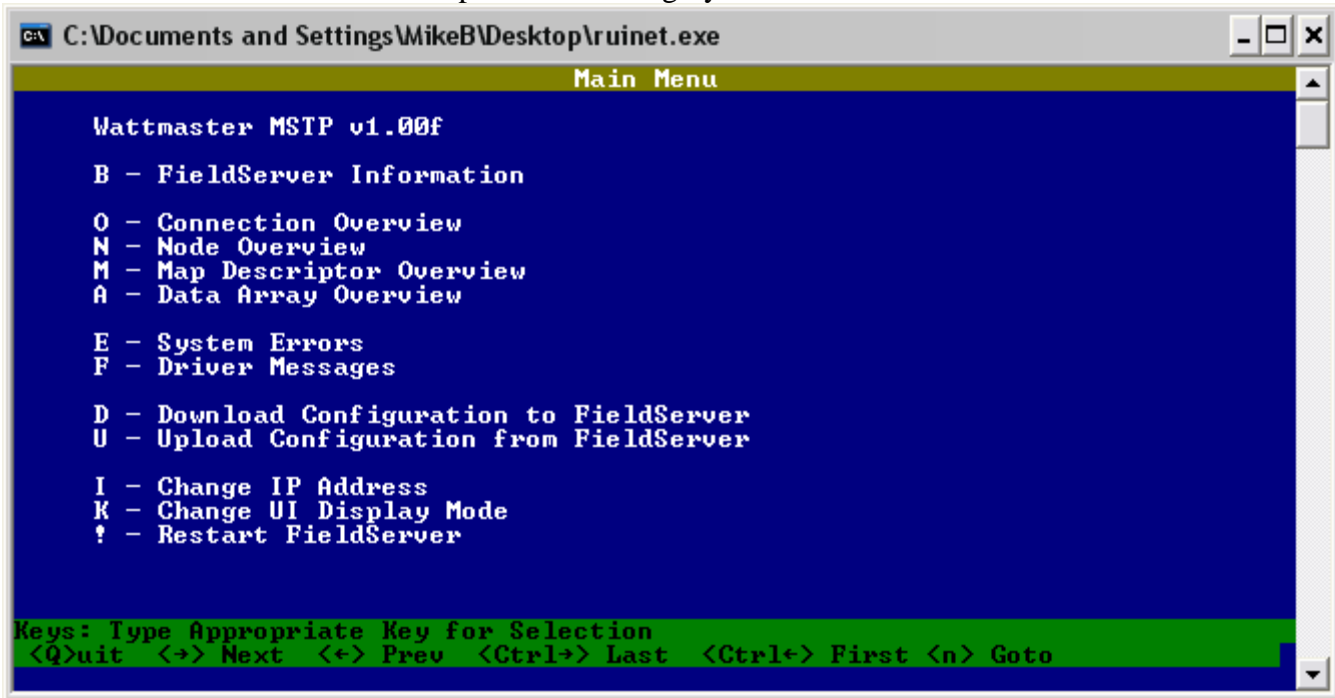
<n/nn> Select a FieldServer to connect to <PgDn> Next Page <PgUp> Prev Page
Specify <I>P Address <C>lear Recent FieldServers List <R>efresh list <Q>uit

```

Using RUINET to Edit the Config.csv File and Verify PT Link Communications

10. Once connected you will see the Main Menu.

PLEASE NOTE – if you are installing a Lon PT Link and the Lon BAS is using implicit addressing no changes need to be made to the config file and you can skip to step 21. Reference page 9 of the PT Link Lon Technical Guide for Explicit Addressing Syntax.



The screenshot shows a Windows command prompt window titled "C:\Documents and Settings\MikeB\Desktop\ruinet.exe". The window displays the "Main Menu" for "Wattmaster MSTP v1.00f". The menu options are listed as follows:

```
Wattmaster MSTP v1.00f

B - FieldServer Information
O - Connection Overview
N - Node Overview
M - Map Descriptor Overview
A - Data Array Overview

E - System Errors
F - Driver Messages

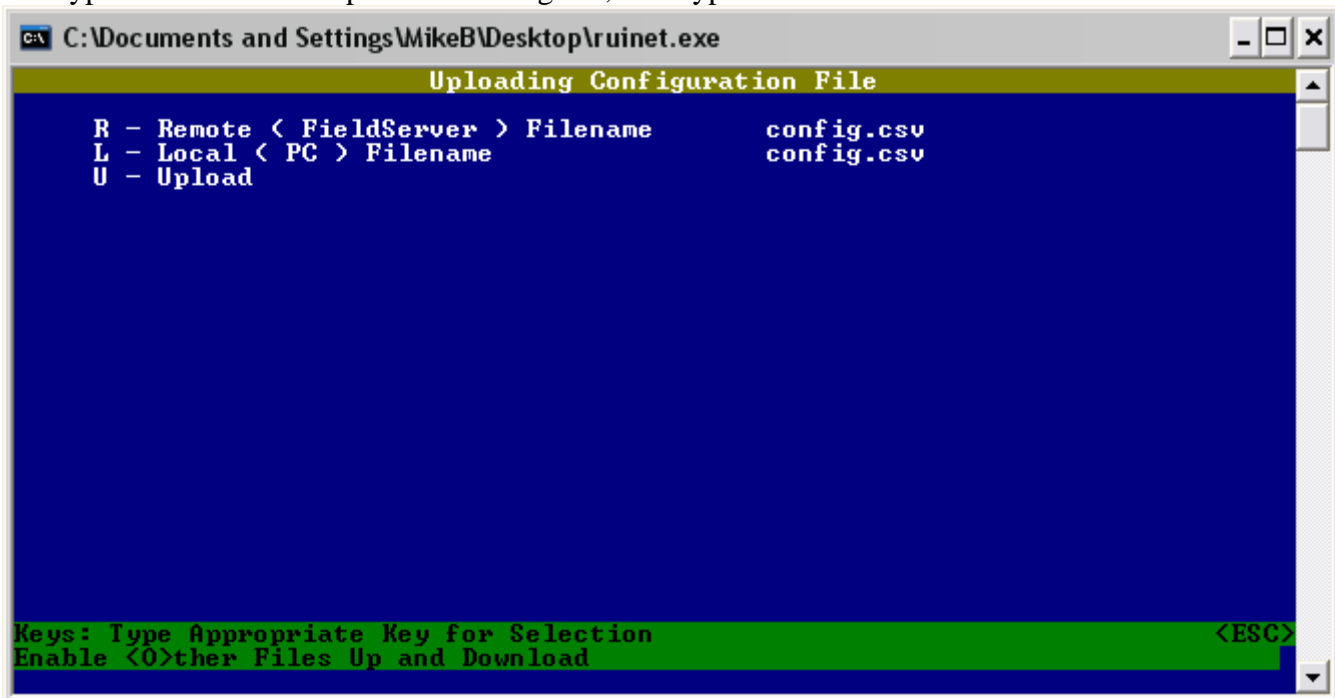
D - Download Configuration to FieldServer
U - Upload Configuration from FieldServer

I - Change IP Address
K - Change UI Display Mode
! - Restart FieldServer
```

At the bottom, a green bar contains the following key instructions:

```
Keys: Type Appropriate Key for Selection
<Q>uit <+> Next <+> Prev <Ctrl+> Last <Ctrl+> First <n> Goto
```

11. Type the letter 'U' to upload the config file, then type 'U' once more at this screen



The screenshot shows the "Uploading Configuration File" screen in the ruinet.exe application. The options are:

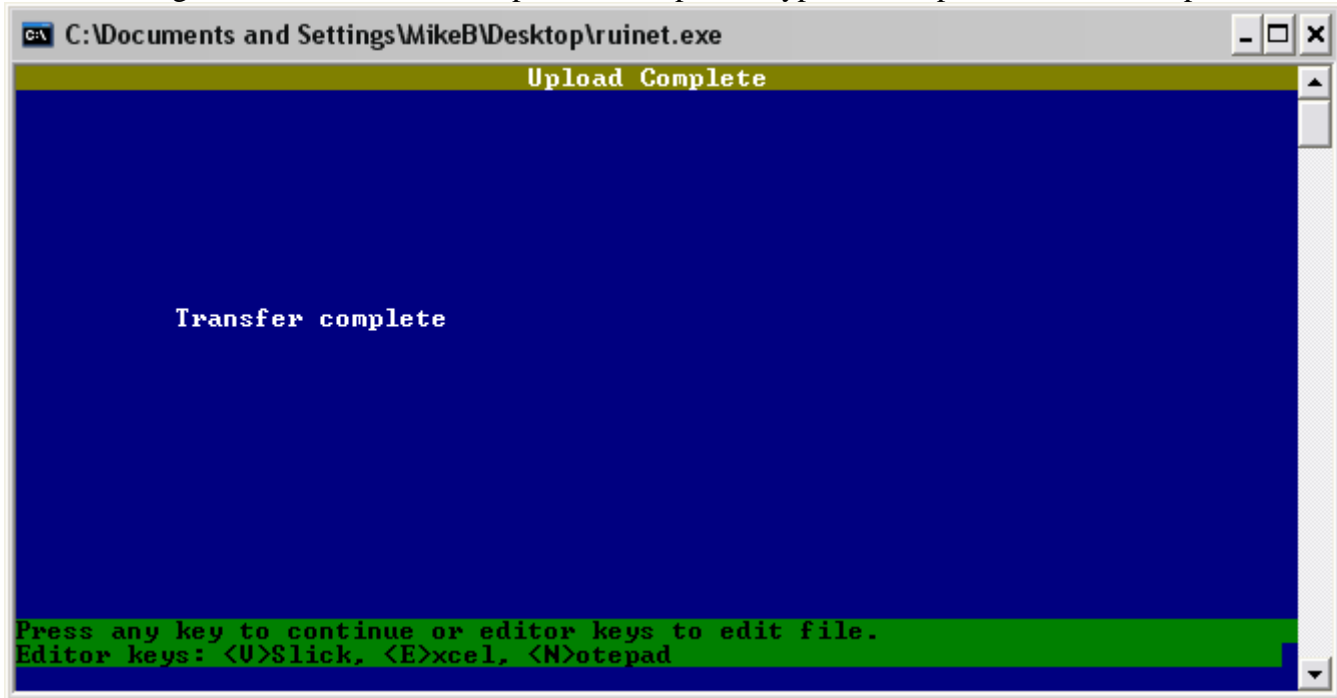
```
R - Remote < FieldServer > Filename      config.csv
L - Local < PC > Filename                 config.csv
U - Upload
```

At the bottom, a green bar contains the following key instructions:

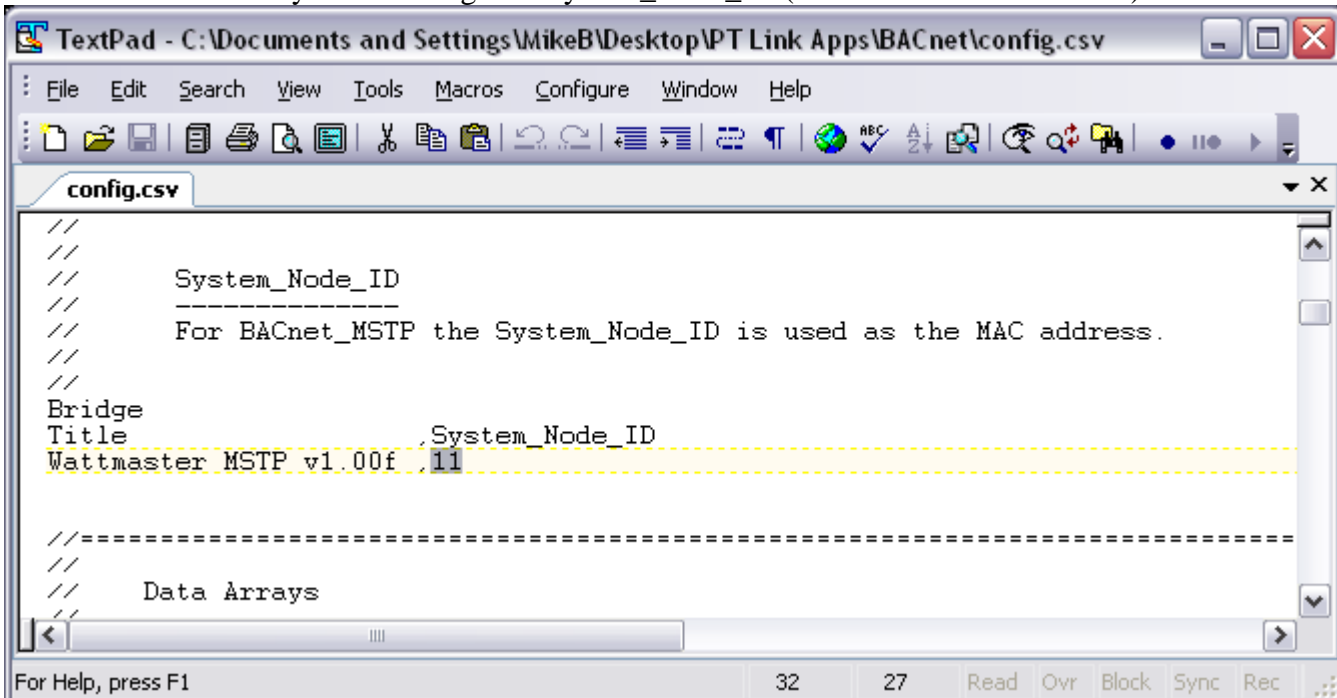
```
Keys: Type Appropriate Key for Selection      <ESC>
Enable <O>ther Files Up and Download
```

Using RUINET to Edit the Config.csv File and Verify PT Link Communications

12. You will get confirmation that the upload is complete. Type 'N' to open the file in Notepad.

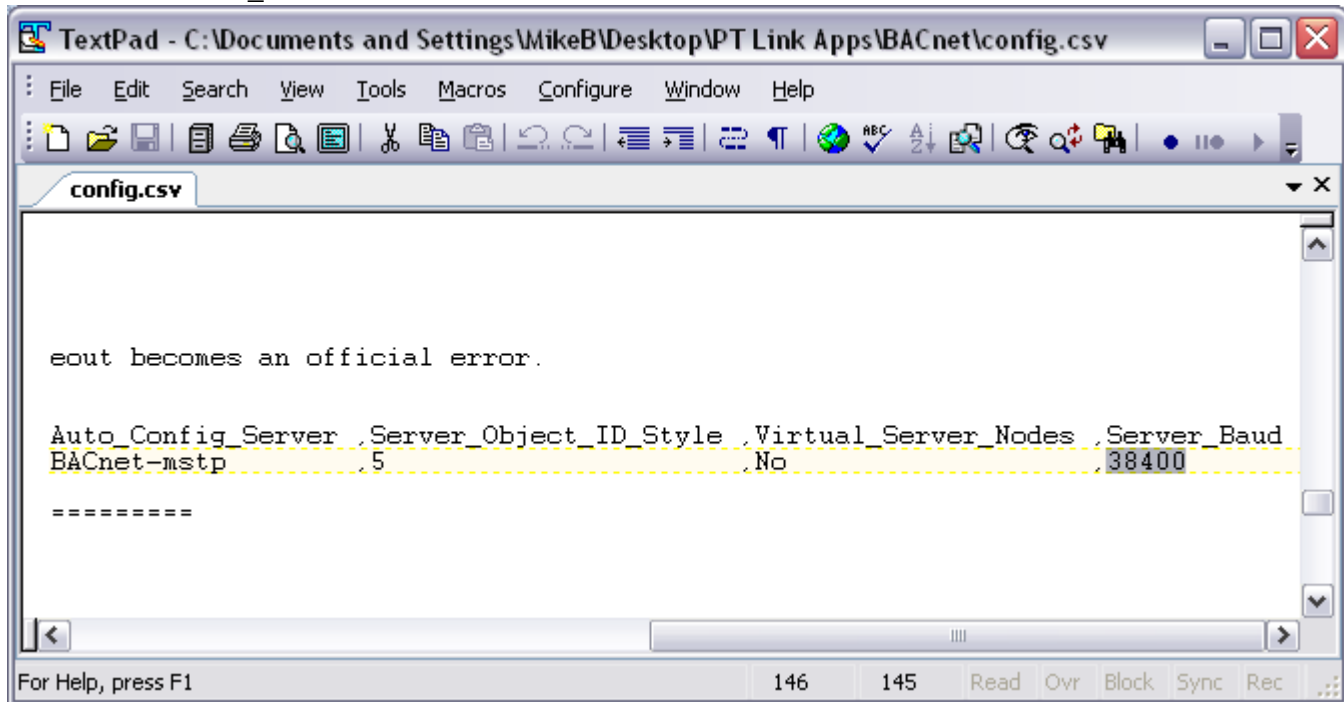


13. Inside the text file you can change the System_Node_ID (the BACnet MAC address) which defaults to 11.



Using RUINET to Edit the Config.csv File and Verify PT Link Communications

14. If the baud rate of the PT Link needs to be changed go to the 'Connections' section and **ONLY CHANGE THE SERVER_BAUD**



The screenshot shows a TextPad window titled "TextPad - C:\Documents and Settings\MikeB\Desktop\PT Link Apps\BACnet\config.csv". The menu bar includes File, Edit, Search, View, Tools, Macros, Configure, Window, and Help. The toolbar contains various editing and navigation icons. The main text area shows the following content:

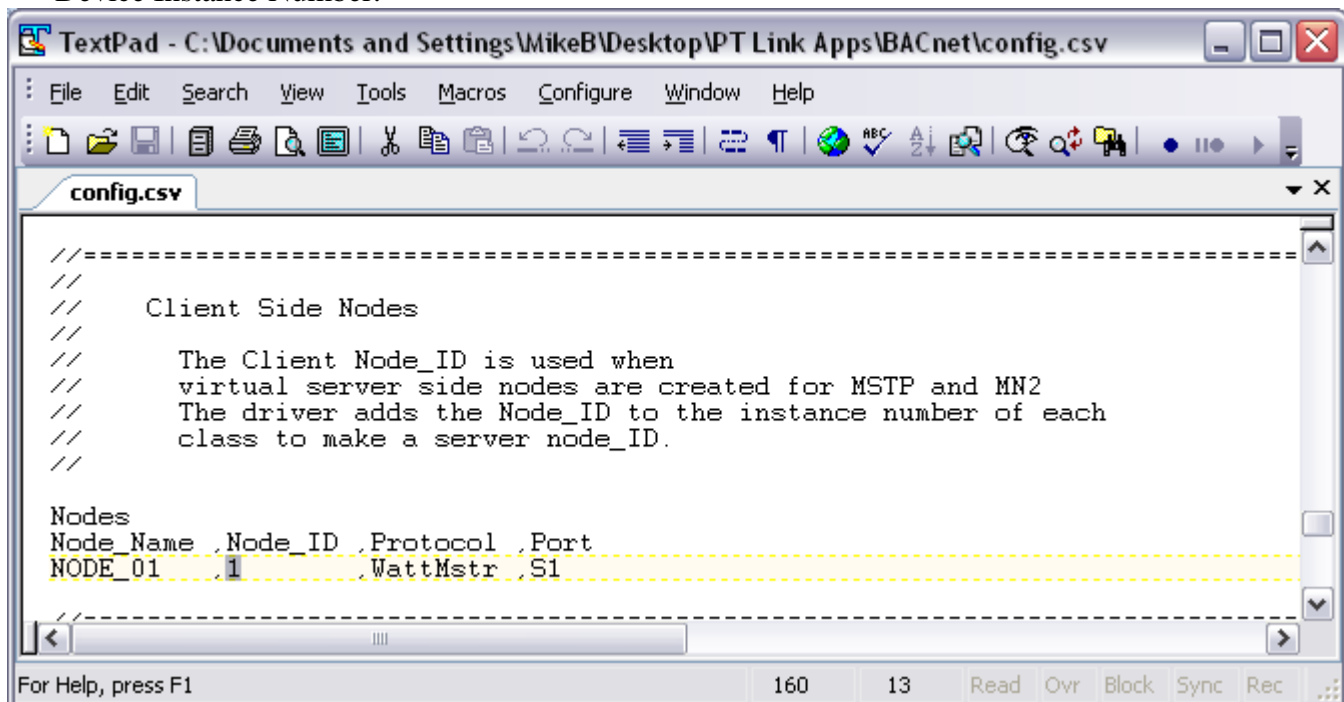
```
eout becomes an official error.
```

Auto_Config_Server	Server_Object_ID_Style	Virtual_Server_Nodes	Server_Baud
BACnet-mstp	5	No	38400

Below the table are several lines of dashes: =====

The status bar at the bottom shows "For Help, press F1", a line number of 146, a column number of 145, and several icons: Read, Ovr, Block, Sync, Rec.

15. The last change you may need to make is the Node_ID under 'Client Side Nodes' which is the BACnet Device Instance Number.



The screenshot shows the same TextPad window as above. The main text area shows the following content:

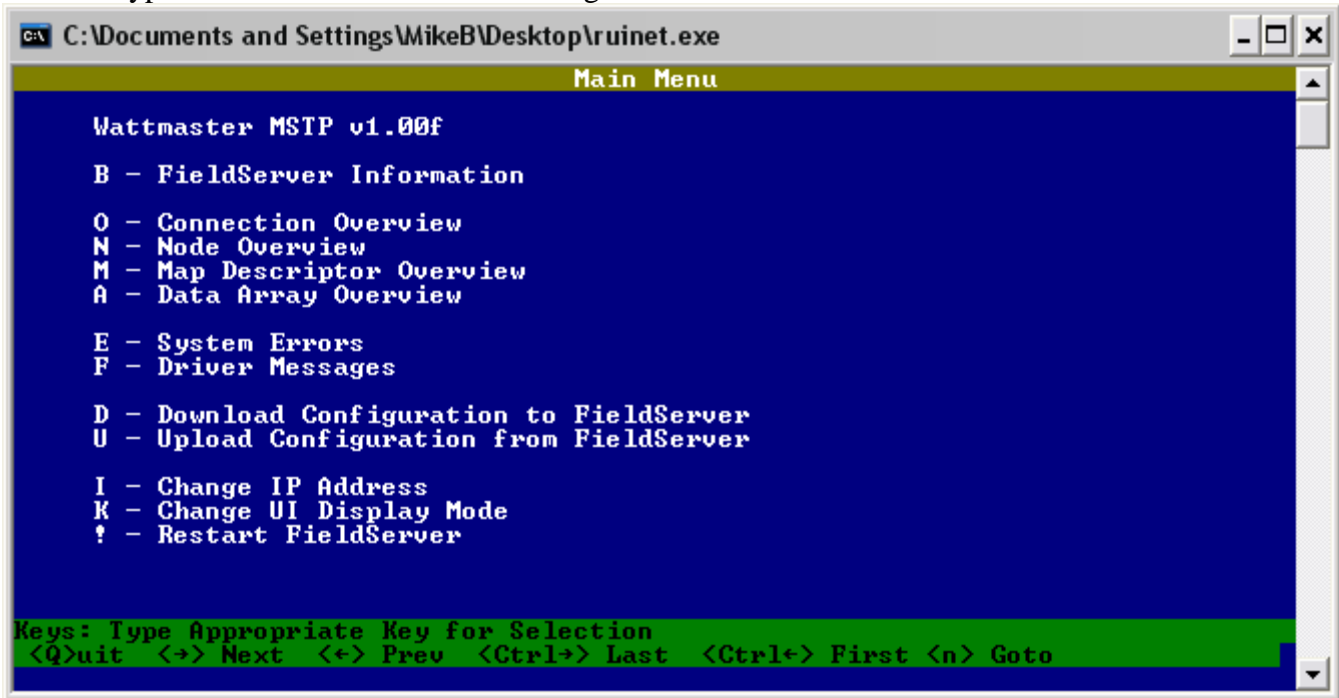
```
////-----  
////  
//// Client Side Nodes  
////  
//// The Client Node_ID is used when  
//// virtual server side nodes are created for MSTP and MN2  
//// The driver adds the Node_ID to the instance number of each  
//// class to make a server node_ID.  
////  
Nodes  
Node_Name Node_ID Protocol Port  
NODE_01 1 WattMstr S1
```

The status bar at the bottom shows "For Help, press F1", a line number of 160, a column number of 13, and several icons: Read, Ovr, Block, Sync, Rec.

Using RUINET to Edit the Config.csv File and Verify PT Link Communications

16. Once the changes are made to the text file, click 'File' in the upper left and click 'Save'. Now close the file and return to the RUINET Main Menu.

17. Now type 'D' to Download the new config.csv file to the FieldServer



The screenshot shows a Windows command prompt window titled "C:\Documents and Settings\MikeB\Desktop\ruinet.exe". The main menu is displayed on a blue background with white text. The menu items are: Wattmaster MSTP v1.00f, B - FieldServer Information, O - Connection Overview, N - Node Overview, M - Map Descriptor Overview, A - Data Array Overview, E - System Errors, F - Driver Messages, D - Download Configuration to FieldServer, U - Upload Configuration from FieldServer, I - Change IP Address, K - Change UI Display Mode, and ! - Restart FieldServer. A green bar at the bottom contains the key instructions: "Keys: Type Appropriate Key for Selection", "<Q>uit", "<+> Next", "<+> Prev", "<Ctrl+> Last", "<Ctrl+> First", and "<n> Goto".

```
C:\Documents and Settings\MikeB\Desktop\ruinet.exe
Main Menu

Wattmaster MSTP v1.00f

B - FieldServer Information
O - Connection Overview
N - Node Overview
M - Map Descriptor Overview
A - Data Array Overview

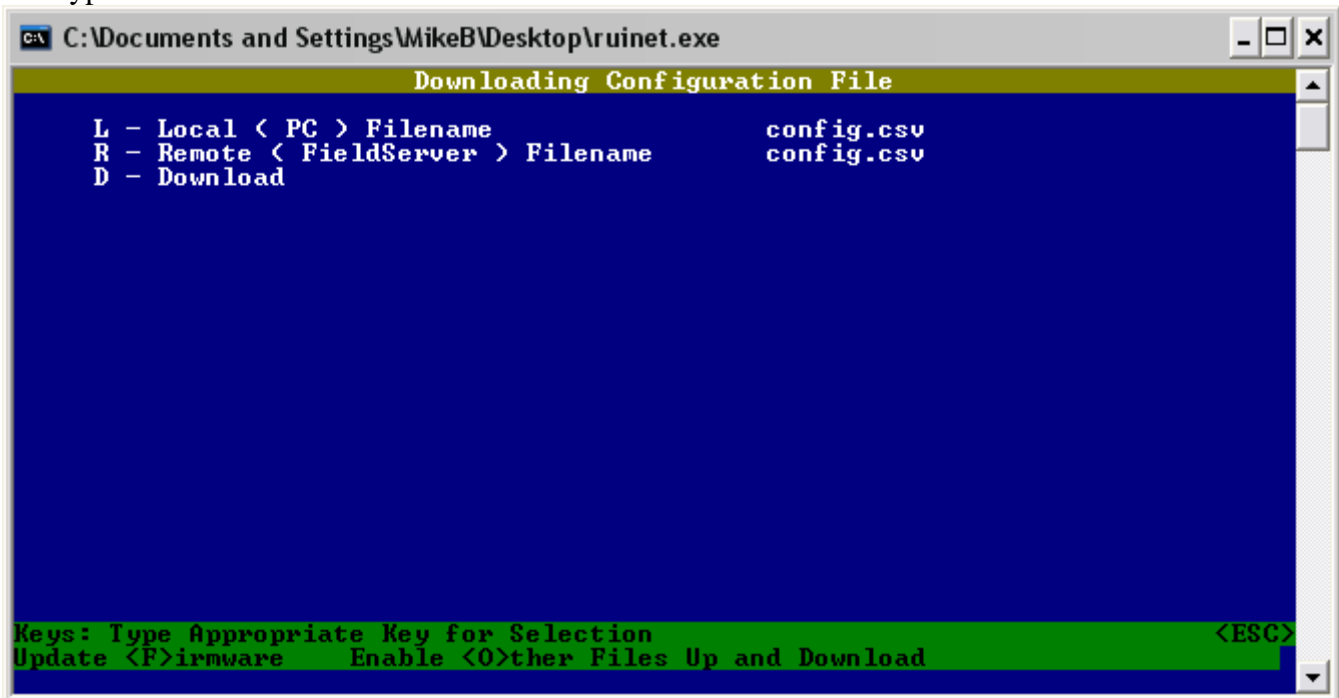
E - System Errors
F - Driver Messages

D - Download Configuration to FieldServer
U - Upload Configuration from FieldServer

I - Change IP Address
K - Change UI Display Mode
! - Restart FieldServer

Keys: Type Appropriate Key for Selection
<Q>uit <+> Next <+> Prev <Ctrl+> Last <Ctrl+> First <n> Goto
```

18. Type 'D' once more on this screen.



The screenshot shows the "Downloading Configuration File" screen in the RUINET application. The screen has a blue background with white text. The menu items are: L - Local < PC > Filename config.csv, R - Remote < FieldServer > Filename config.csv, and D - Download. A green bar at the bottom contains the key instructions: "Keys: Type Appropriate Key for Selection", "<ESC>", "Update <F>irmware", and "Enable <O>ther Files Up and Download".

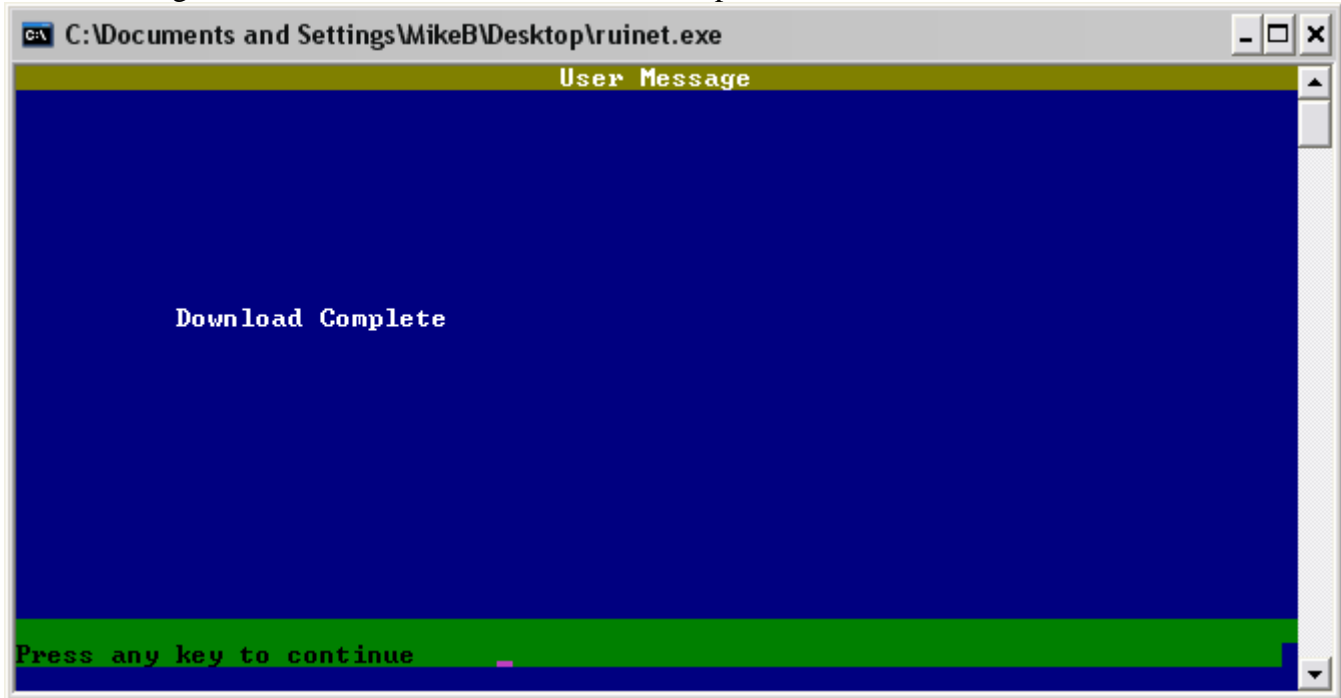
```
C:\Documents and Settings\MikeB\Desktop\ruinet.exe
Downloading Configuration File

L - Local < PC > Filename          config.csv
R - Remote < FieldServer > Filename  config.csv
D - Download

Keys: Type Appropriate Key for Selection <ESC>
Update <F>irmware      Enable <O>ther Files Up and Download
```

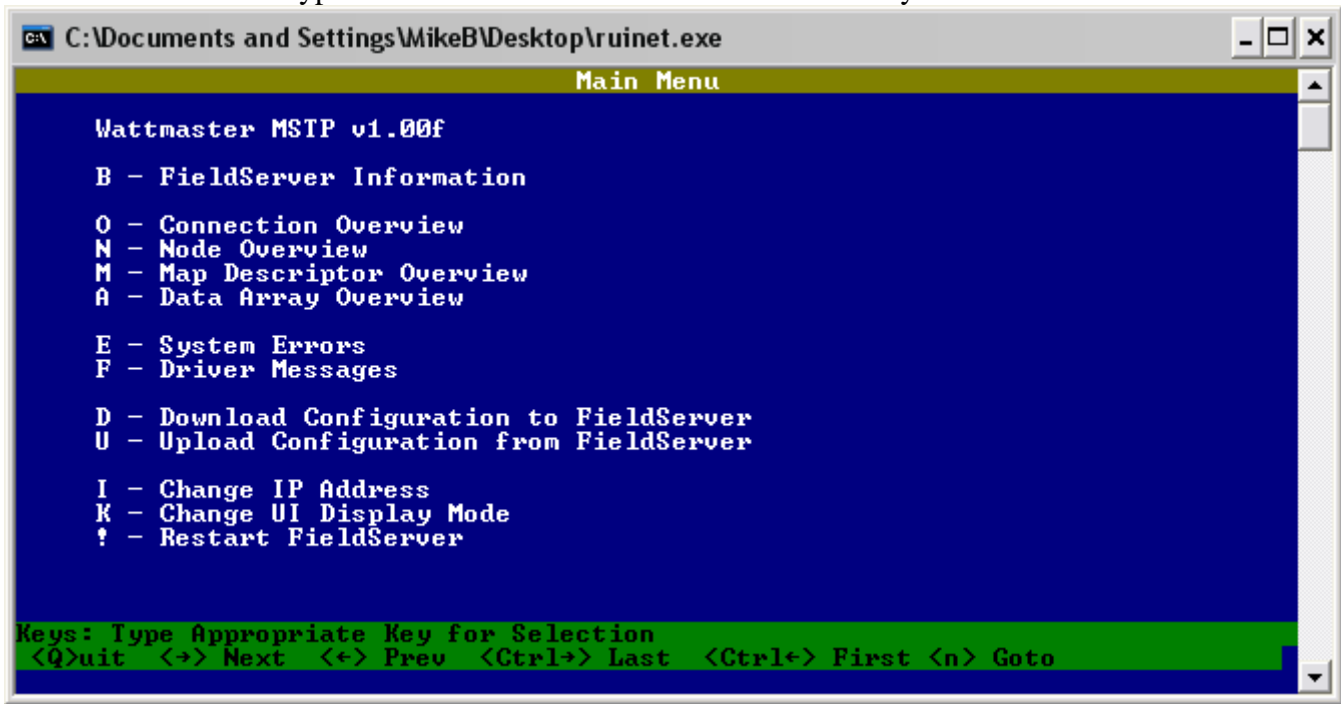
Using RUINET to Edit the Config.csv File and Verify PT Link Communications

19. You will get confirmation that the download is complete.



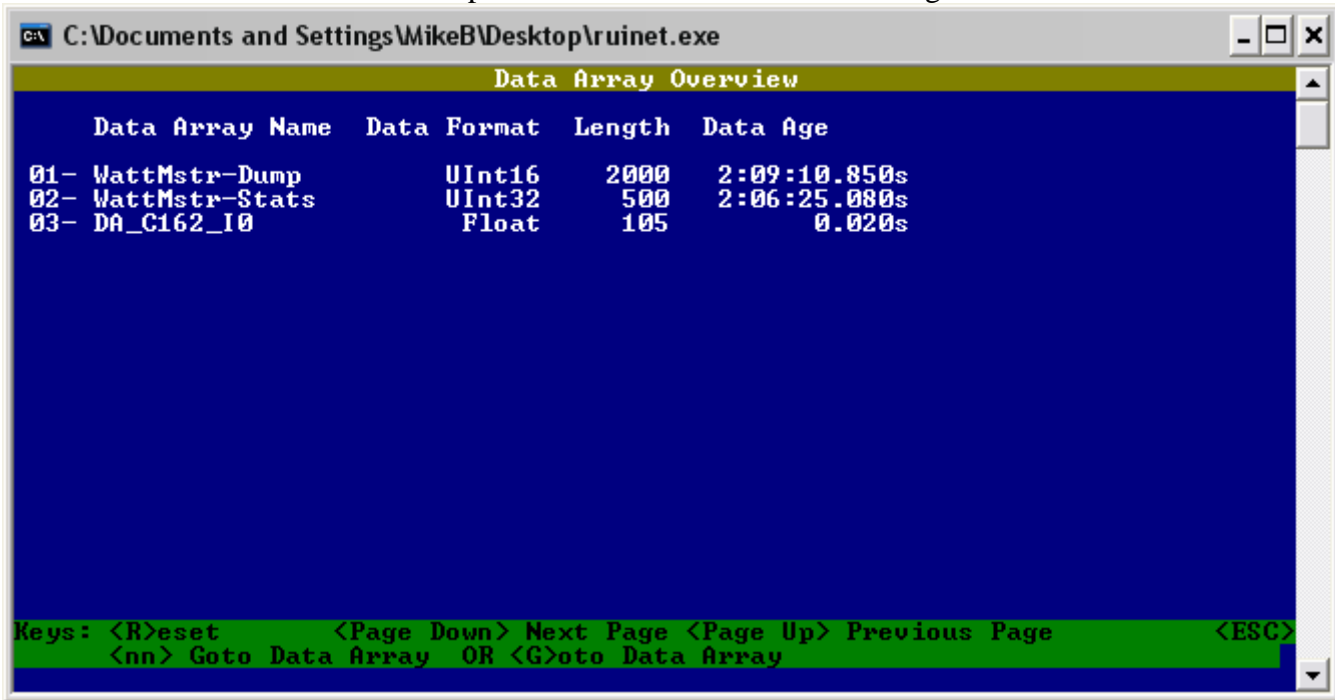
20. Now restart the PT Link by cycling power or typing '!' from the main menu to save the new configuration and restart RUINET. There will be a start-up period where you will be unable to connect to the PT Link.

21. Once reconnected type 'A' from the Main Menu for the Data Array Overview.



Using RUINET to Edit the Config.csv File and Verify PT Link Communications

22. This screen will verify communication to the HVAC units. Lines 1 & 2 should always be present. After a start-up period of approximately 4 minutes on a BACnet or N2 PT Link you will see 1 additional line for each HVAC unit. This screen represents the PT Link communicating with 1 HVAC unit.

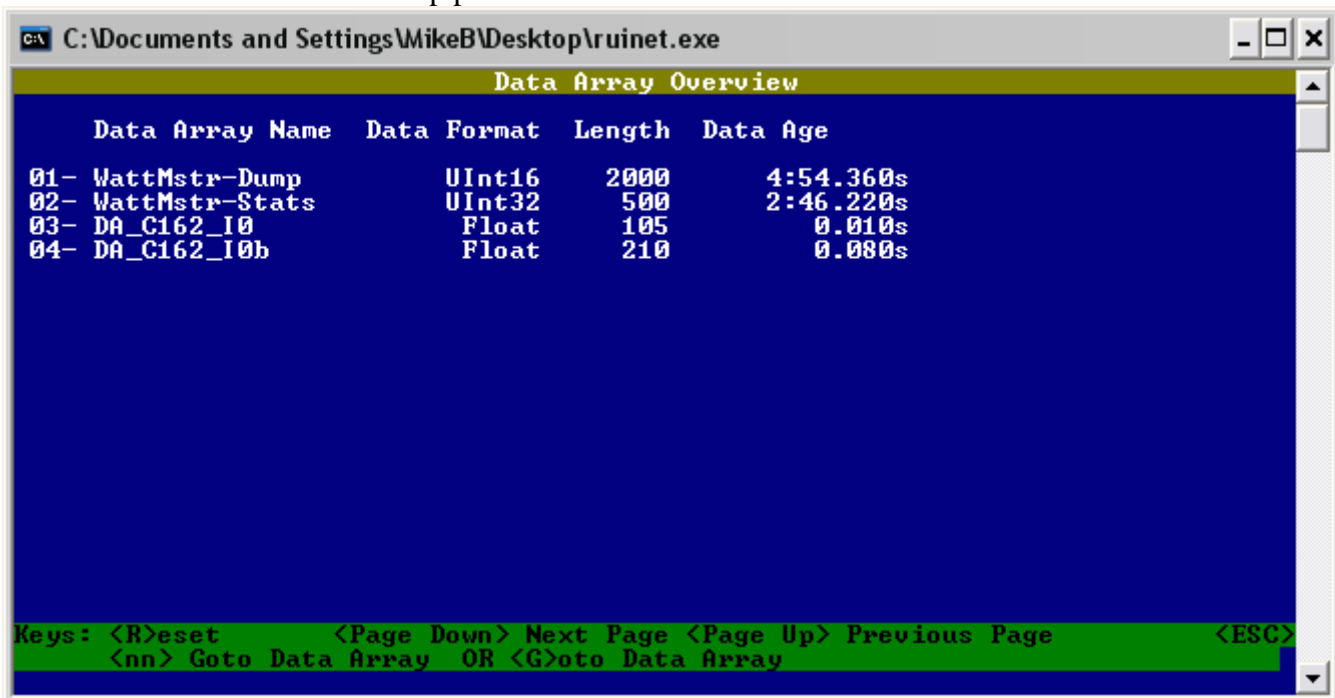


The screenshot shows a window titled "C:\Documents and Settings\MikeB\Desktop\ruinet.exe" with a yellow header "Data Array Overview". The main area is a blue background with white text. At the bottom, a green bar contains keyboard shortcuts.

Data Array Name	Data Format	Length	Data Age
01- WattMstr-Dump	UInt16	2000	2:09:10.850s
02- WattMstr-Stats	UInt32	500	2:06:25.080s
03- DA_C162_I0	Float	105	0.020s

Keys: <R>reset <Page Down> Next Page <Page Up> Previous Page <ESC>
<nn> Goto Data Array OR <G>oto Data Array

23. A Lon PT Link, which can only communicate to one HVAC unit, will display 2 additional lines as shown here after the 4 minute start-up period.



The screenshot shows a window titled "C:\Documents and Settings\MikeB\Desktop\ruinet.exe" with a yellow header "Data Array Overview". The main area is a blue background with white text. At the bottom, a green bar contains keyboard shortcuts.

Data Array Name	Data Format	Length	Data Age
01- WattMstr-Dump	UInt16	2000	4:54.360s
02- WattMstr-Stats	UInt32	500	2:46.220s
03- DA_C162_I0	Float	105	0.010s
04- DA_C162_I0b	Float	210	0.080s

Keys: <R>reset <Page Down> Next Page <Page Up> Previous Page <ESC>
<nn> Goto Data Array OR <G>oto Data Array

24. Once these steps have been completed you have verified that the reconfigured PT Link has established communication to the HVAC unit(s) and can now be added to the BAS network.