**Checking service and force push for CDMA modems:**

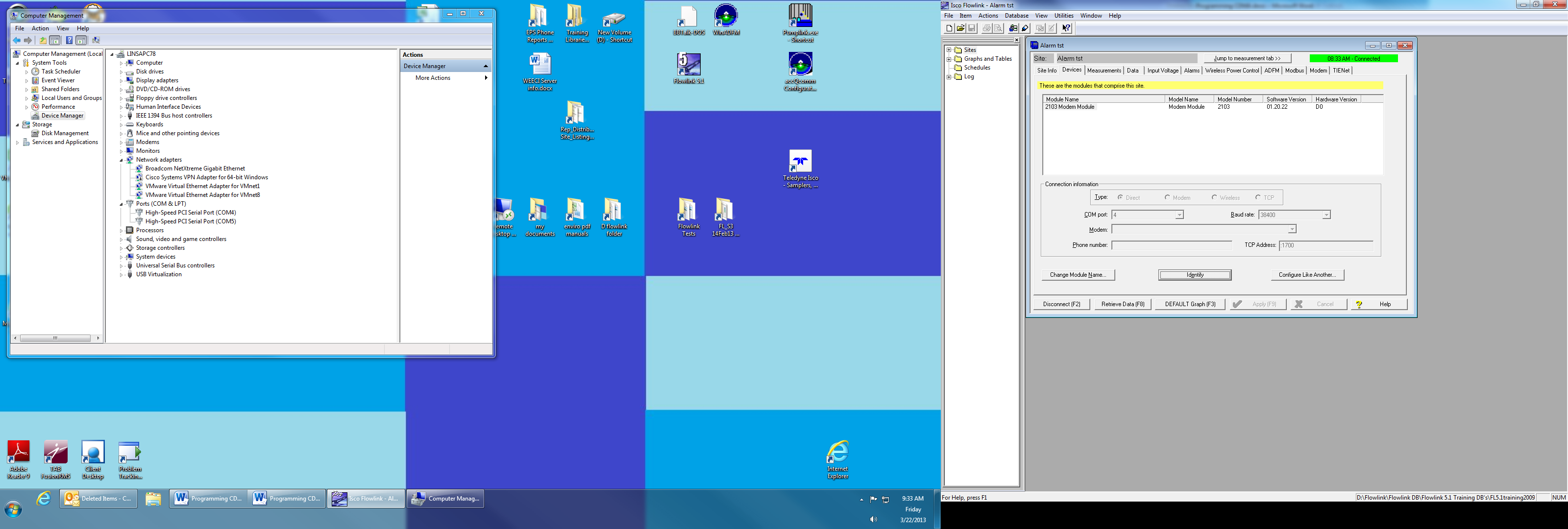
**2103c/ci With Internal Software (Firmware) 1.20 or Newer**

**2105c/ci With Internal Software (Firmware) 1.14 or Newer**

* The following commands and instructions (unless instructions use Flowlink) require you to be connected via a terminal emulation program (HyperTerminal & TeraTerm are two of the most common programs) to the unit.
* To initiate the command you must press enter after you type the command.

**How to verify current internal software (firmware) Using Flowlink**

1. Log into the meter using the quick connect window in Flowlink.
2. Go to the devices tab the internal software (firmware) for the 210X is in the software version column.



DBG 31 turns on debug function

**Logging into the 210X(x) module**

|  |  |  |
| --- | --- | --- |
| **Step #** | **Command** | **Purpose/Explanation** |
| 1. | ???? | Pressing the ? key (Shift ?/) logs into the meter. |
| 2. | SP <CR> | Goes into the “System Process” menu. |
| 3. | 1 <CR> | 1 goes into the Router settings. |
| 4. | tmout 0 <CR> | This turns the “timeout” condition off so the meter does not go to sleep. |
| 5. | q <CR> | Quit out of the Router menu |
| 6. | 23 <CR> | Accesses the modem menu |
| 7. | MCOM <CR> | Communicate directly to the internal modem |

**Check for Digital Service & over-the-air activation CI modem**

**Instructions for “Ci” (only) modem:**

***\*Used when a modem is not pushing or allowing incoming connections.***

|  |  |  |
| --- | --- | --- |
| **Step #** | **Command** | **Purpose/Explanation** |
|  | AT+CSQ? <CR> | Shows signal strength. Should be between 1 and 31. 99 = no service |
|  | AT+CREG? <CR> | Show if in home area. Look for “+CREG 0,1” *(01 = Home; 02 = Bad; 04 = Bad; 05 = Roaming; 99 = no signal (could be no antenna is plugged in.))* |
|  | AT+WRMP? <CR> | Shows current data roaming setting. Look for “2” |
|  | AT+WRMP=2,1 <CR> | Sets data roaming “on” (,1 saves to the default profile) |
|  | AT+WBND? <CR> | Displays the current wireless band. Look for “0” |
|  | AT+WBND=0,1 <CR> | Program the wireless band to 0 (,1 saves to the default profile) |
|  | ATD\*22899; <CR> | Over-the-air activation for the Verizon system. Wait for the output to say “Programming Successful” the unit should automatically reset. |
|  | AT+CGSN <CR> | Shows MEID. Verify against the label on bottom of cell module. |
|  | AT+CNUM <CR> | Shows the mobile number. |
|  | AT+WIPCFG=1 <CR> | Shows IP address. |
|  | AT+WIPBR=4,6 <CR> | Starts communication port process. Wait for “+WEND 25” |
|  | AT+WIPBR=3,6,15 <CR> | Shows the IP Address XXX.XXX.XXX.XXX (XXX = 0-255) (Verizon static IP addresses usually start with 166.xxx.xxx.xxx |
|  | AT+WIPBR=5,6 <CR> | Closes communication port. |
|  | ++++ | Exits out of modem communications. |
|  | Q <CR> | Exits out of the modem menu. |
|  | Q <CR> | Exits out of the system processes menu. |
|  | Q <CR> | Exits out of the 2100ci. |

**Check for Digital Service & PRL update**

**Instructions for “C” (only) modem:**

***\*Used when a modem is not pushing or allowing incoming connections.***

|  |  |  |
| --- | --- | --- |
| **Step #** | **Command** | **Purpose/Explanation** |
|  | AT+CAD? <CR> | Checks for digital service in the area Returns +CAD: x where x=0 means no digital service is available. X=1 implies digital service is available. |
|  | AT+CSQ? <CR> | Returns +CSQ: x,y where x is the signal strength on a scale from 0-31. Y is not needed. |
|  | (Verizon only) AT+CDV\*228 99 <CR> | Verizon only. Updates PRL. Returns OK if successful. “No carrier” is displayed at end. |
|  | ++++ | Exit modem communication mode. |
|  | Q <CR> | Quit out of the modem menu. |
|  | 1 <CR> | 1 goes into the Router settings. |
|  | TMOUT 1 <CR> | Re-enable debug menu timeouts. |
|  | Q <CR> | Exit the router menu. |
|  | Q <CR> | Exit the system process menu. |

**Forcing a push from the 210X(x) module**

***\*Cycling power to the 2100 modem will force a push upon power up. This process:***

***1) Allows you to see any problems during the push function***

***2) See the push activity without having to verify the successful push at the server.***

|  |  |  |
| --- | --- | --- |
| **Step #** | **Command** | **Purpose/Explanation** |
|  | ???? | (pressing the ? key (Shift ?/) logs into the meter |
|  | SP <CR> | Goes into the “System Process” menu |
|  | 1 <CR> | 1 goes into the Router settings |
|  | tmout 0 <CR> | This turns the “timeout” condition off so the meter does not go to sleep. |
|  | q <CR> | Quit out of the Router menu |
|  | 18 <CR> | Goes into the “DataPush” menu |
|  | Dbg 31 <CR> | Turns the “Debug” mode ON (this allows us to see information on the screen) |
|  | dump F <CR> | Forces a Dump of the data (or Forces a Data Push). Repeating this step will continue to force data pushes to the server. Once the data goes by on the screen, you should see if it fails or if data continues to process through the screen. You can quickly press ENTER to get a cursor between data dumps. If you type dbg quickly you can stop the data from going to the screen. If the Push fails you can easily press dbg turn the dbg back off. Also if the push fails, you can type “dump F” again to try again. |
|  | dump # <CR> | Sets the “amount of time” of data to push out. The # represents how many hours back to push. i.e. Placing an 8 will have the modem go back and push 8 hours of previous data, when it does do the push. |
|  | dump <CR> | Dumps information (Last push, next push, and start time of next pushed data) to the screen. |
|  | dump A <CR> | “A” must be capital. This will force a dump of ALL DATA.  **Dump F – only data from the last push.** |
|  | At the end of pushing you should see ATD\*99#...this will be successful or “failed” for the push. | |
|  | dbg <CR> | Turns the “Debug” mode OFF (be sure to turn off the debug when you are done as it takes up. processing power if left on) |
|  | q <CR> | Quits out of the “DataPush” Menu |
|  | q<CR> | Quits out of the “System Process” Menu and disconnects from the Modem |
|  | This will now allow you to go to the Web UI and verify the data is being populated into the Database.  While in 8) DATAPUSH – you can type “dcfg” to check the IP and port push settings in the modem. | |

\*Type “dcfg” to see all settings in the modem.

WSE sets wireless schedule