ALLIED ELECTRONICS, INC.

Technical Service Bulletin

To: NeXGen Service and Help Desk Personnel

From: Allied Electronics Technical Support

Date: January 20, 2017

Re: ANDI_DGS Port and I/O Board Assignment Function
***For the remainder of this document, the NeXGen controller will be referred to as NXG.**

ANDI_DGS version 4.2.5 must be used to effectively implement the ANDI_DGS Port and I/O Board Assignment functions.

In the event of a suspected port failure on a NXG unit or the need to assign serial ports and/or I/O boards becomes necessary to upgrade legacy NXG firmware to the TXA platform, the ANDI_DGS tool has a utility which makes this process easy and efficient.

It is important to note that the NXG ports are designed specifically with certain communication protocols in mind. For example, some ports are RS232 while others may be Current Loop, RS485, or 12 Volt Serial Interface. What needs to be understood when employing the port assignment function of ANDI_DGS is that ports supporting different protocols are **NOT** interchangeable.

In other words, a function on an RS232 port (i.e. POS, Car Wash, GSM, Network Credit Host) cannot be re-assigned to an RS485 port. A function of an RS485 port (i.e. Wayne CAT, Bennett dispenser, Tokheim DPT) cannot be re-assigned to an RS232 port. A function of a Current Loop port (i.e. Gilbarco dispenser, Gilbarco CRIND, Wayne dispenser) cannot be re-assigned to an RS485 port, and so on.

The following is the procedure for re-assigning a function to a different NXG port:

1) Launch ANDI_DGS and connect to NXG.
   Note a) **Re-assigning NXG ports via the ANDI_DGS application can ONLY be performed via Ethernet. This function is not supported when connected serially.**
   Note b) **This utility also requires the user to be logged in as an administrator.**
2) Identify an available port based on the protocol of the function to be moved.
3) Click on the *Utilities* tab.
4) From the *Utilities* tab, click on the **CF Access** button under **Firmware Control.**

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> *Note:* **Newer firmware platforms ONLY support Compact Flash Access Mode <u>RFA</u>.**
> This will launch the **Compact Flash Configuration** box.

5) Click on the ***Port Function*** tab.

For the remainder of this procedure, we will re-assign the Carwash Controller as an example. In NXG systems, the Carwash Controller defaults to port 3. As this is an RS232 port, we need to find an available RS232 port. Let's say port 1 is available.

6) Under the **Configuring Port** section, select *COM 1.*

7) Under the **Port Functions** section, select Carwash Controller*.* Refer to the following example:
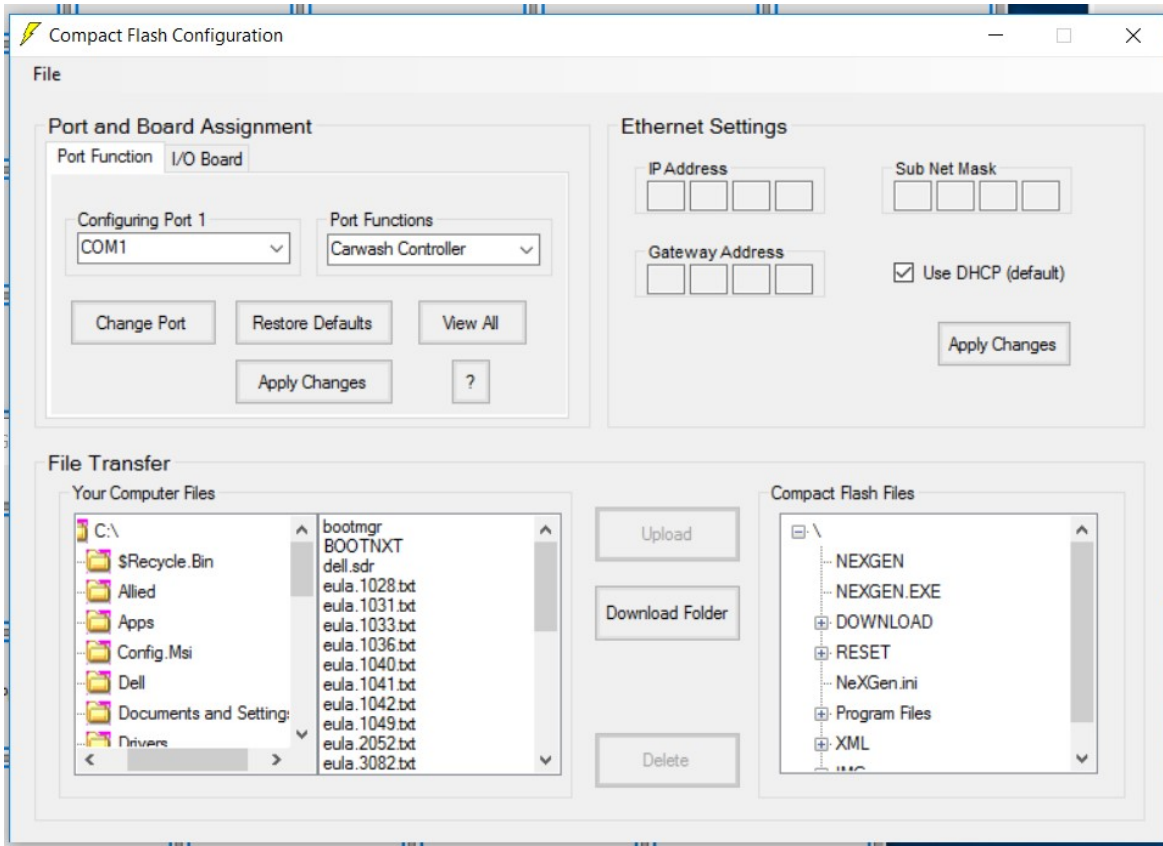
8) Click **Change Port** and **Apply Changes**. ***<u>BOTH</u>*** buttons must be clicked.

9) Now that the Carwash Controller has been assigned to COM 1, COM 3 must be set to *Not In Use.*

10) Under the **Configuring Port** section, select COM 3.

11) Under the **Port Functions** section, select *Not In Use.*

12) Click **Change Port** and **Apply Changes**. ***<u>BOTH</u>*** buttons must be clicked.

13) Exit the **Compact Flash Configuration** box.

14) ***You must now warm start NXG via ANDI_DGS in order for the changes to take effect. Please refer to the Technical Service Bulletin "ANDI_DGS Warm Start Procedures" for more information.***

15) Upon completion of the warm start procedure, re-connect to NXG via ANDI_DGS and click on the **Status** tab.

16) Verify the new port assignments

I/O Board Assignment

Allied's TXA platform not only requires that the serial ports be defined using the above procedure, but that I/O boards 1, 2 and 3 be defined as well.

The following is *typical* of NXG deployments:

I/O board 1 connects to ports 5 thru 8 on NXG, addressed as 300 and assigned IRQ 5.
I/O board 2 connects to ports 9 thru 12 on NXG, addressed as 250 and assigned IRQ 15.
I/O board 3 connects to ports 13 thru 16 on NXG, addressed as 2A0 and assigned IRQ 9.

The following is a list of I/O board types currently recognized:

| Type	Description
1	Gil/Wayne
2	Tokheim
5	Schlumberger
7	4 Channel RS-485 (typically used for Bennett)
18	RS-232

The following is the procedure for assigning the I/O board:

1) Launch ANDI_DGS and connect to NXG.
   Note a) **Re-assigning I/O boards via the ANDI_DGS application can ONLY be performed via Ethernet. This function is not supported when connected serially.**
   Note b) **This utility also requires the user to be logged in as an administrator.**
2) Click on the **Utilities** tab.
3) From the **Utilities** tab, click on the **CF Access** button under **Firmware Control.**
   Note: **Newer firmware platforms ONLY support Compact Flash Access Mode <u>RFA</u>.**
   This will launch the **Compact Flash Configuration** box.
4) Click on the **I/O Board** tab. For the remainder of this example, we will assign board 1 under the assumption the site has Gilbarco and/or Wayne dispensers & card readers.
5) From the **Board** dropdown menu, select *1*.
6) From the **Type** dropdown menu, select *Gil/Wayne*.
7) From the **Address** dropdown menu, select *300*.
8) From the **IRQ** dropdown menu, select *5*.
9) Click **Change Board** and **Apply Changes**. ***<u>BOTH</u>*** buttons must be clicked.
10) Refer to the following example:

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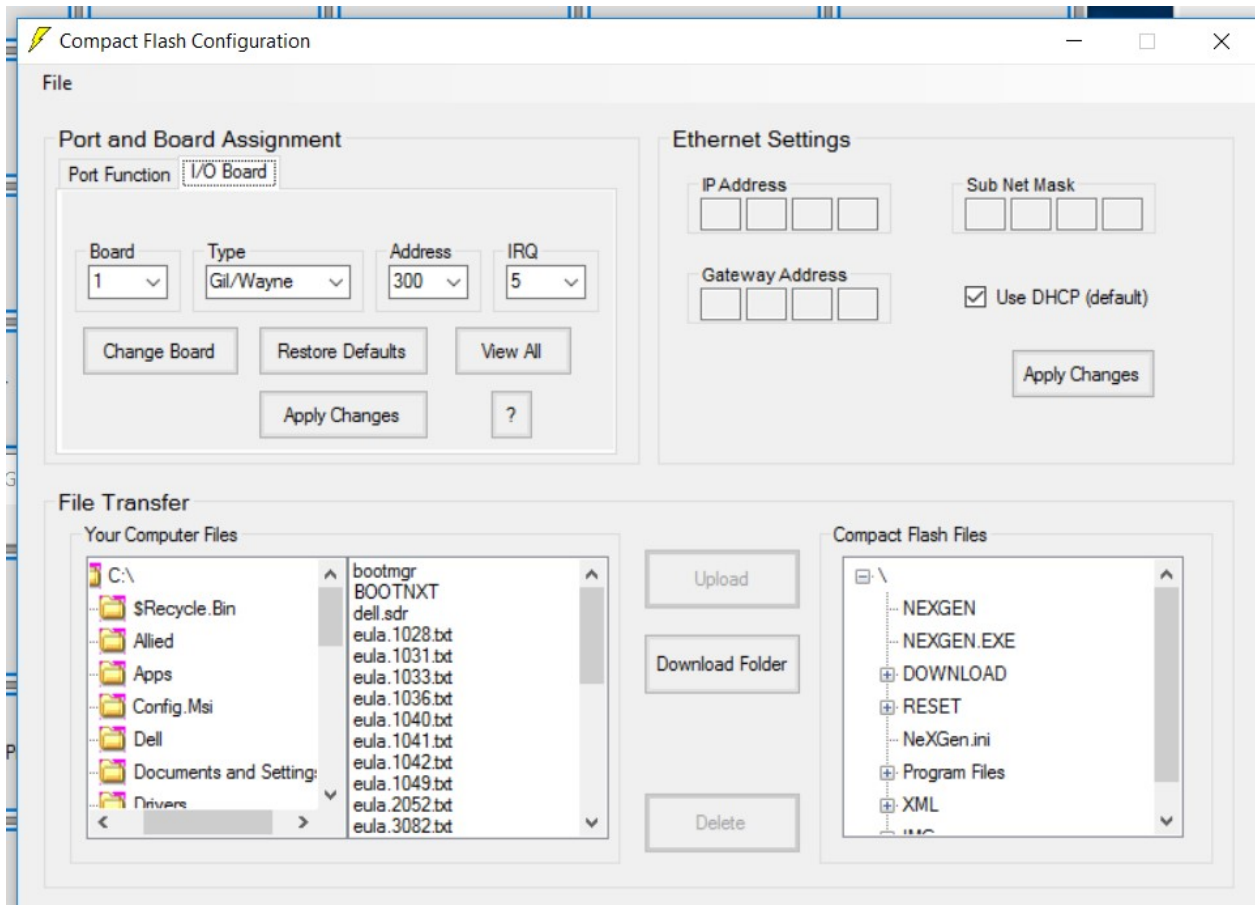
11) Exit the **Compact Flash Configuration** box.
12) ***You must now warm start NXG via ANDI_DGS in order for the changes to take effect. Please refer to the Technical Service Bulletin "ANDI_DGS Warm Start Procedures" for more information.***
13) Upon completion of the warm start procedure, re-connect to NXG via ANDI_DGS and click on the **Status** tab.
14) Verify that the intended ports have an assigned function and are not showing a function of "NON."

Contact Allied Electronics Technical Support with any questions or concerns:

800-223-3619
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