

WashPay Gen 1 to Gen 2 Upgrade Instructions

1 Overview

This document provides instructions for upgrading Washpay systems to the Sierra software platform (the 2nd Generation product). The upgrade involves replacing the Site Controller computer and updating the software program in the self-serve bay paynode terminals and the Washpay printer paynode. Wash Select II software and the software on the WashPay expansion board must also be upgraded when interfaced with the Washpay controller.

A PC/Laptop computer will be needed to perform the upgrade. In cases where the current site controller is equipped with a keyboard, mouse, and monitor, it can be used as the local computer.

The installer should be familiar with the Sierra Management application in order to program the system. Detailed instructions on use of the management functions are provided in the Sierra Management Application Programming Manual, which can be downloaded from Unitec's website at:

<http://www.unitecelectronics.com/DocumentsDownloads/Manuals.aspx>

2 Parts Required

The Washpay upgrade kit (SA2302) includes the following:

- Replacement Site Controller Computer
- Thumbdrive with update programs for bay terminals, printers and the Wash Select II interface board (if applicable)

Customers with a Wash Select II unit integrated with WashPay will also need to order the Wash Select II/WashPay upgrade kit (SA2303), which includes:

- Wash Select II Software (version 6.00)
- Expanded memory chip
- Updated Operations Manual

3 Upgrade Process

3.1 Preparing to Upgrade

No data will be transferred from the old WashPay Generation 1 site controller to the new WashPay Generation 2 site controller. Therefore, a complete set of reports should be printed (or saved in electronic form) and a database back up should be performed. The database back up file will not be readable by the new site server, however, Unitec will be able to recover the data, if needed, from a copy of these files.

In Wash Select II applications, a copy of the configuration report should be printed, because the Wash Select II will need to be reprogrammed after the upgrade. The configuration settings for the paynode device profiles should also be recorded (by printing the setup screens or writing down the settings), as these will also need to be reprogrammed.

The upgrade procedure is described in the following sections and should be performed in the order presented.

3.2 Downloading Software Updates

The Washpay upgrade kit includes a thumbdrive with update programs for paynodes (installed in bay terminals and printers) and for the Washpay interface board, which is installed in the Wash Select II. These updates are applied as follows

3.2.1 Updating the Paynodes

1. If you are using the site server with a monitor, mouse, and keyboard, skip to step 2. If you are using a laptop or PC, locate the router to which the paynode terminals are connected. Connect your laptop or PC to the router using a CAT5E cable.
2. Plug in the thumbdrive provided in the upgrade kit into a USB port and copy the files onto the desktop of the PC, laptop, or site controller.
3. Click and run the UDPDownload.exe file. Make sure all bays, printers, and Wash Select II units are online and listed in the utility.

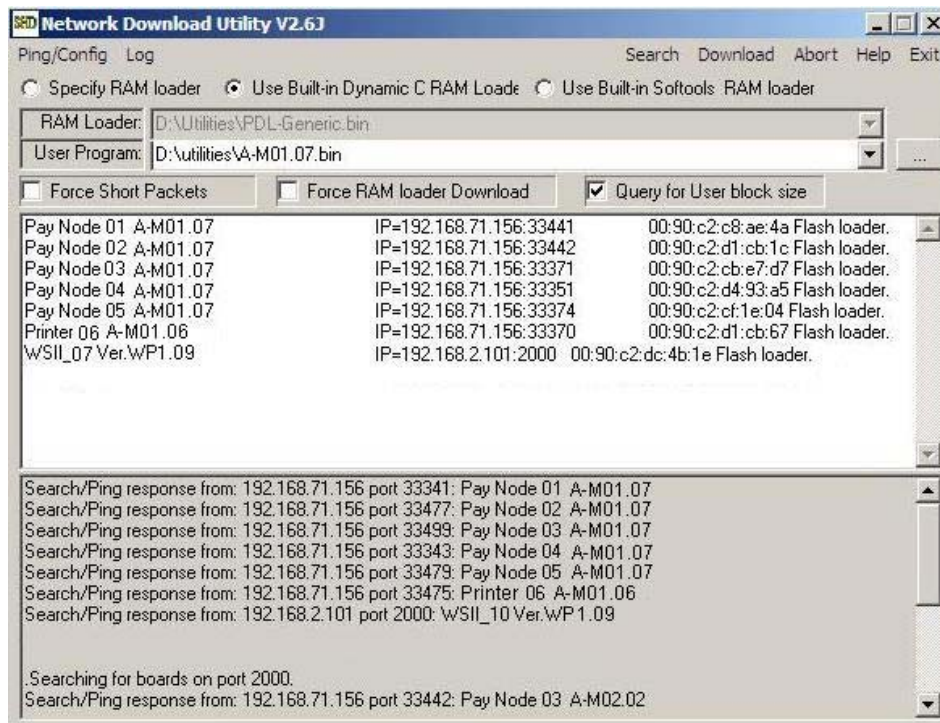


Figure 1. Paynode Update Utility

4. Click “Use Built-in Dynamic RAM Loader.”
5. Select the Paynode bin file as the User Program. To do so, click the button with “...” next to the “User Program” field. Locate the bin file labeled A-M02.XX (where XX = the most current release) and click Open.

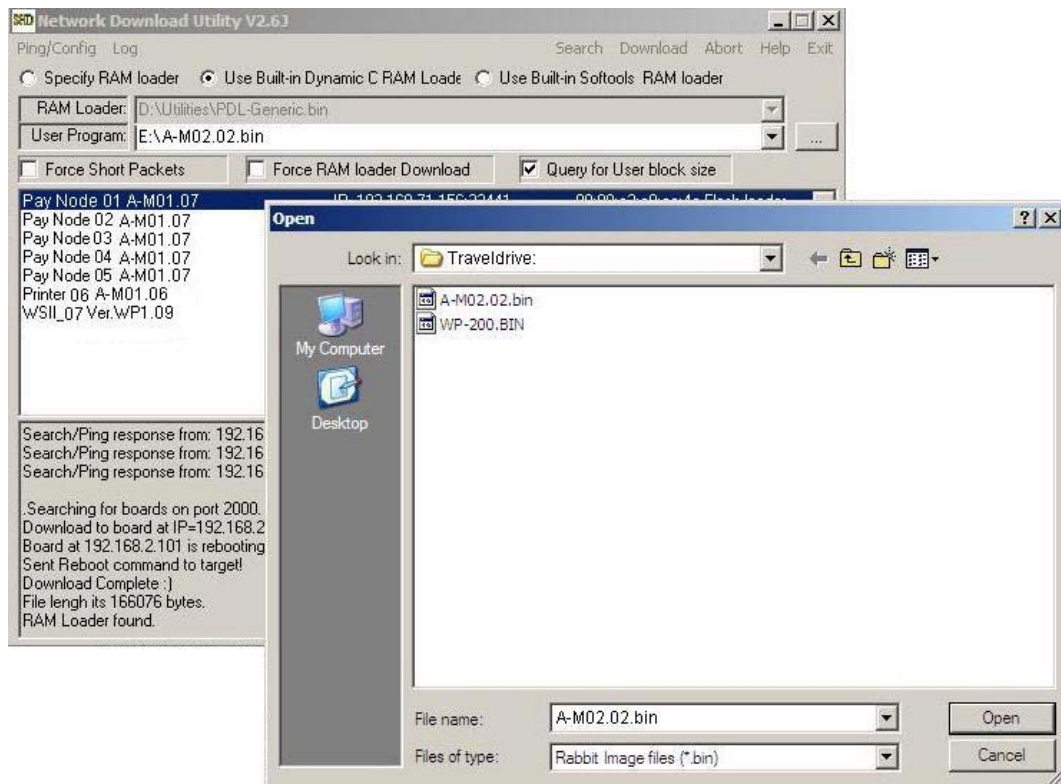


Figure 2. Load BIN File

6. Highlight a paynode by clicking on the paynode name. Click Download at the top of the utility. As each paynode is updated, it will reboot. Once each paynode is updated, ensure the file name has updated to the new software version.
7. Repeat Step 6 for each paynode and the printer.

3.2.2 Updating the Wash Select II Interface Board

1. Select the WSII rabbit board bin file as the User Program. To do so, click the button with "..." next to the "User Program" field. Locate the bin file labeled WP-2XX.BIN (where XX = the most current release) and click Open.
2. Highlight the rabbit board by clicking on device marked WSII_XX Ver WP1.XX, then click Download at the top of the utility. As the WSII rabbit board is updated, it will reboot. Once the rabbit board is updated, ensure the file name has updated to the new software version.
3. Repeat Step 2 for each WSII. Once all downloads are complete, the devices should be similar to the following screen:

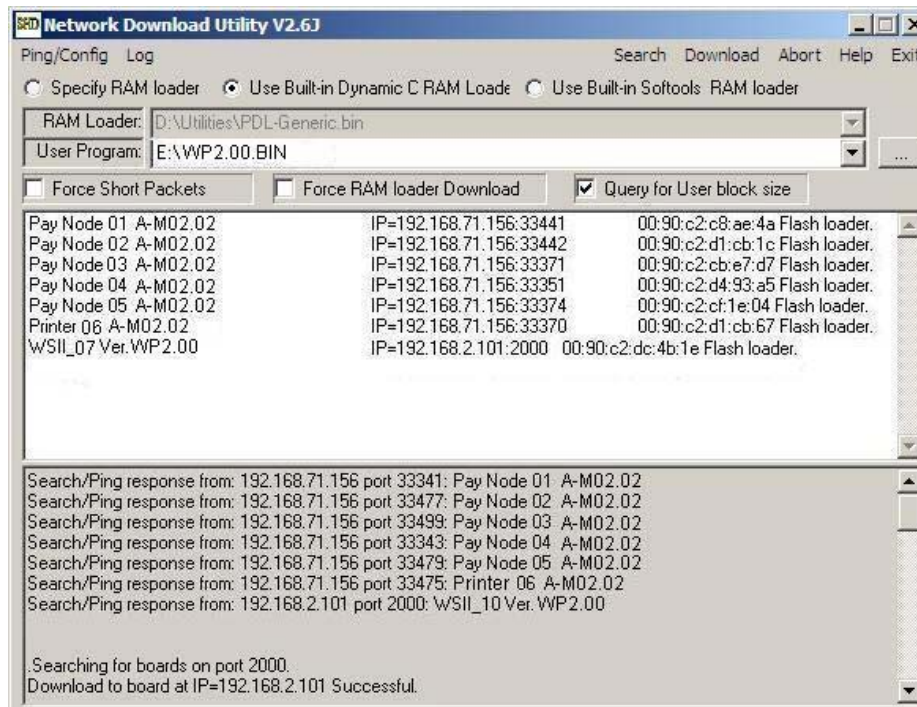


Figure 3. Completed Downloads

- Once each WSII is updated, shut the WSII's, paynodes, and printer down until you are ready to install the new server.

3.3 Install the New Site server



Figure 4. WashPay Site ServerError! Bookmark not defined.

Shut down the Washpay server. Disconnect the power, monitor, keyboard, mouse and network cable from the old server. Setup the new Sierra-based server by connecting the power, monitor, keyboard, mouse and network cable. When connected, power on the server and monitor. The server will boot to the login screen.

3.4 Configure the New Site server

Login to the server using the default user ID and password (00 and 00). Select the Set-up menu and program the site parameters, products and all required device profiles. Programming procedures can be found in the *Sierra Management Application Programming Manual*, as mentioned in Section 1.

3.5 Activating Paynode Devices

When the paynodes and printers are powered on, they will automatically connect to the site server but will require a configuration file (or profile) to be downloaded from the server. The recommended procedure for activating these devices follows.

1. Apply power to one of the connected devices in the order you would like to arrange the bays (leaving all others powered off).
2. Select the *Set-up* then *Devices* menu options of the Sierra management application. A table listing connected devices should be displayed. The device which was powered on should be the only one displayed. (If no devices are displayed, refresh the page to show the connected device).

3. Select the Edit button next to the paynode and enter the desired name (Bay 1, for example). Select the desired configuration profile for this paynode and click the save button to return to the device list.
4. Select the *Download* function for the device to download the configuration profile. The paynode will be enabled. Verify the paynode is functional.
5. Power on a 2nd paynode. Refresh the Set-up/Devices page. The 2nd device should appear in the table. Repeat steps 3 and 4 to activate this paynode.
6. Repeat this procedure for all remaining paynodes, and printers (one at a time).

3.6 Completing the Wash Select II Upgrade

3.6.1 Replace Wash Select II Software

The WS2 will need to have new software installed and be reprogrammed. The new EPROM should be installed on the CPU and the network cable disconnected from the Expansion (Rabbit) board before the unit is powered on. Once installed, power on the WS2 and perform a full system reset.

3.6.2 Install Expanded Memory

The Wash Select II requires the expanded memory chip in order to operate with the generation 2 WashPay controller. The expanded memory chip is located in position U57 of the CPU board (see illustration below). If the unit(s) being updated already has this chip, it need not be replaced.

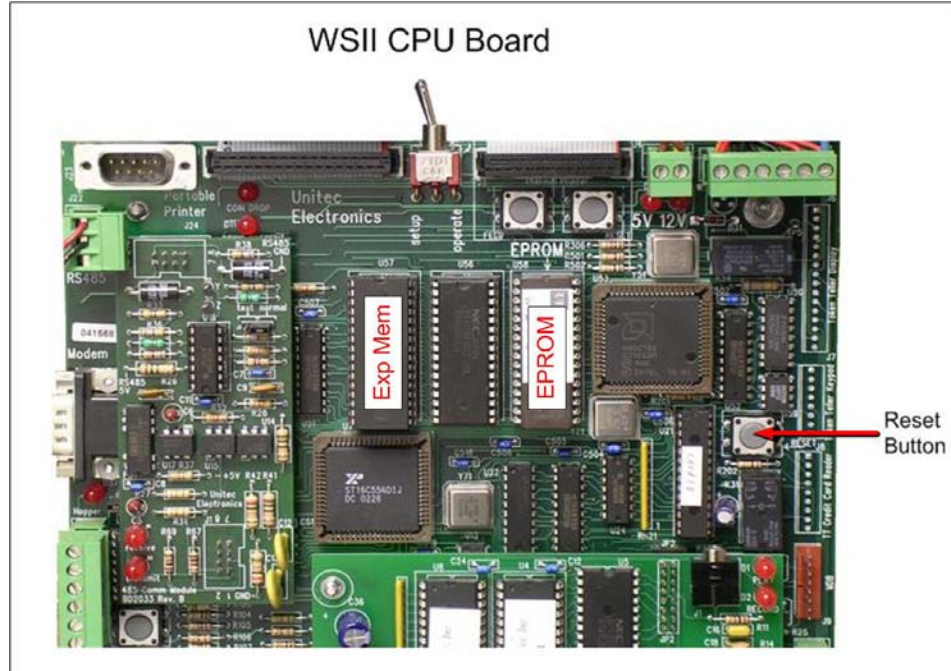


Figure 5. Wash Select II CPU Board

To upgrade the WSII software, perform the following procedures:

1. Remove the existing EPROM located at connection U58 on the CPU board (see Figure 5) by inserting a small flat-blade screwdriver between the EPROM and the socket and prying it off. Be careful not to damage the socket or the circuit board.
2. Insert the new EPROM into the socket on the board. Chip pins may need to be adjusted to fit into the socket. Use the following steps to adjust the pins:
 - Lay the chip on its side with the pins facing away from you.
 - Gently rock the chip away from you to bend the pins.
 - Lay chip on its other side and rock it away from you.
 - Repeat the above steps, alternating sides of the chip, until pins are at approximately a 90-degree angle and line up in the socket.
3. The notched end of the chip goes up. There is a silk-screened image on the CPU board you can use to line up the notch correctly. This image is labeled EPROM.
4. Push the EPROM chip in gently. Do not force it, as you may cause damage to the chip or the CPU board.
5. Repeat steps 2-5 for the expanded memory chip on U57, if applicable.

3.6.3 Wash Select II Programming

The Wash Select profile that was set up through the Sierra management application contains some, but not all, of the Wash Select programmed settings. Additional programming will need to be completed through the Wash Select's local management function for the following settings:

- Wash Interface Settings
- Speech Settings (if applicable)
- Customer Interface
- Cash and Tokens
- Miscellaneous Setup
- Pass Codes and Cards
- POS4000 Link (if applicable)

Once the Wash Interface settings are configured, reconnect the network cable into the WashPay expansion board in the Wash Select II, then change the Credit Mode to Mode 6.

1. Place the WSII in Setup mode. Scroll to: Credit System (*) Credit Mode (*) 6 (*)
2. The Version of the installed expansion board will be displayed. If the board is not connected correctly, the error "NIC not found!" will be displayed on the LCD windows on the door. The credit mode will not save and the system will not connect to the WashPay server until this is corrected.
3. Scroll to Network Params (*)

4. You should see "Rev#: WP2.XX. Press any key." Press any key to continue. If this message is not displayed, make sure the LED light is lit on the expansion board by the Ethernet cable and make sure the ribbon cable and Ethernet cable connections are secure, then reboot the Wash Select II unit.
5. The network status will be displayed:
 - host connected: communication to the server is established (or)
 - network online: server connected, but no communication (or)
 - network down [x]: where x equals one of the following error codes:
 - 1 - No DHCP returned
 - 2 - Cannot create TCP server
 - 3 - Cannot set up UDP socket
 - 4 - Cannot find controller
 - 5 - Did not connect to TCP server
 - 6 - Did not get a device ID
 - no response: No response from the interface (If "no response", set up will exit.)
6. The parameters will be sent to the network interface. If successful, it shows "IP addresses set", otherwise "Cannot Set IP".

Return to the Sierra Management application, refresh the Set-up/Devices page and enter the desired name for each Wash Select II. Select and download the appropriate configuration profile for the Wash Select II as performed in Section 3.5. Repeat for any other Wash Select II units to be added to the system.

3.7 Setting the Cash Report Baseline

To use the Cash Report on the new server, all devices will need to have an initial cash adjustment performed. For paynodes, this is accomplished by swiping the Cash Adjustment card provided at each paynode. The resulting adjustment may show "strange" numbers, and should be ignored.

The WSII should also have an initial set of remove and add adjustments performed. To run a WSII adjustment, setup a Cash Reconcile Passcode/Passcard, perform both bill and coin removals, and run an "add" of the initial coin change.

4 Enabling Automatic Database Back Up

As a failure of the site server could cause critical data to be lost, Unitec strongly recommends that all site servers be set up for automated (daily) database backups. The thumbdrive that was supplied with the update programs can be used for the backup device. This thumbdrive should be connected to the USB port of the server (**Note:** the USB extension cable included in the upgrade kit will be required when the server is mounted in a NEMA enclosure).

With the thumbdrive in place, enable automated backups by selecting the *Utilities* tab on the Sierra Management Application, then *Database* in the left frame. Select the *Edit Automatic Backup Settings* function to access the set up page. Enable the function, select the drive location (thumbdrive) and set the desired time of day for the back up to run. **(Note:** The server will be unavailable for payment processing or other functions while performing backups. Therefore, this function should be scheduled to run when the site is closed or most likely to be idle).