



## Procedure – QS2000/QS3200 Software Installation

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<b>Subject</b>	Software Installation, Version 1.2.4
<b>Applies to</b>	All QS2000/3200 printers, all serial numbers
<b>Priority</b>	2; recommended; improves functionality
<b>Number</b>	FTP-00089-C
<b>Date</b>	October 2008

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### Summary

This document describes the steps needed to update the Linux Operating System, VUTEK User Interface (VUI) Software, and the QS2000/3200 firmware to version 1.2.4.

There is one Software Configurator disk, part number 45071091 REV C , and one Linux Operating System disk, part number 45071090 REV D.

The disk's label lists the version number of the software.

This document contains the following six sections:

1. Low-level formatting the Linux and data hard drives.
2. Installing the Linux operating system.
3. Installing the VuWare software
4. Installing the printer firmware.
5. Setting the jet pack temperatures and voltages, if required.
6. Returning to the previous software version.

The Release Notes document, VAB-00335, Version 1.2.4, posted on <http://www.vuteksupport.com>, contains details of the changes included in this version.

To determine the versions of software and firmware currently installed, go to the VUI **Service** menu and select **Versions**.

### Support Information

If you have any questions, please contact EFI's technical support staff from 8:00 AM to 5:00 PM, Monday through Friday.

- Eastern Standard Time – 603-677-3111
- Central European Time – 32.2.749.9420
- 24-Hour Emergency Support – 603-677-3111

## Installation procedures



**Before you begin, please review this document completely.**

EFI-VUTEk recommends performing this procedure during our normal business hours. These procedures may take as long as three hours to complete; the printer is unusable during this time.

In the VUI **Setup** menu, select the bold type items listed in Table 1 to display their values; record them in Table 1.



**You need the values recorded in Table 1 to complete the procedures.**

<b>Bi-directional</b>	
<b>Step size</b>	
<b>Offsets</b>	
Fence Left	
Fence Right	
Sheet Input	
Carriage Foot	
Purge Tray	
<b>Network Settings</b>	
Auto DHCP Host Name	
Static IP	
IP Address	
Subnet Mask	
Default Gateway	
Primary DNS Server	
Secondary DNS Server	

Table 1: Current printer settings

## Formatting the Linux and data hard drives

This section provides instructions necessary to perform a low-level format on both hard drives, Linux and Data, using the SCSI utilities. Complete this section before installing the software.

**Note:** If you do not format the hard drives, the software default settings will not be updated. To correct this problem, rename the DEFAULT.DAT file to DEFAULT.OLD and retain this file in case it is necessary to roll back to the original settings.

1. Power off the printer by pressing the green power button. The printer workstation computer remains on.
2. Close the VUI by clicking the "X" in the top right corner of the window.
3. Restart (reboot) the printer workstation by clicking on the **Desktop** menu at the top of the Linux desktop, selecting **Shut Down**, selecting **Restart**, and clicking **OK**. As the workstation restarts, the following message opens:

```
Adaptec SCSI Bios Vx.xx.x
© 2001 Adapter, Inc. All Rights Reserved
<<<Press <Ctrl> <A> for SCSI Select™ Utility!>>>
```

4. Press the **CTRL** and **A** keys simultaneously to open the **SCSI Select Utility**.
5. When the menu opens, press the **Enter** key.
6. Select **SCSI Disk Utilities** and press the **Enter** key.
7. Select the first device, usually **ID #3**, and press the **Enter** key.
8. Select **Format Disk** and press the **Enter** key.
9. When asked to verify, select **Yes**, and press the **Enter** key.
10. When asked to verify again, select **Yes**, and press the **Enter** key. Wait for the formatting to complete.



**It can take up to one hour for each hard drive to complete low-level formatting. Format the second drive after the first drive has finished formatting.**

11. From the **SCSI utility**, select the second device, usually **ID #6**, and press the **Enter** key.
12. Repeat steps 8 – 10, and then proceed to step thirteen, next.
13. Exit the **SCSI utility** by pressing the **Esc** key until the **Exit Utility?** dialog appears.
14. Select **Yes** and press the **Enter** key. The computer restarts and fails to load the operating system due to the blank hard drives.

## Installing the Linux Operating System

This section provides instructions necessary to install the Linux operating system.



**The process in this section deletes all settings, media, databases and images.**

1. Place the Linux Operating System DVD into the printer's DVD drive.
2. Restart (reboot) the printer workstation by pressing the **Ctrl**, **Alt**, and **Del** keys simultaneously.
  - ▶ The workstation side boots from the DVD.
  - ▶ The **How should I restore?** window opens, as shown in Figure 1.

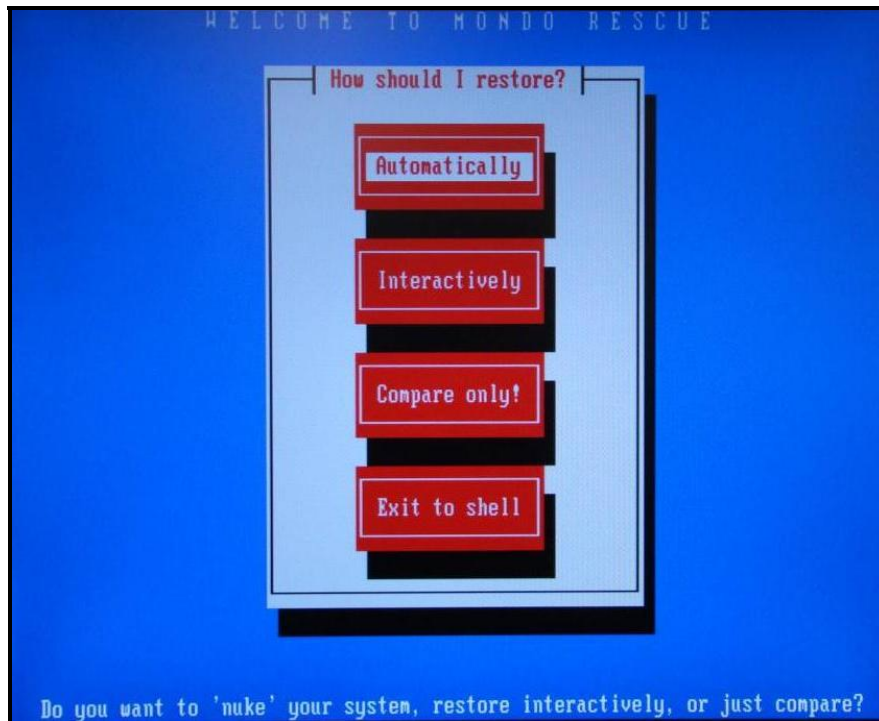


Figure 1: How should I restore? window

3. Select **Automatically**. The **Read from:** window opens, as shown in Figure 2.

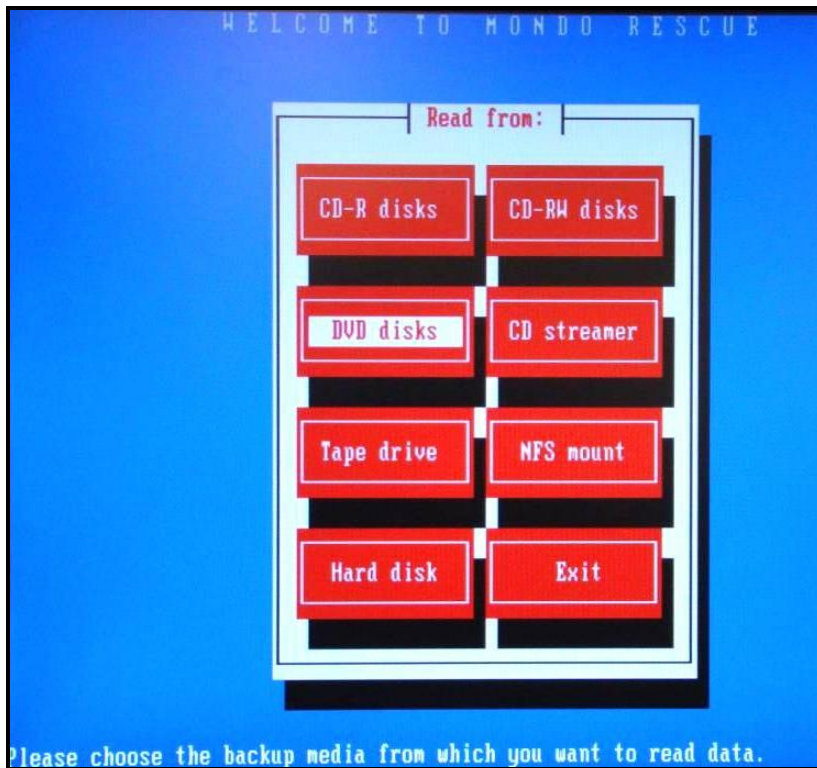


Figure 2: Read from: window

4. Select **DVD disks**. The install process starts. Several **CAUTION** windows appear indicating install progress. Figure 3 displays an example.

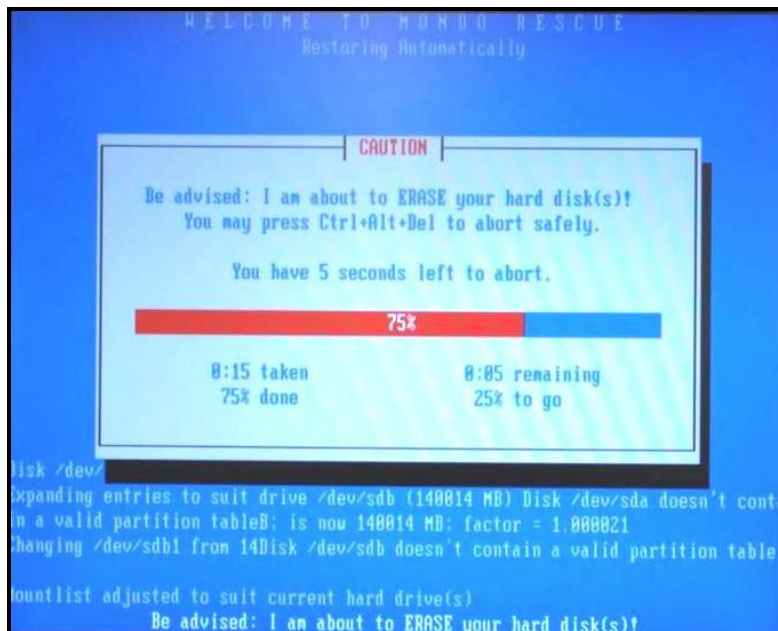


Figure 3: Caution window

5. When complete, an **Alert** window opens, as shown in Figure 4.

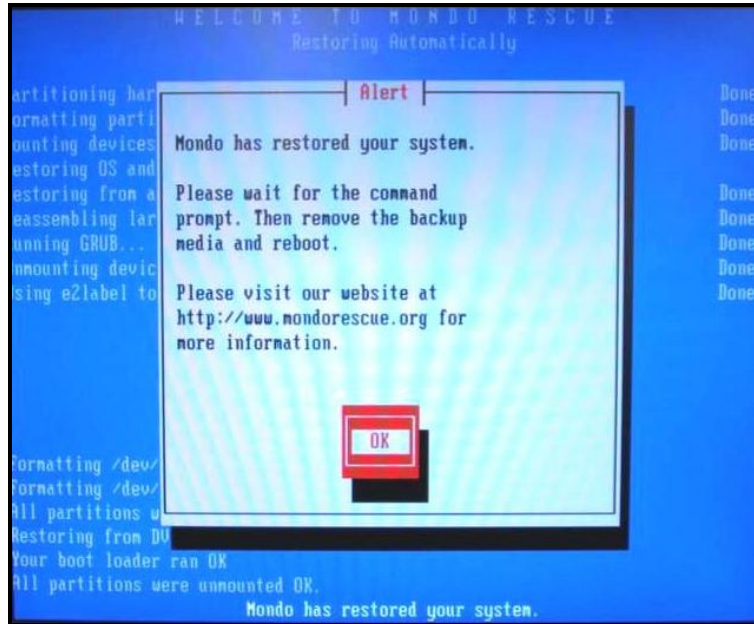


Figure 4: Alert window

6. Select **OK**. The DVD ejects from the DVD drive.



**The process is not complete until the # sign appears; this may take up to 1 minute.**

7. Remove the DVD from the DVD drive.
8. When the # sign appears, as shown at the bottom of Figure 5, type **reboot** and press the **Enter** key.



Figure 5: Operating system screen



9. The system reboots.

## Installing the VuWare Software

This section provides instructions for creating the disks to install the printer VuWare software.



**You need two blank, formatted 3.5" floppy disks to complete this procedure.**

### Using the VuWare Installer

1. Insert the Software Configurator DVD into the Linux computer DVD drive.
2. From the Linux desktop, select the **VuWare Installer** icon on the toolbar, highlighted with a red box in Figure 6.



Figure 6: System toolbar update icon

3. A confirmation window opens asking if you would like to shutdown the VuWare Software. Select **OK**. The software closes and the **VuWare Updater** window appears, as shown in Figure 7.

(If the VuWare Updater window does not appear, be sure you have the Software Configurator disk in the DVD Drive. If not, insert the correct disk and select the **Update VuWare** button again.)



Figure 7: VuWare Updater window

4. Under the **Installation Source** section, select **CD/DVD Drive**.
5. Click **Install VuWare**.

6. The status window displays the installation progress; once finished, the Middleware and VUI applications are installed.

## Creating the floppy Disks



The VuWare software must be installed before creating the firmware disks to ensure the proper version of firmware is created.

1. Insert a blank floppy disk in the printer's floppy disk drive located by the SmartCard reader.
2. Select **Create Firmware Disks**. The **Floppy Creator** window opens, as shown in Figure 8.

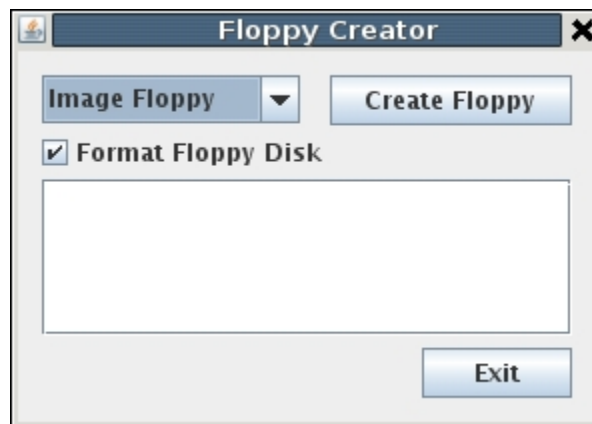


Figure 8: Floppy Creator window

3. From the drop down menu select **Image Floppy** and select the **Format Floppy Disk** checkbox.
4. Select **Create Floppy**. Formatting and making the disk takes approximately 30 seconds.
5. When complete, remove the floppy disk from the drive and label it **Image Floppy**.
6. From the drop-down menu, select **Format Floppy** and click the **Create Floppy** button.
7. Repeat steps four through seven to create a **Format Floppy** disk.
8. When complete, remove the floppy disk from the drive and label it **Format Floppy**.
9. Click **Exit** to close the **Floppy** Creator window.
10. Click **Restart VuWare**. The VUI loads and prompts you to insert the **Setup Smart Card**.
11. Insert the **Setup Smart Card**. The VUI continues loading.
12. Insert the **Security Smart Card** and choose **OK**.



13. From the VUI **Service** menu, select **Versions** to confirm that the following software versions are displayed:

- ▶ Client 1.2.4
- ▶ Middleware 1.2.4
- ▶ Firmware Firmware\_offline

## Installing the Printer Firmware Disks



**If you have not recorded your printer default settings as requested in Table 1 on page 2, please do so now.**

1. Shut down the Linux Workstation by selecting the Desktop menu and clicking the **Shutdown** icon found in desktop panel. (You may need to minimize the VuWare client if it is covering the desktop panel.)
2. Select the firmware computer by pressing the **Scroll Lock** key twice *quickly*, followed by the **↑** (Up Arrow) button. This switches the user monitor from the Linux computer to the firmware/Windows computer.
3. Open the front cover of the printer's electrical compartment to access the printer's floppy drive.
4. Insert the "**Format Floppy**" disk into the printer's floppy drive.



**Be sure to use the floppy drive located inside the electronics compartment.**

5. Cycle the power off and then on to reset the printer. Press the Green power switch, wait 30 seconds and press the Green power switch again to restart the printer.
  - ▶ After the printer computer restarts, the monitor displays the prompt **A:\>**.
6. Replace the "**Format Floppy**" disk in the printer's floppy drive with the "**Image Floppy**" disk.
7. At the **A:\>** prompt, type **Vxworks.exe C:**
8. If a message prompts you to confirm that you want to overwrite the existing firmware, type **Y** and press the **Enter** key to continue.
9. When the floppy drive active indicator goes out, it indicates the installation of the firmware is complete.
10. Remove the floppy disk from the disk drive.
11. Restart (reboot) the firmware computer by pressing the **Ctrl**, **Alt**, and **Del** keys simultaneously.
12. Once the printer operating system reboots, check that the version number displayed in the title bar of the window is version 1.2.4.
13. Select the Linux computer by pressing the **Scroll Lock** key twice *quickly*, followed by the **↑** (Up Arrow) key.

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14. Restart the Linux computer by pressing the **Ctrl**, **Alt**, and **Del** keys simultaneously.
15. Once the Linux computer reboots, press the **Scroll Lock** key twice *quickly*, followed by the **↑** (Up Arrow) key. You are now at the Windows workstation.
16. Copy the VUTEk font file, **FONTVTK.FON** from the "blank" drive to C:\.
17. Store the floppy disks in a safe and accessible location, such as with the printer's documentation, in case they are required at another time.

## Setting the jet pack temperatures and voltages



Do not delete the default.dat file on the printer side hard drive during the installation. If you have deleted the default.dat file, you must perform the following steps for all jet packs.

1. From the Firmware **Service** menu, select **Jet Monitor**.

In the **Jet Settings** field, in the bottom right corner of the screen, type the number of the jet pack to modify. Figure 9 depicts the jet pack layout in the carriage, numbering scheme, and associated colors.

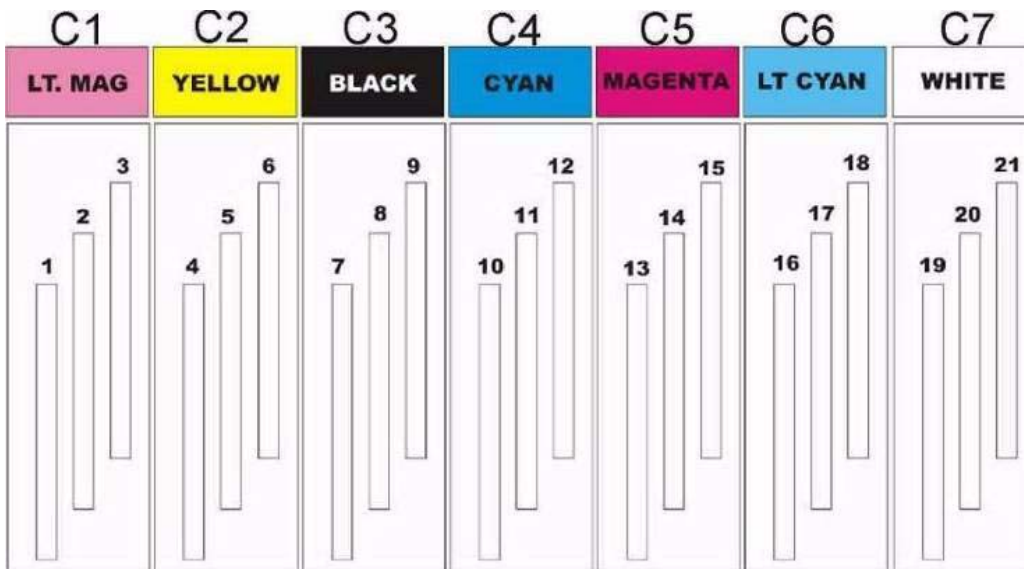


Figure 9: Jet pack numbers and placement

2. Select **Temp Select**.
3. In the **Jet Setting** entry field, type the required temperature for each jet pack. The jet temperature settings are as follows:

- ▶ Cyan, Magenta, Yellow **116° F**      **46.7° C**
- ▶ Black, L. Cyan, L. Magenta, L. Yellow, L. Black **118° F**      **47.8° C**
- ▶ White **121° F**      **49.4° C**

4. Select **Volt Select**.
5. Calculate the voltage value to enter for the current jet pack.

Colors – Each jet pack has a specific voltage value printed on it. To calculate the value to enter for each jet pack, subtract 1.5 volts from the number printed on the jet pack. For example, 20.1 on the jet pack minus 1.5, results in a value of 18.6 volts to enter.

White – The voltage for each white jet pack needs to be set at 1.0 volts less than the number printed on the jet pack.

6. Enter the calculated value and click **Set**.
7. Repeat the steps 2-7 for the remaining jet packs.

## Returning to the previous software version (if necessary)

1. From the Linux desktop, select the **VuWare Installer** icon on the toolbar, highlighted with a red box in Figure 10.



Figure 10: System toolbar update icon

2. A confirmation window opens asking if you would like to shutdown the VuWare Software; select **OK**. The software closes and the **VuWare Updater** window appears.
3. From **Installation Source** list, select **Backup Folder**.
  - ▶ Each time the **Update VUI** icon is pressed, a backup is saved to the hard drive.
  - ▶ Double click the **Backups** folder and select the desired backup version.
  - ▶ A backup is only created when the software is updated using the VuWare Installer. If there is no backup file in the Backup Folder, the software must be installed from the Configurator CD containing the desired version of software.
4. Select **Install VuWare**.
5. When complete, create the firmware floppy disks and install the firmware as outlined above.
6. From the VUI **Service** menu, select **Versions** to confirm restoration of the desired software version.

- end -