Information Sheet IS10011C

VS Series – Recovering / Installing the Operating System

(For Software Version 2.x)

Issue 1.0 ..... 25 November 2013

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IS10011C: VS Series - Recovering / Installing the Operating System
INFORMATION SHEET

1.0 INTRODUCTION

This document describes how to recover / install the operating system (OS) of a VS series FM transmitter. This may be performed as part of an upgrade procedure or in the event that corruption of the OS has occurred.

1.1 Equipment Affected

This procedure applies to all VS series transmitters running software 2.x.

1.2 Responsibility for Implementation of Procedure

This procedure should be carried out by qualified station maintenance personnel who are familiar with VS series transmitters.

1.3 Scheduling

This procedure should be performed only when directed by a software upgrade procedure or when corruption of the OS has occurred. The transmitter will need to be “off air” during this procedure.

1.4 Manpower Requirements

Implementing these instructions will require approximately 60 minutes.

1.5 Special Tools/Test Equipment

- USB flash drive, formatted to FAT32 (for download of OS recovery files).
- PC or laptop to serially connect to the transmitter
- DB9 straight-through serial cable with a male connection for the transmitter end

1.6 Publications Affected

This modification does not affect the VS series documentation.

NOTE

This procedure will erase the user database. Only the default "Nautel" user will be valid with no password required. Before proceeding, record user settings such as user accounts, logs, SNMP configuration, email configuration, time zone, notifications and playlists to ensure they can be restored after the procedure is complete. Refer to the transmitter's Operations and Maintenance Manual to locate these settings.

2.0 RECOVERING THE OS

(a) Using a PC or laptop with a web browser, go to ftp://www3.nautel.com. Select Directory **VS_Series/OS Recovery**.

(b) Select Directory Ver 2.0.1.

(c) Download the zip file found in the directory.

(d) Extract the contents of the zip file to the root directory of a USB flash drive.

(e) Connect a PC or laptop, via the serial port, to the **RDS/RBDS** port (A1J5A) on the rear panel of the transmitter.

(f) Using your PC or laptop, download putty.exe from http://www.chiark.greenend.org.uk/~sgtatham/putty/download.html. Choose the first download in the list and save it to your desktop.

(g) Double click the PuTTY.exe icon and configure for the settings shown in Figure 1. Select Serial for Connection type. Enter the appropriate COM port in the Serial line field. Enter 115200 in the Speed field. Click **Open**.

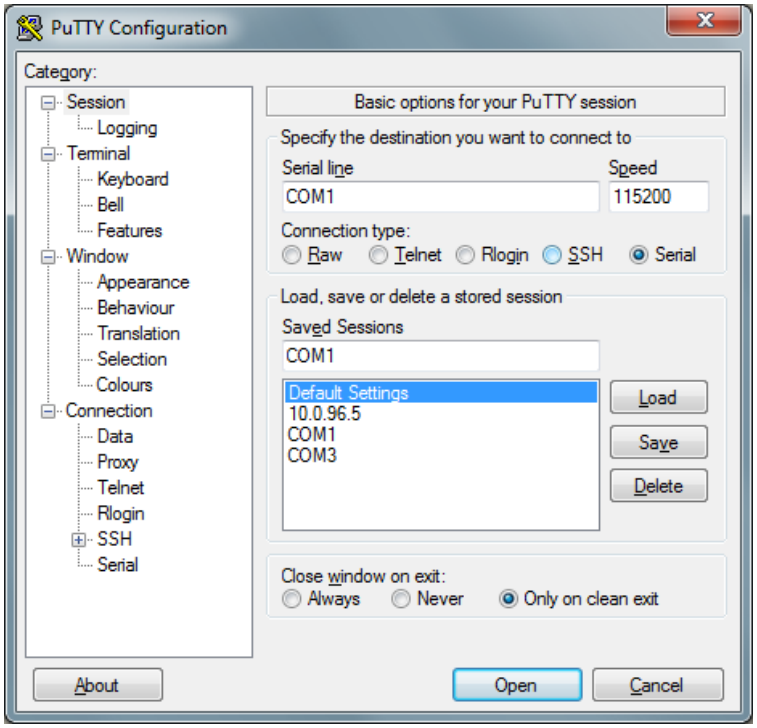

Figure 1: PuTTY terminal emulation configuration settings

(h) Using the transmitter's front panel UI, navigate to the Main Menu -> Local/Remote screen and select **Local**.

(i) Using the transmitter's front panel UI, navigate to the Main Menu -> System Settings -> Console Select screen and select ARM Console. Press the center checkmark button to save the selection.

(j) Using the transmitter's front panel UI, navigate to the Main Menu -> System Settings -> Arm Watchdog screen. Use the up and down buttons to select **Disabled** (*PuTTY will now communicate with the ARM serial console*). Press the center checkmark button to save the selection.

(k) Remove any USB devices that are connected to the transmitter.

(l) Plug the USB flash drive used in step (d) into the top USB port (A1J8B) on the rear of the transmitter, located immediately below the LAN port. The PuTTY terminal screen should indicate the detection of the USB drive (see Figure 2).

(m) Using the transmitter's front panel UI, navigate to the Main Menu -> System Settings -> OS Recovery screen, which should display the word **Cancel**. Press the UI's up arrow key to change the selection to **Force OS Recovery**. Press the center checkmark button to initiate the process.

(n) The VS transmitter's front panel does not indicate the OS Recovery process. PuTTY.exe allows observation of the process and provides notification when the process is complete. See Figures 3, 4 and 5.

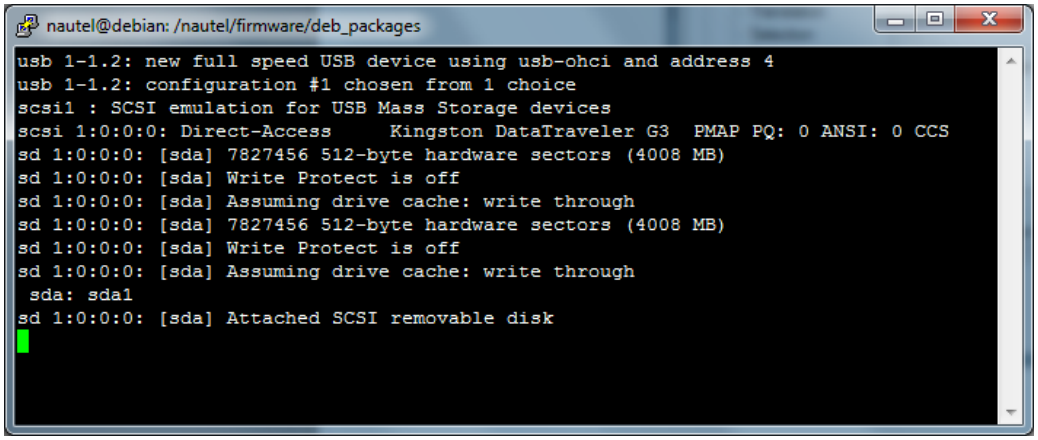

Figure 2: PuTTY terminal screen – USB drive detection

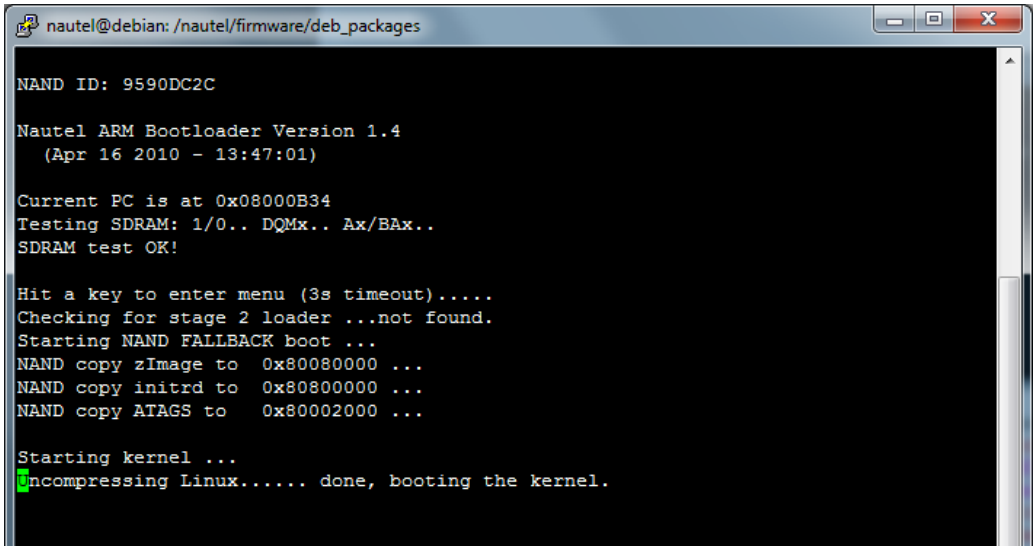

Figure 3: PuTTY terminal screen – recovery process initiated

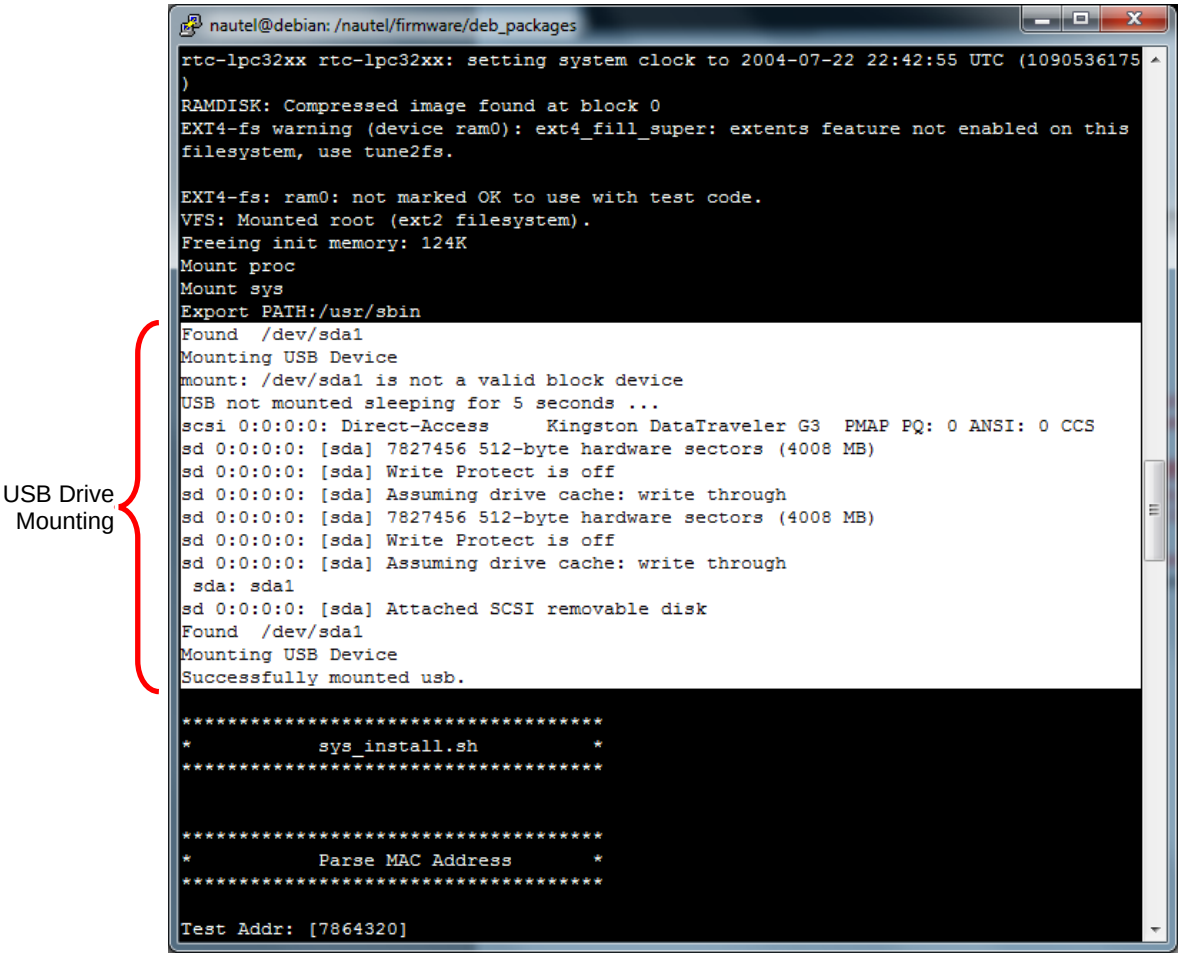

Figure 4: PuTTY terminal screen – USB drive mounting

(o) Once the USB drive is mounted (see Figure 4), the extraction process should commence (see Figure 5). **NOTE:** The extraction process takes approximately 25 minutes to complete.

NOTE

If the USB drive fails to mount (indicated by PuTTY syntax "USB drive failed to mount, sleeping for 5 sec…"; unplug the USB drive and then plug it in again.

(p) The OS recovery process is complete when "Finished Installation" appears on the screen (see Figure 5).

(q) Reboot the transmitter by cycling its ac power (off, then on). Remove the USB flash drive and disconnect the serial port connection. This completes the OS Recovery procedure.

(r) Using the transmitter's front panel UI, navigate to the ARM Watchdog function and set to **Enabled**.

(s) Return the transmitter to remote control operation, if necessary.

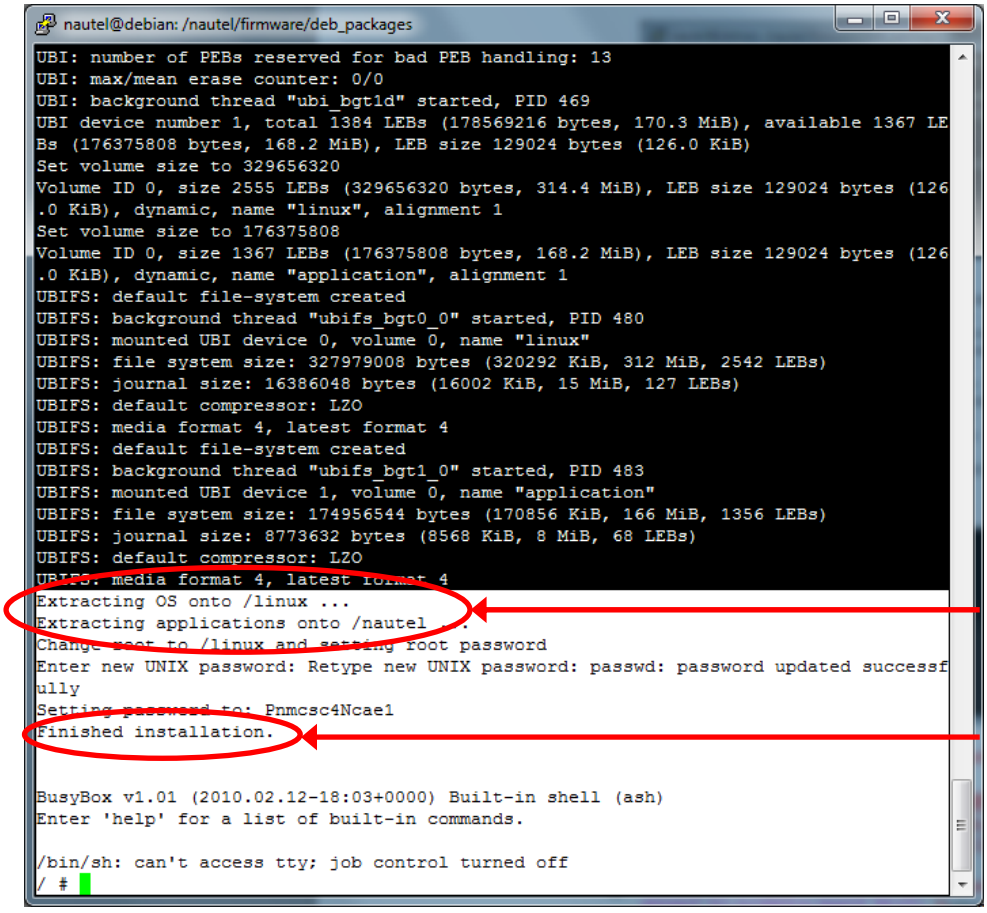

Figure 5: OS recovery completion screen

NOTE

Once the OS Recovery is complete, the user database is reset, therefore only the default "Nautel" user is valid with no password required.

Refer to the transmitter's Operations and Maintenance Manual to re-establish lost user settings including: user accounts, logs, SNMP configuration, email configuration, time zone, notifications and playlists.

Before connecting remotely via the AUI, clear your web browser's cache to remove any obsolete AUI files.

If you have any questions or require additional assistance, please contact Nautel's Customer Service Department at:

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Email: support@nautel.com