Information Sheet IS21011

Viewing and Logging Information from the Console Port for ARM-based Transmitters

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IS21011: Viewing and Logging Information from the Console Port for ARM-based Transmitters
INFORMATION SHEET

1 INTRODUCTION

This document provides instructions to gather data on an ARM-based transmitter, to assist in troubleshooting activities. Specifically, this document describes how to:

- configure the terminal program PuTTY for logging and provide settings for other serial terminals.
- navigate to the ARM login screen.

1.1 Equipment Affected

This procedure applies to VS Series FM transmitters, NVLT Series FM Transmitters, and NX3, NX5 and NX10 AM transmitters.

1.2 Responsibility for Implementation of Procedure

This procedure should be carried out by qualified station maintenance personnel who are familiar with the transmitters included in paragraph 1.1 and terminal programs such as PuTTY.

1.3 Scheduling

The transmitter will need to be "off air" during this procedure.

1.4 Manpower Requirements

Implementing these instructions will require approximately 15 minutes.

1.5 Special Tools/Test Equipment

- PC or laptop to serially connect to the transmitter
- DB9 straight-through serial cable with a male connection for the transmitter end
- USB to Serial adapter cable (dependent on PC / laptop capabilities)
- Internet connection is required to download terminal access program (e.g., PuTTY)

1.6 Publications Affected

This information does not affect the transmitter's documentation.

2 PRELIMINARY SETUP

(a) Using the transmitter's front panel or remote AUI, set the transmitter to its 'RF Off' state.

(b) If applicable to your transmitter series: Using the transmitter's front panel UI, navigate to the **Main Menu ► System Settings ► Host Watchdog** OR **Main Menu ► System Settings ► Arm Watchdog** screen. Use the right arrow then the up arrow. Select **OFF** and press the check mark.

(c) Using the transmitter's front panel UI, navigate to the **Main Menu ► System Settings ► Console Select** screen. Use the right arrow then the up arrow. Select **Host/ARM Console** and press the check mark.

3 CONNECTING THROUGH PuTTY

NOTE

Ensure adequate internet connection is available for step 3 (a) or download PuTTY prior to arriving at the transmitter site.

(a) Ensure PuTTY is installed on the PC or laptop used for the upgrade. If not, 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.

(b) Connect the PC or laptop (with PuTTY installed) via the serial port to the following port for your transmitter, noting that modern laptops may require a USB to Serial adapter cable:

- VS Series: J5A (RDS/RBDS) on the rear panel
- NVLT Series: J5A on the back of the NAE106* Controller Module
- NX3/NX5/NX10: J2 Debug jack on the NAPC168* Control/Interface PWB.

NOTE

Correct COM port can be confirmed through the use of Device Manager (see Figure 7).

(c) 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.

Figure 1: PuTTY configuration settings

Viewing and Logging Information from the Console Port for ARM-based Transmitters
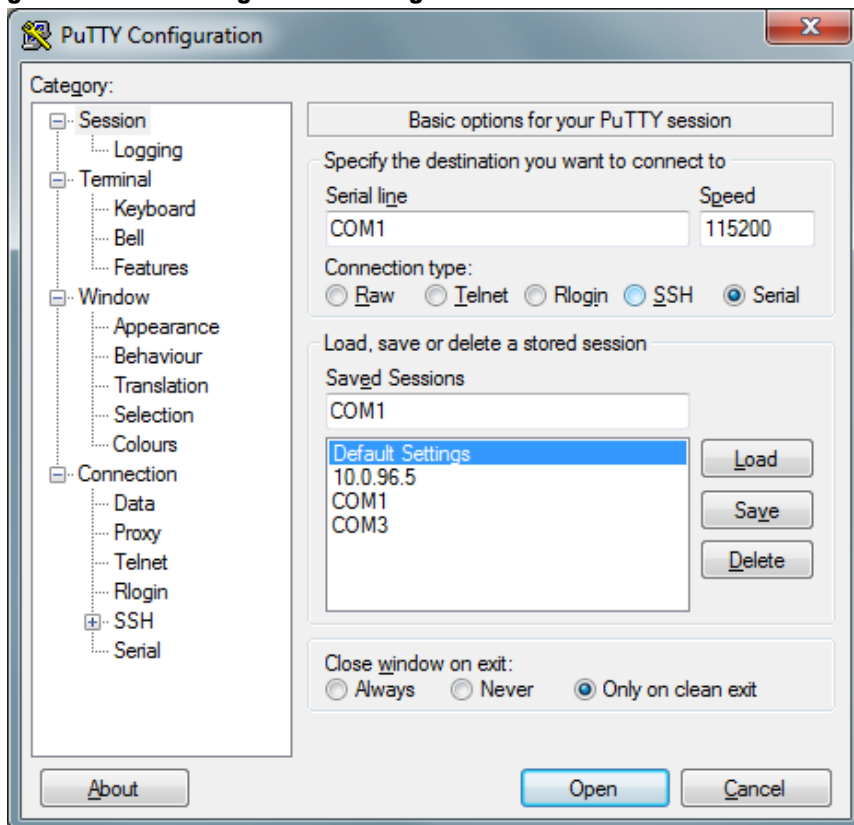
(d) See Figure 2. Enable logging by clicking **Logging** in the Category section. Select the **All session output** radio button. To set the directory and filename of the log, click the **Browse** button beside the **Log file name:** field.
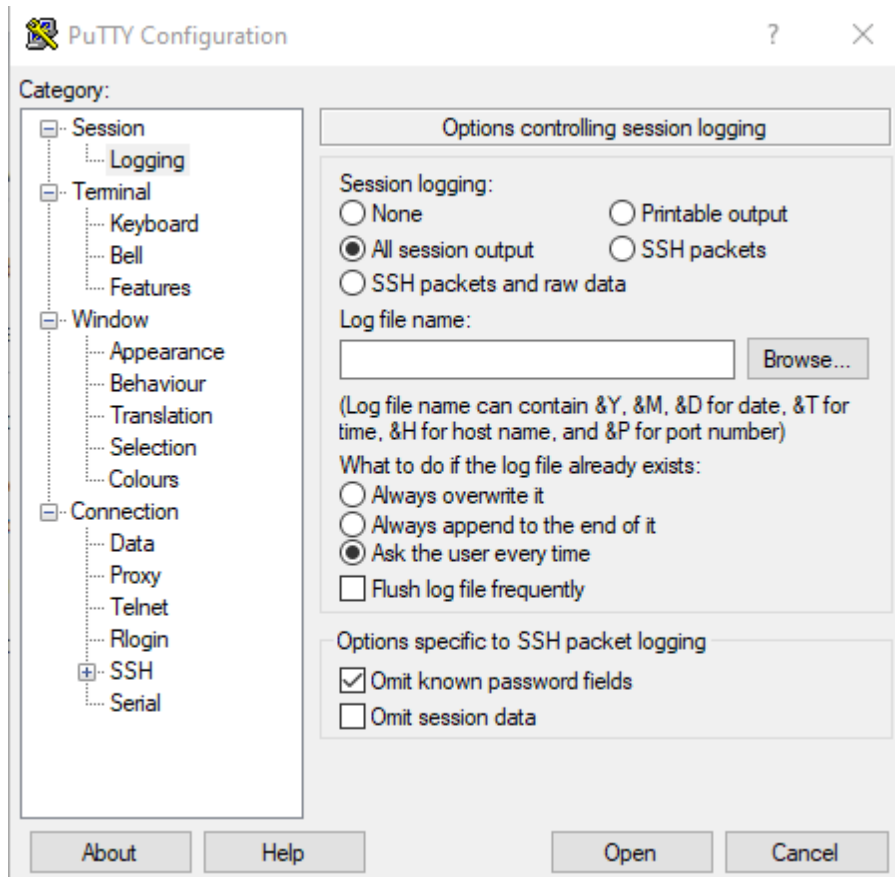

Figure 2: Enabling Logging

(e) See Figure 3. Choose an appropriate directory and filename and click **Save** in the bottom right corner of the dialog box. This will return you to the configuration settings in Figure 2.
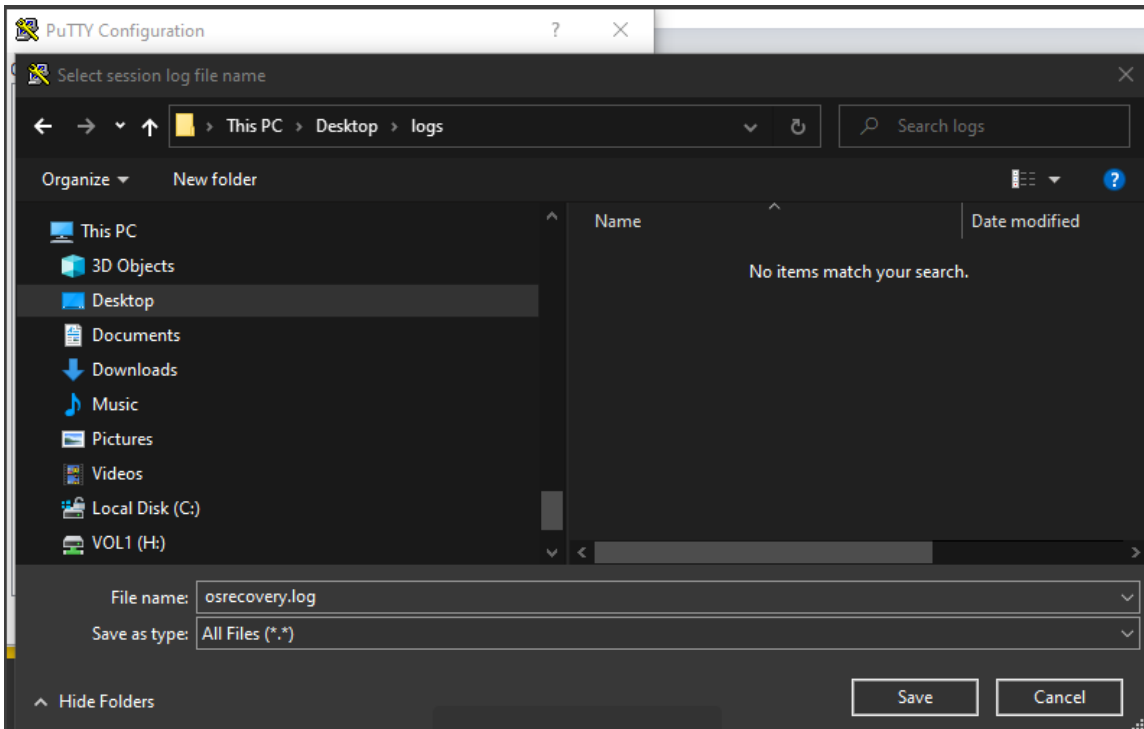
Figure 3: Saving Log File Name

(f) Click **Open**. The window in Figure 4 should appear, verifying that connection has been established. If no connection error occurred, press the **Enter** key once, and the window will update to display the screen shown in Figure 5. If a connection error occurs, you may see a screen like Figure 6. Make sure you have an error-free connection.
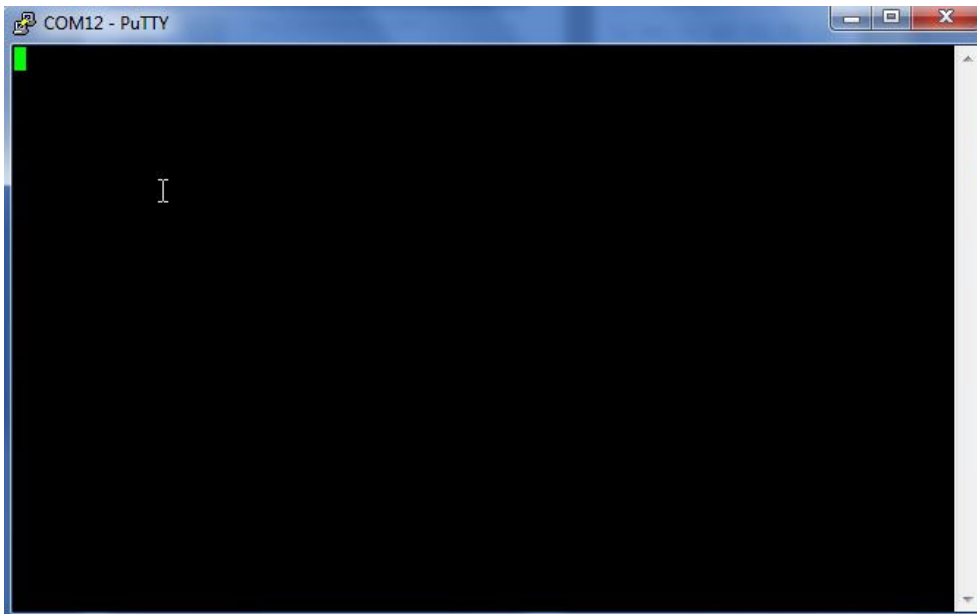

Figure 4: Terminal Screenshot

Viewing and Logging Information from the Console Port for ARM-based Transmitters
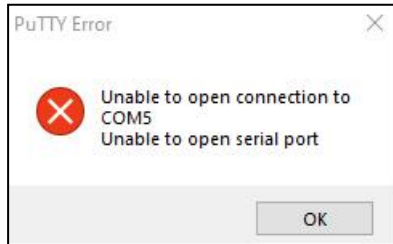
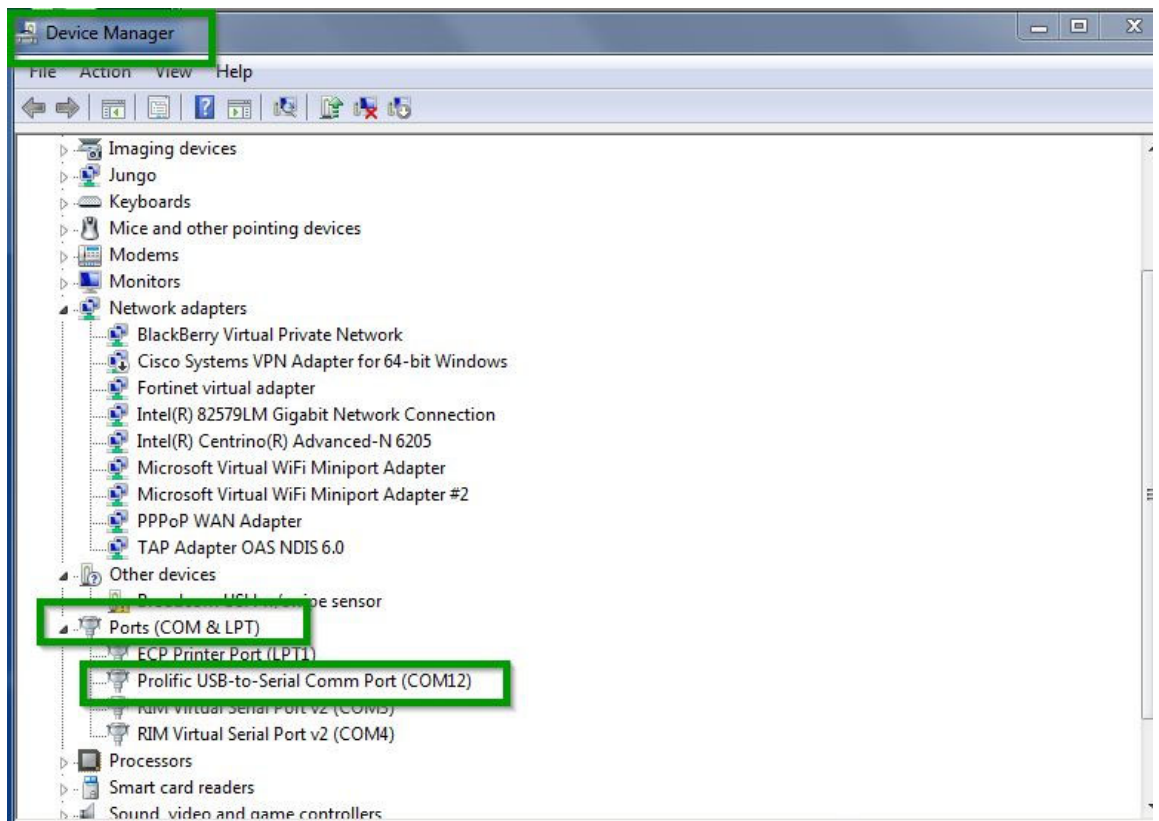**Figure 5: ARM Console Login Screen**

Figure 6: Connection Error

Figure 7: Device Manager

(g) The procedure is complete. The terminal program is now configured for logging and providing transmitter settings.

(h) Resume normal transmitter operation as follows:

- Disconnect the serial cable from the transmitter.
- Set the Host Watchdog or Arm Watchdog screen, if applicable [see step 2 (b)], to **ON.**
- Set the Console Select screen to **DSP Console** [see step 2 (c)].
- Set the transmitter to its 'RF On' state.

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