

Smartware Automated Services

August 2006

Overview

This document briefly describes how to use the new Smartware Automated Services web site to generate block diagrams and documentation from Microzone and PEM files. It also describes the procedures for generating a complete block dump from a GCM, Microzone or PEM.

At the moment, the system will accept the following:

- Microzone II and PEM Text Files (.txt)
- Microzone II and PEM Binary Files (.mz2, .pem)
- GCM/LNC Block Dumps (.txt, .log, .blk)
- LCM Block dumps (.txt, .log, .blk)

There is a new Smartware NW8000 Communications Utility that can be used to effectively retrieve block dumps for GCMs, LNCs and LCMs via direct connect or modem, with error checking and correction built in, as described later in this document

Logging into the Web Site

The new site is available anywhere on the internet at:

<http://services.smartwaretech.com>

- To log in, click on the Login link on the left side.
- The accounts and user names for this system are distinct from the ones used for the main Smartware Technologies web site.
- If your company doesn't already have an account, click on the Sign Up Now link and complete the form.
- At least one user in each company is designated as an Account Manager. That user can add new users to their account by clicking on the Manage Users link.

Creating an Order

A brief rundown of the steps to create and submit an order:

- After logging in, click on the Manage Orders link.
- Click on the CREATE NEW ORDER button.
 - You will be prompted for a Job Name and Reference Number.
- From the Order Summary page, click ADD FILES to add files
 - Browse to the appropriate source file (.txt, .pem, .mz2 or .blk), or to a zip file containing multiple files
 - Click UPLOAD FILE
 - Repeat for any additional files
 - When you are done, click DONE.
- The files will be analyzed on the server. When they are finished, the screen will be updated.
- Click SUBMIT ORDER to submit the order for processing.
 - The screen will show an estimate for when the processing will be complete
 - You do not have to keep the browser open for the processing to continue.
 - When the job is complete, you will be notified by e-mail
- Return to the Order Summary page after being notified that the job is complete
 - Click DOWNLOAD ORDER to download the zip file containing the output files
 - Save the Zip file to your hard drive
 - Unzip the files into a new folder
 - Review the *Readme.txt* and *Warnings.txt* files
- To view the output files through Designer Suite 2005, open the generated .DS2 file
 - Use the Print Manager to print the files
 - Be sure to select the PRINT BY FILE option in the Print Manager

Generating a Block Dump for a GCM, LNC or LCM

There are two methods you can use to generate a block dump for a GCM, LNC or LCM.

You can use a generic terminal program, such as Windows HyperTerminal, and capture the output for the REPORT→BLOCK DATA→ALL:BLOCKS command. This method can be unreliable, as even a few lost characters in the middle of the dump will cause the web site to be unable to process the request. Furthermore, you will not know there was an error until after you uploaded the file, and the only remedy is do the entire dump again.

The preferred method is to use the new Smartware NW8000 Communications Terminal Utility, which is designed to communicate with the devices, requesting the blocks one at a time and verifying them as it goes. If an error is found, the individual block can be requested immediately. The entire process is automated, and the resulting file is a .BLK file that you can upload to the web site for processing.

Using the Smartware NW8000 Communications Utility

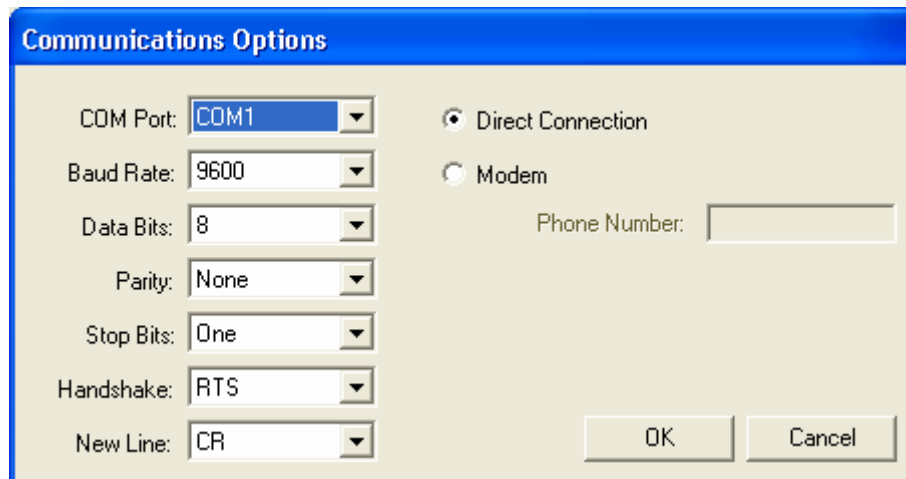
To install the utility, download the latest version from the web site and run the .MSI file. An icon will be created on your desktop.

Creating a New File

When you first run the utility, you must either create a new project file (FILE→NEW) or open an existing one (FILE→OPEN). These files have .BLK extension, and are used to store all the information about connecting to a specific device and the block data that was collected.

The Communications Options

When you create a new file, you will be prompted to specify the communications parameters:



The screenshot shows the 'Communications Options' dialog box. The title bar is blue with the text 'Communications Options'. The main area is light beige. On the left side, there are seven dropdown menus: 'COM Port' (set to COM1), 'Baud Rate' (set to 9600), 'Data Bits' (set to 8), 'Parity' (set to None), 'Stop Bits' (set to One), 'Handshake' (set to RTS), and 'New Line' (set to CR). On the right side, there are two radio buttons: 'Direct Connection' (which is selected) and 'Modem'. Below the radio buttons is a text box labeled 'Phone Number'. At the bottom right of the dialog are two buttons: 'OK' and 'Cancel'.

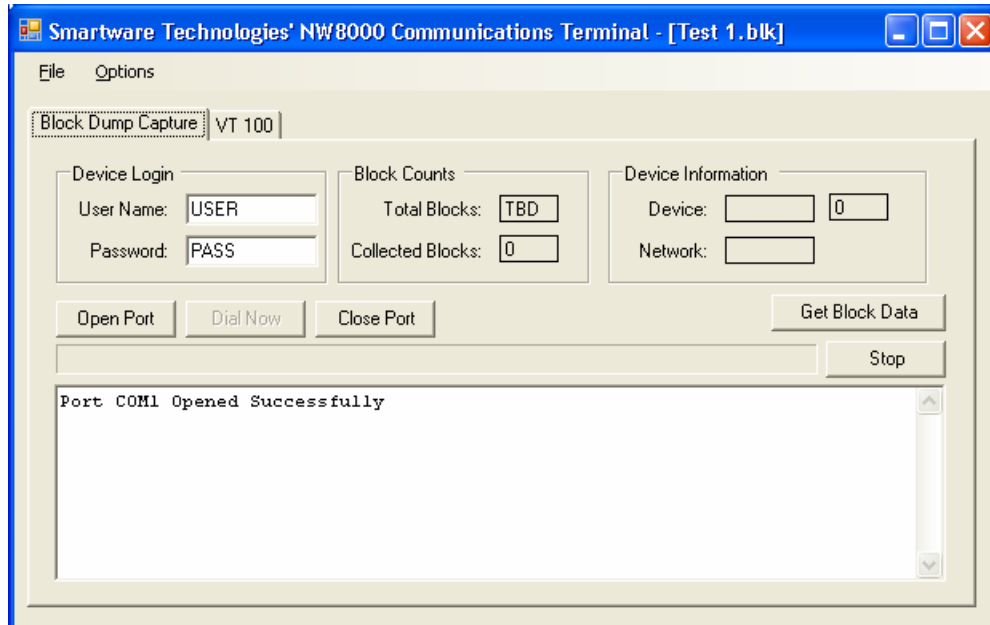
The default parameters should suffice, with the following changes:

- For direct connection, you might need to choose a different COM port number.
- For modem connections, you will likely need to choose a different COM port (such as COM3).
- For modem connections, select the MODEM radio button and enter the phone number to dial. Include any dialing prefixes, such as a '9' to dial out or a comma to pause (e.g. 9,555-1212).

To change the communications parameters at any time, select OPTIONS→COMMUNICATIONS.

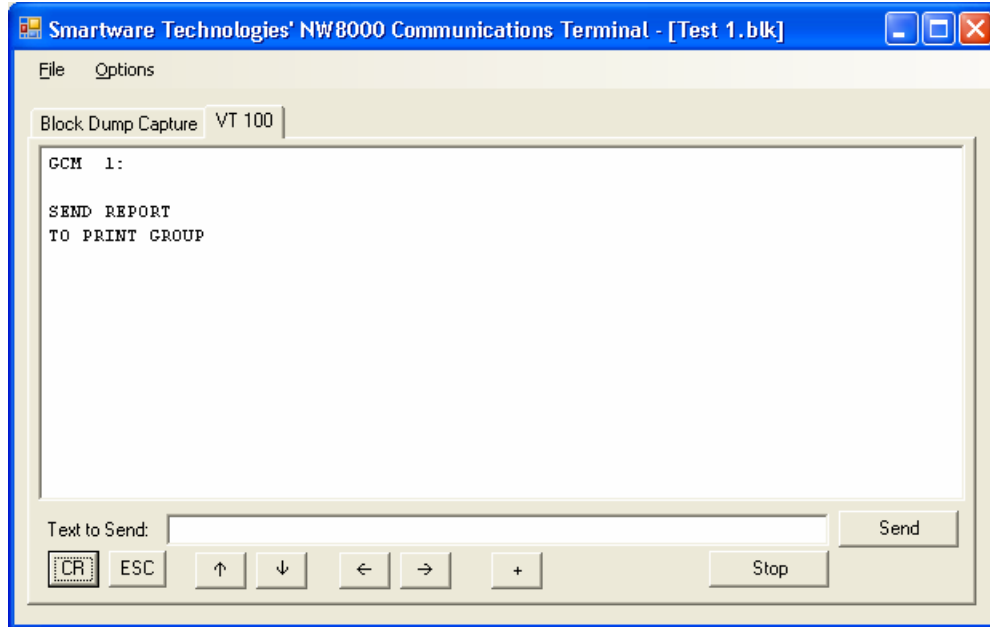
The Utility Screens

There are two tabs on the utility that show two different views of what is happening. The BLOCK DUMP CAPTURE screen shows the activity of the automatic block dump collector, among other information:



- The BLOCK COUNTS and DEVICE INFORMATION fields will be filled in when the collection begins.
- If you want the system to automatically log into the device, specify the USER NAME and PASSWORD fields (otherwise you can do it manually from the VT 100 Terminal page).
- Use the OPEN PORT, CLOSE PORT and DIAL NOW buttons to connect and disconnect from the device.
- When ready, use the GET BLOCK DATA Button to start the automated collection.

The VT 100 tab provides a terminal emulator to control the device manually.



- If you click in the text area, you can send certain keystrokes (arrows, Enter and ESC) to the terminal. Otherwise, you can use the CR, ESC and arrow buttons to control the menus.
- To send a direct command or response, enter the text in the TEXT TO SEND box and click SEND. A carriage return will be sent automatically.

Connecting to the Device

To begin communications, do the following:

- Ensure that the communication parameters are correct.
- Click the OPEN PORT button to initialize the communications.
- If connecting by modem, click the DIAL NOW button, listen for the modem tones, and wait for a Connection message.
- Once connected, on the VT 100 screen click the CR button two or three times quickly until the device responds with a login message.
- Log into the device by responding to the USER NAME and PASSWORD prompts as usual. If you specified these values on the first screen, you don't need to do this manually.

Collecting Block Data

Once connected (and at the main menu), click the GET BLOCK DATA button. The system will request a block list from the device, and then request the individual block dumps one at a time. You can follow the progress by noting the progress bar and block counts on the first screen, or watching the automated conversation on the VT 100 screen. During this process, do not enter any manual command on the VT 100 terminal screen.

Handling Communications Problems

Because it gets the blocks one at a time, you can stop the communications at any time and restart it. This is useful if:

- The modem connection disconnects.
- The communications become garbled and the system becomes too far out of synch. You may need to stop the collection (by pressing the STOP button) and use the VT 100 screen to return to the main menu. You can then resume the collection by pressing the GET BLOCK DATA button.

If you are restarting the utility itself, simply open the appropriate .BLK file (FILE→OPEN) and resume.

Sending the Block Data to the Smartware Services Web Site

The block data is automatically stored in the .BLK file you specified for the project. This file can be uploaded to the web site in the same way as any other acceptable format.