Subject: Installation Instructions for IRIS DVS with NCR ATM

Hardware: ATM Data Inserter

Software: N/A

Release Date: 02/04/04

SUMMARY

There are various ATM network configurations in use. The IRIS DVS system is capable of interfacing with these systems using the ATM Data Inserter but the interface must be configured correctly. This Technical Bulletin provides a guide in connecting the IRIS DVS system to NCR ATM's particularly ATM's with a dial-up connection. **This Technical Bulletin only applies to NCR ATM's.** Although the procedure is written specifically for ATM's with a built-in modem and used for dial-up connections the procedure should work on all NCR ATM's.

Applicable ATM's

This procedure applies to NCR Model 0101 Class 5870 ATM with built-in modem. (Note: This procedure may also apply to other NCR ATM's since all NCR ATM machines should be capable of supporting the camera interface port.)

PROCEDURE

1. Determine which RS-232 serial port on the ATM will be used for the IRIS DVS interface. The selected RS-232 communication port should not be connected to any other device. Verify that the ATM configuration does not have this port pre-assigned using the **ATM Serial Port Configuration Procedure** described later.
2. Assuming that the selected port was RS-232 port #2 insert the NCR ATM configuration disk (supplied with the NCR ATM interface kit) into the ATM drive. Copy the files to the ATM using the **ATM File Copy Procedure** described later.
3. Install the DB-25 to DB-9 adapter supplied with the NCR ATM interface kit. Connect the DB-9 to DB-25 adapter to the male DB-25 connector on the back of the IRIS ATM data inserter.
4. Connect the NCR ATM to the IRIS ATM interface unit using the cable supplied with the NCR ATM interface kit. Connect one end of the DB-9/DB-9 cable to the selected ATM RS-232 port and the other end to the DB-9/DB-25 adapter installed in the previous step.
5. Set up the IRIS ATM data inserter to the correct protocol using the steps outlined in the **Set-up of ATM Data Inserter and IRIS DVS Procedure** described later.

6. Set up the IRIS DVS to capture the transaction data and transaction information using the **Set-up of ATM Transaction Data on IRIS DVS Procedure** described later.
7. This completes the installation.

ATM Serial Port Configuration

1. Place the NCR ATM into the "Supervisory" mode with the switch on the rear maintenance panel.
2. The service panel or display screen should be showing you the actual "Select" menu. Press "7" then "Enter" on the maintenance keypad. This will take you to the "Diagnostics" menu.
3. Press "1" to select the "Configuration" menu.
4. On the "Configuration" menu select option "9" to display "more" options for the Configuration menu.
5. On the second "Configuration" menu press "7" to display the "RS-232 Configuration"
6. Select "1 – Yes" for OK to proceed. The ATM will only be reset if you change the RS-232 configuration.
7. At the bottom of the screen it will show the current RS-232 configuration. Verify that nothing is assigned to the serial port you have designated for the IRIS DVS system. If there is a device assigned to the selected serial port, select another unused serial port or change the configuration so that the selected serial port is unassigned.
8. If you change the RS-232 configuration you will need to hit the reset switch to reset the ATM one you exit all of the configuration menu screens. When the ATM resets it will reload the OS software and display a "SYSTEM NOT AUTHORIZED" message. To clear this message open the safe and unlatch the bottom currency cassette and partially remove it, then shove it back in. The display should now indicate "SYSTEM LOADED" and continue with the software load.

ATM File Copy Procedure

1. Place the NCR ATM into the "Supervisory" mode with the switch on the rear maintenance panel.
2. The service panel or display screen should be showing you the actual "Select" menu. Press "6" then "Enter" on the maintenance keypad. This will take you to the "Access" menu.
3. Press "15" then "Enter" to select the "Copy File" function. You will see the diskette drive access light come on for a moment, then go out, and at the bottom of the maintenance screen it will display "Function Done".
4. Remove the diskette from the ATM drive and then press down on the "Reset" switch on the maintenance panel. Return the "Supervisory" switch to "Normal"
5. TO verify that the files were copied correctly the ATM will have written a "COPYLOG.SSS" file to the diskette. Using a different PC open the "COPYFILE.SSS" file with a text editor like Notepad. The text file will contain a list of all files copied and the results of the copy operation. Verify that the CAMERA file was successfully copied.
6. *(NOTE)* The files contained on the disk assume that RS-232 port #2 is used for the connection. To change the port to a different RS-232 port edit the "CAMERA" file and change the first parameter on the first line to the port number desired. i.e. Currently the file is configured to use port #2. To change the settings to use port #1 the first line should read: "1,4800,7,E,1". **Caution: DO NOT CHANGE ANY OTHER PARAMETERS**.

Set-up of ATM Data Inserter and IRIS DVS Procedure

1. Once the ATM Data Inserter is connected to the ATM we can proceed with setting up the ATM Data Inserter and the IRIS DVS to capture transaction information.
2. Turn the ATM Data Inserter over and locate four (4) small Phillips head screws. Remove the four screws. This will enable you to remove the top half of the enclosure. Verify that the jumper settings are the same as the default settings listed in the ATM Data Inserter manual. Also set switch S1 position 1, 2 and 3 ON.
3. Using a 9 pin cable connect the ATM Data Inserter to the serial port of a laptop. (Hint: You can also

use the IRIS DVS system as a PC by connecting to the serial port of the IRIS DVS and starting Hyper-Terminal). This cable is a direct-connect cable and does not require a modem-eliminator cable. (See ATM Data Inserter manual for detailed connection information on RS-232 cable)

4. Apply power to the ATM Data Inserter. The Power and Sync LED's should come on solid.
5. Type "<cntl>AMM<cntl>C" on the terminal to bring up the Maintenance Menu.
6. Using menu item 1 set the teller number.
7. Using menu item 2 set the Bank ID number.
8. Select menu item 6.set the "Transaction Protocol" to (6) "Async 911 ASCII 4800 E71". Select "1" ASCII for the data format. Set the "End of Line Character" to (0) LF, set the "Number of Lines Displayed" to "15", Set the "Transaction Number on Line" to "0", set the "Transaction Number in Position" to "0". Set the "Number of lines in transaction" to "16". Set the "Transaction delay time" to 75.
9. Using menu item E save the settings and close the Maintenance Menu.
10. Remove and reapply power to the ATM Data Inserter. Leave the ATM Data Inserter connected to the serial port terminal.
11. The ATM Data Inserter power LED should come on solid. The Sync LED should also come on initially. Verify that the ATM Data Inserter displayed "PU00" on the terminal connected.
12. Run a test transaction on the ATM. Compare the results shown on the serial port terminal with the printed ATM receipt.
13. The terminal should display several lines. Each line should start with "MR01:L0x:" where 'x' is the line number. If the information shown on the terminal does not contain the same number of lines as shown on the printed ATM receipt then repeat step 5,8 & 9 but set the "End of Line Character" to (1) NL. Repeat step 12 and 13.
14. The last line shown on the terminal should look something like; "B:4444 T:99 S:1234". The number after the "S:" is the sequence number. Verify that this is the same as the sequence number printed on the ATM receipt. If the two numbers are the same go to step 17. If they are different go to step 15 to change the capture of the sequence number.
15. Using the ATM printed data shown on the terminal, find the transaction number. At the beginning of this line there will be "MR01:Lxx:. Record the number shown on the terminal for "xx", this is the line number of the transaction. To locate the character position, count the number of characters from the "MR01:Lxx:" to the first character in the sequence number. Start counting with the first character after the ":Lxx:" and do not count the first character of the sequence number. Example: "MR01:L10:DEPOSIT SEQ 1234". Here the transaction number is 1234, the transaction is on line 10 and the transaction is at character position 12. (Make sure you count all space characters.) Record the transaction line number and the transaction character position and go to step 16 to save the numbers.
16. Repeat step 5, 8 & 9 but set the transaction line number to the number observed in step 15 and set the transaction character position to the character position recorded in step 15. Repeat steps 12, 13 & 14 to verify that the ATM Data Inserter is now capturing the correct transaction sequence number.
17. Compare the ATM printed data shown on the terminal with the ATM receipt. If the data shown on the terminal is terminated before the end of the receipt data repeat steps 5, 8 & 9 and increase the number of lines to display. Note: Do not increase the number of lines to display past the line number that was used for the transaction. Repeat steps 12, 13 & 14 to verify that the complete ATM receipt data is now displayed.
18. Repeat step 12. Save a copy of the data captured on the terminal as this information will be used in setting up the IRIS DVS.
19. This completes the set-up portion of the ATM Data Inserter. Connect the ATM Data Inserter to the IRIS DVS system. If the ATM Data Inserter is connected to the IRIS MUX set switch S1 position 2 OFF and reset the power to the ATM Data Inserter. If the ATM Data Inserter is connected directly to the IRIS DVS leave switch S1 position 2 ON.

Set-up of ATM Transaction Data on IRIS DVS Procedure

1. Follow the instructions in the IRIS DVS Installation manual for set-up of the ATM Transaction. By saving a copy of the ATM printed transaction data captured in "Set-up of ATM Data Inserter and IRIS DVS" it will be easy to identify the three lines to be captured along with the video image.
2. Start the IRIS configuration program. From the main menu select Events->ATM Transactions. Using the data captured in step 18 of the "Set-up of ATM Data Inserter and IRIS DVS Procedure" select three lines that will be displayed at the bottom of each ATM transaction image.

Contents of Included Files

"CAMERA" file (Note this file must be in the root directory of the diskette)
2,4800,7,E,1

"COPYFILE.SSS" file (Note this file must be in the root directory of the diskette)
> A:\CAMERA C:\SYSTEM\camera
> c:\copylog.sss

NCR Set-up Information for CAMERA file

Support has been added for a Serial Camera attached to one of the available COM ports on the ATM, where an exact copy of every transaction reply message is sent out the COM port to the camera. It is then up to the camera to parse the data and determine if a picture is to be taken and what information to include on the picture. This requires a third-party camera that specifically supports this capability. (TAR #151226)
There is no NDC+ fault detection or status reporting with this camera solution. It is always assumed that the camera operation succeeded.

This optional camera support will be enabled by the presence of a configuration file called 'CAMERA' in the C:\SYSTEM directory on the ATM. This configuration file is an ASCII text data file with comma separated data fields. The presence of the file will activate the feature and the COM port parameters will be read from the file. The parameters are positional and variable length. Following is a description of the parameters in this file and their valid values:

Parameter #	Parameter Name	Valid Values
1	COM Port	1 - 4
2	Baud Rate	110 - 9600
3	Data Bits	7 | 8
4	Parity	E - Even
		O - Odd
		N - None
		M - Mark
		S - Space
5	Stop Bits	1 | 2

For example, a CAMERA configuration file containing:

   1,9600,7,E,1

Will use COM Port 1, 9600 Baud, 7 Data Bits, Even Parity and 1 Stop Bit.