

PIV Installation and Testing with an Intermec 751G Terminal

This guide provides information on how to setup and test the basic functionality of a PIV reader on the 751G Mobile Computer.

The following is needed:

- 1) An Intermec 751G Mobile Computer that is configured to communicate with a PIV, and a cradle with USB connectivity to a host PC
 - a. Operating system builds supported are:
 - i. WinCE.net 4.2 OS v3.00.00.0163 AIT3 with PSM v1.15 iva_4.03.37.1156
(build requires included support for existing Intermec CAC Card reader)
 - ii. WinCE 4.2 OS v3.00.00.0154 PSM v1.15 iva_4.03.37.1156
 - iii. WM 5.0 iva_5.00.42.1512
- 2) PIV Unit
- 3) Test cards for the smartcard and contactless smartcard
- 4) Windows PC with ActiveSync installed (or Sync Center on Windows Vista)

Usage Note

- 1) The PIV adapter will not function while the PIV is connected to the cable cub adapter.
- 2) A soft reboot may be necessary after disconnecting from the cable cup, or after attaching the PIV to the PDA, before the PIV will become functional.

There are 2 main steps to take to complete testing with the 751G. They are as follows:

- 1) Configuring a 751G so that it has all the programs needed and can communicate with the PIV
- 2) Testing of a fully-packaged PIV

Configuring a 751G

- 1) Go to the start menu (lower left corner of screen), then to Settings, and finally to Network and Dial Up Connections. There will be an icon labeled LAN90001. Select this icon and click "Connection" in the upper left hand portion of the screen. Click "Connect" in the pull down menu.
- 2) Double-click the LAN90001 icon. In the IP Address tab, select "Specify an ip address". Put in an IP address of 192.168.155.215, and a subnet mask of 255.255.255.0 and click ok. (If your installation has other requirements for the Ethernet port on the 751G, for instance you use a fixed IP address in another range when you cradle the PDA to sync a

database, you can change the TCP/IP address of the PIV unit. Just make certain to choose compatible TCP/IP addresses.)

- 3) Place the 751G in its docking station. Connect the docking station to a PC via USB. Make sure this PC has Microsoft ActiveSync. If ActiveSync is installed you will see a window pop up to ask to set up a partnership. Select No and hit next. The Microsoft Activesync window will show a message saying it is connected.
- 4) Run the PIV installer. You should have a program call PIV-2.01-CE42-ARMV4I-Installer.exe or something similar (perhaps a later version).
- 5) Remove the PDA from the cradle and connect the PIV to the PDA.
- 6) Now soft boot the Terminal by holding down the Yellow I/O button for 10 seconds.

Testing of the AR4 PIV

- 1) Connect the PIV to the 751G Mobile Computer.
- 2) Soft boot the Terminal by holding down the Yellow I/O button for 10 seconds.
- 3) Once the PIV is attached to the 751G, you should notice the two LEDs light up. The topmost LED should turn green to indicate that the power on self-test has passed. The bottommost one should be green with orange flashes to show that Ethernet is up and there is some activity. The green is to show that Ethernet is linked, and the orange flashes are to show Ethernet activity.
- 4) Verify that the TCP/IP address is still the address you entered in step 2 from above. Some 751Gs may have an "address management" program installed that will change the network parameters when the PDA detects that it is no longer docked to the cradle.
- 5) In Flash File Store run "CalApp". Follow the directions on screen to calibrate the fingerprint sensor. Be sure to do another soft boot after completion.
- 6) In Flash File Store run "PIV Demo". The "PIV Demo" window will open up. There will be 5 options. Magstripe, Smartcard, Contactless Smartcard, Bar Code Scanner and Grab Fingerprint.
- 7) Click on Magstripe and a separate window will open up asking to swipe a card. Swipe a magstripe card and data will be shown for all 3 tracks. Close out of this window.
- 8) Click on Smartcard and insert the card into the reader. After a few seconds, it will display the ATR value for your card. Press the "OK" button in the upper left to exit.(This function will work only once per invocation of the "Smartcard" window. To query another smartcard, return to the "PIV Demo" window, then open the Smartcard window again.)
- 9) Click on Contactless Smartcard. Wave the contactless card under the reader (the antenna is on the underside of the PIV unit, towards the back) and it will display the ATR value. Press the "OK" button in the upper left to exit. (This function will work only once

per invocation of the “Contactless Smartcard” window. To query another smartcard, return to the “PIV Demo” window, then open the Smartcard window again.)

10) Lastly, click on Grab Fingerprint. Place a finger on the fingerprint sensor and click Grab. If it shows a black screen it is ok, just close the window and re-open the fingerprint demo. Place a finger on the fingerprint sensor once more and click Grab. After 3 to 5 seconds a fingerprint image will appear. To grab another fingerprint just place another finger on the sensor and hit grab again.

11) Testing is complete!



Figure 1 – How to insert a SmartCard into the PIV