F.A.Q.

Axel Thin Client

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Overview

Q1 - Entering the AX3000 Set-Up

Two possible cases depending on the AX3000 firmware revision.

Current firmware version
Use the following keystroke combination to enter the interactive set-up: **<Ctrl><Alt><Esc>**
Note: for AS/400 keyboard press <Rest><Alt><SetUp>.

Versions earlier than 9832e
Set-up is in two parts:
   - Terminal set-up: press **<Ctrl><Alt><Esc>** to enter the current session configuration
   - TCP/IP set-up: press **<Ctrl><Alt><*>** to enter the TCP/IP configuration

Q2 - How to get AX3000 Hardware/Firmware Information?

An AX3000 is described by:
   * **Hardware**: set when the AX3000 is manufactured. For more information see Q3.
   * **Firmware**: can be downloaded as many times as needed. For more information see Q4

The AX3000 firmware and hardware revision, can be found by:
   * Use AxRM utility (run a "Retreive Terminal Information")
   * Enter the AX3000 interactive set-up, and select '?',

Q3 - Understanding Hardware Information

The AX3000 hardware information is FKx-BVyyy
   - FKx is the electronic board code
   - BVyyy is the boot code version (the boot code is the non-erasable part of the flash memory)

The different generations of hardware in the field are listed below (each requiring specific firmware):
   - FK3: former production hardware of models 55, 55E and 56
   - FK5: former production hardware of models 55, 55E and 56
   - FK7: former production hardware of models 65
   - FK11: former production hardware of models 55, 55E and 56
   - FK13: former production hardware of models 65 and 65E
   - FK14: former production hardware of models 65/65B/65E (PS/2 mouse port)
   - FK15: former production hardware of models 60/60E
   - FK16: former production hardware of models 75/75B/75E
   - FK17: former production hardware of models 65B (network 10/100)
   - FK18: former production hardware of models 75C (USB ports)
   - FK19: former production hardware of models 75C
   - FK20: former production hardware of models 65C
   - FK30: former production hardware of models 70W
   - FK31: former production hardware of models 70W
   - FK35: former production hardware of models 70F
   - FK36: former production hardware of models 70F
   - FK40: former production hardware of models 75C

- FK41: former production hardware of models 75D
- FK45: former production hardware of models 65C
- FK51: former production hardware of models 85
- **FK52: current production hardware of models 85B**
- FK55: former production hardware of models 80F
- **FK56: current production hardware of models 80G**
- **FK57: current production hardware of models 80WMS**

Q4 - Understanding Firmware Revision Information

With AxRM, the firmware revision can be changed by a simple 'Firmware download' .

Examples of firmware revision:
  - TCP.FR.1236c.STD_14065
  - WFI.XX.0922f.STD.SH2_13261

The AX3000 firmware revision is composed of:
  - a general firmware descriptor (shown here in blue)
  - the firmware version (shown here in red)
  - firmware options (shown here in green)
  - build number (shown here in black)

1 - General Firmware Information

The beginning of the firmware revision is FCT.NA:

  * FCT is the AX3000 operating mode:
      o TCP stands for both TCP/IP and serial modes,
      o WFI stands for wireless,
      o SER stands for serial mode.
  * NA is the firmware nationality (code is ISO compliant). The main nationalities are:
      o XX: International (all countries except the following)
      o BR: Brazil
      o CZ: Czechoslovakia
      o DE: Germany
      o EE: Estonia
      o FI: Finland
      o FR: France
      o GR: Greece
      o IS: Iceland
      o PT: Portugal
      o SI: Slovenia
      o TR: Turkey

Note: three functions are dependent of the firmware nationality:
  1. Set-up default language (FR: French messages, other: English messages),
  2. Support of national keyboard and associated character set. For instance, the Turkish environment (keyboards and character set) is only available with the 'TR' firmware.
  3. Default keyboard nationality (FR: France, XX: North American, TR: Turkey, etc).

2 - Firmware Version and Build number

The firmware version is yywwi.
Where yy is the year and ww is the week number. This is followed by an alphabetical index

Exemple : 1236c (year is 2012, the week number is 36).

The build number is a five-digit number. This is the firmware creation date..
The first 2 digits are the year, and the next are the day number. For example 14065, meas the firmware was created the 65th day of 2014 (6 mars 2014).

3 - Firmware Options

The firmware options indicates what protocols, emulations and features are available.

The following gives a non exhautive list of firmware options:
- STD: set of standard feature (it depends of thin client model)
- I52: 5250 emulation
- I32: 3270 emulation
- ANS: ANSI-based emulations
- VT2: VT220 emulation
- WYS: Wyse 60/120 emulation
- V52: VT52 emulation
- ATO: ATO300 emulation
- SM9: SM9400/SM9412 emulations
- THE: THEOS emulation
- QVT: QVT 119+ emulation
- TVI: TVI 910 emulation
- SLN: SLNET emulation
- TWS: TWIN SERVER emulation
- I51: 3151 emulation
- R32: REAL32 emulation
- C32: C332 emulation
- PR9: PRISM emulation

Note : the following document gives the availble options for AX3000 models 80 and 85. Click Here.

Q5 - Wireless Option

Only the AX3000 model 75d and 85 can be equipped with an optional wireless interface (802.11b/g)

If the thin client had been shipped with the wireless interface, it already equipped with a wireless (WFI) firmware. This firmware offers the active interface selection (Ethernet or Wireless).

If the wireless interface had been installed after the shipment, the firmware must be updated (download WFI firmware).

With WFI firmware, to select the active interface, enter the Thin Client Set-Up, go to [Configuration]-[Network]-[General Parameters] and set 'Active Interface' to '802.11'.

Q6 - How to Configure a Thin Client in RS232 Serial Mode?

Two possible methods:

The thin client is only used in RS232 Mode
To select the RS232 interface, enter the Thin Client Set-Up, go to [Configuration]-[Network]-[General Parameters] and set 'Active Interface' to 'None (serial mode)'.
After rebooting, only one RS232 session will be available.
Note: this method is only available for thin client with 'native' RS232 serial ports (AX3000 models 75 and 85)

The thin client is used in both TCP/IP and RS232 modes
An RS232 session can be used concurrently with TCP/IP sessions (telnet, RDP...). To create an RS232 session,enter the Thin Client Set-Up, go to [Configuration]-[Sessions]-[Session X]. Set the 'Session Type' to 'Text Emulation', 'Protocol' to 'Serial' and select the 'Main Port'.

Q7 - Configuring and Using a Touch Screen

Embedded touch screen support is offered by Axel terminals. "Touch screen events" are automatically remapped by the Axel terminal into "mouse events". No additional driver or settings are required on the server (Windows, Unix/Linux, AS/400...).

Most of touch screens (except APR technology from ELO Touch) should be supported. In event of any problems, please contact Axel technical support.

The configuration is very easy. Just select the touch screen type : USB (auto-detected) or serial (AUX1 or AUX2).

A calibration function (2 or 4 points) may be required.
The touch screen events reported to the server can be selected: 'click only' or 'all events' (click and motion)

When settings are done, the touch screen emulates a mouse. It also works locally in the thin client's desktop and set-up.

Note: multi-touch devices are also supported. Multi-touch functionnality is only provided in Win2012/Win8 environments. A multi-touch screen in any other environment will function as a single touch screen.

In Event of Problem...

P1 - I don't Remember the Password of AX3000 Set-Up

The super password 'yaka' allows the thin client set-up to be entered. And the unknown password can be deleted or changed.

Note: this super password can't be used with the remoter control. It also can be disabled.

P2 - The Thin Client Screen Remains Black

Apart from an hardware failure, the screen may remain black if the resolution (on the thin client set-up) is not supported by the monitor.

Two methods are possible to change this resolution

1 - Press <Ctrl><Alt><BackSpace>
This forces the resolution to 1024x768.

2 - Use the remote control (AxRM) to enter the thin client set-up
Use AxRM to remotely enter the AX3000 Set-Up. This will allow the resolution to be changed.

P3 - The PS/2 Keyboard Doesn't Work Properly (Can't Enter the Set-Up)

Apart from an hardware failure, this may happen when the keyboard type (configured in the thin client Set-Up) doesn't match the actual physical keyboard type. (For example a PC keyboard is used and in the thin client Set-Up the keyboard type is 'AS/400 122 keys').

Three methods are possible to change this:

1 - Press <Ctrl><Alt><K>
The AX3000 Keyboard Type is automatically changed and the set-up can be entered.

2 - Connect a USB keyboard
Enter the set-up to change the keyboard type (menu [Configuration]-[Advanced]-[Tuning]-[Keyboard/Screen])

3 - Use the 'Remote Control' to enter the set-up
Run AxRM to remotely enter the set-up and change the keyboard type

Non Compatible Devices

I1 - Canon LBP-810 Printers

The problem:
These printers cannot be used with an Axel terminal. The printer fails:
   - with the 'printer test' (from the Axel terminal set-up)
   - under the LPD protocol
   - with TSE environment (RDP or ICA)

Explanation:
This printer is limited to only supporting the CAPT protocol (Canon Advanced Printing Technology) and does not support the industry standard ASCII mode.

The Printer Test:
This test sends a string of standard ASCII text to the printer, as the printer does not recognise ASCII the test fails.

The LPD Protocol:
This printer (i.e. the CAPT protocol) uses bi-directional communication. LPD is uni-directional protocol. This makes the printer incompatible with LPD. In addition no Unix/Linux drivers are provided by Canon. (This printer is only certified for Windows 95/98/NT 4.0/ME/2000).

The CAPT protocol is not supported under the TSE environment, so will not work under RDP or ICA.

I2 - HP USB Printers: HP LaserJet 1000, 1005, 1018, 1020 and 1505

The problem:
The USB printer is detected by the terminal but no logical USB port is mapped to the printer (USB1, USB2...).

Explanation:
The key factor is that these printers don't contain 'persistent' firmware. (The firmware is downloaded each time the printer is switched on).

For PCs the printer firmware is copied onto the PC when the printer driver is installed, so is available to be uploaded at any time.

As the driver is not loaded into the Axel terminal, the firmware is not stored in the terminal. This makes it impossible to use this printer.

This explanation can be confirmed by this simple test:
  - connect the printer to a PC
  - turn the printer on
  - check the printer by printing a test page
  - connect the printer to the terminal WITHOUT TURNING THE PRINTER OFF
  - the printer is detected by the terminal and now a USB logical port is available.

I3 - Intermec USB model SR30 Scanner Linear

The problem::
Reported barcodes are incorrect.

Explanation:
The issue is the Intemec Reader firmware version. The version must be 1.3.9 (or greater).

I4 - ELO Touchscreens - APR Technology

The problem:
Some ELO touchscreens are not detected by Axel terminals.

Explanation:
Three technologies are available with ELO Touchscreens: Accutouch, Intellitouch and APR.

The two first ones are correctly supported be Axel terminals and allow a touchscreen to be immediately ready to be used.

But the APR technology (Acoustic Pulse Recognition) is not supported because a too high CPU usage is required (to retrieve the X/Y coordinates from the "finger" location).