KB00110 Terminal Concentrator and the 4610 Printer

This article provides details about the usage of 4610 printers in the Terminal Concentrator environment:

- How the driver is loaded and functions
- How to put the printer in and out of emulation mode
- How changes to emulation mode can affect TC
- Procedures to switch a TC store from Model 3/4 emulation (or from physical Model 4 or lower printers) to 4610 Native mode.
  The information in this article applies to:

- QVS Terminal Concentrator for Windows
- QVS Terminal Concentrator for 4690

MORE INFORMATION

How the driver is loaded and functions:

Although the printer type is not specified in the terminal configuration, the type is determined when the terminal is configured and the appropriate driver loaded. The 4610 driver is incompatible with the driver for Model 1-4, and the terminal will not function properly unless the terminal configuration is reloaded after the printer or emulation mode is changed.

A 4690 Mod1/Mod2 pair must have the same type of printer. If you change the Mod1 into/out of emulation mode and do not convert the Mod2 at the same time, the only way to recover is to convert the mod1 back into the previous mode and then simultaneously convert both terminals. See How to put the printer in and out of emulation mode:

Terminal Concentrator does not support changing the printer from a 4610 to a non-4610. TC must be restarted after the change is complete for the terminal to function properly. Details on how to convert a store from one type of printer to the other are covered in Procedures to switch a TC store from Model 3/4 emulation (or from physical Model 4 or lower printers) to 4610 Native mode:

How to put the printer in and out of emulation mode:

The IBM 4690 On-Line Terminal program is used to change the emulation mode of the printer. To invoke this program and change the printer mode, perform the following steps:

1. Determine the current printer mode:
    1. Press and hold both of the top triangular buttons on the 4610 until the receipt feed light starts blinking.
    2. Press and release the receipt feed button.
    3. The printer information will be printed. If it does not print out MODEL 3/4 EMULATION, then it is in native mode
2. Enter <S1>, 95,<S2> on the 4690 keyboard
3. At the ENTER REQUEST prompt, enter 728,<S2>

To enable emulation:

1. If using the printer integrated MICR reader, select TI2 or TI4. Otherwise, select TI1, TI3, or TG3.
2. At the Activate Model 3/4 Emulation 1=N, 2=Y, S2 prompt, enter 2 to enable Model 3/4 emulation.
3. At the Using EJ in Offline Mode? 1=N, 2=Y, S2 prompt, select Y if you want to store all the journal data in the printer flash memory.

To disable emulation:

1. At the Disable Mod 3/4 Emulation 1=N, 2=Y, S2 prompt, enter 2 to disable Model 3/4 emulation.

How changes to emulation mode can affect TC:

Terminal Concentrator does not support changing the printer on a previously loaded terminal. If your terminal has been running under TC and you change the printer from a 4610 to non-4610 or vice versa, TC must be stopped and restarted for the printer to function properly.

Procedures to switch a TC store from Model 3/4 emulation (or from physical Model 4 or lower printers) to 4610 Native mode:

Note: This procedure requires stopping and starting TC. If at least one terminal cannot be put into Native 4690 mode, then this procedure must be done (or at least significantly completed) before the store opens

The goal here is to restart TC early and make sure that no terminal comes online with the old printer configuration. If a terminal does come online before the printer type has been changed, then TC will have to be restarted before that terminal can be used.

Reconfigure below refers to the following steps:

1. Perform <S1>, 95, <S2> on the terminal(s) and change the printer emulation type. Terminal will start a full reload (this step does not apply for going from a physical Model 3/4 printer to a 4610)
2. When terminal displays U005, press dump button firmly and release
3. When terminal displays Z001, enter the terminal address and press <S2>. When prompted, press <S1>, then <S2>

Note: Some registers (Pharmacy, for example) may be inaccessible during store closed hours. Ideally, those registers would be powered off and labeled Do not start at close of business on the night before the switchover. If this is not possible, then stop the application on those terminals before starting the conversion process, and hang a note on the locked area entrance telling the personnel to contact store management before trying to use their register. The application can be canceled from the Controller Control menu, terminal option 5.

The steps to convert a store are:

1. If possible, put at least one lane in native 4690 mode by performing the following steps:
   (Note: it is a good idea to go on and change the emulation type at this time)
   1. Execute <S1>, 7, <S2> to get the terminal address
   2. Execute <S1>, 71, <S2> and set the address to the existing address 800.
   3. Wait for terminal to fully IML
   4. All subsequent instructions do not apply to this register. It should be used for sales only and converted back to TC at the end of this process.
2. Go to each register and perform <S1>, 7, <S2>. Write down the terminal address
3. Go to each register and perform <S1>, 95, <S2>. If a register is part of a 4690 Mod1/2 pair, complete all steps up to the IPL to FOLLOW prompt on both machines, then finish the process on the Mod1 terminal.
4. When terminal displays U005, firmly press the dump button and release. This step is not necessary on the Mod2 partner terminals.
5. Confirm that TC has no terminals running by checking the background task screen. If terminals cannot be accessed, use the Stop terminal Application as described above. Once TC displays 0 Terminals Active, stop and restart TC. If TC does not go to zero, check the registers. All Mod1 terminals except the native one (see step (1)) should be displaying Z001.
6. Go to each Mod 1 terminal and enter the address written down in step (2) above. Note that if you do all terminals at the same time in a loop store, the front end will slow noticeably. It is usually less painful (and faster) to do a couple of pairs at a time.
7. Once all the TC terminals are back up and any inaccessible registers have been accessed and converted, convert the native terminal used in step #1 back to TC.