Scanner Configuration (BP0166)

Revision	Date	Description of Change	Revised By
A	5/15/2019	Initial Document	MD
B			
C			

Introduction

FeneTech does not maintain a list of compatible scanners. Any scanner should work with the FeneVision system as long as it supports appending the required preamble and postamble characters to the barcode scan data. These additional characters allow the software to distinguish an incoming scan from other data such as keystrokes on the keyboard.

FeneTech has gathered a collection of "scanner setup" documents over the years and will share them with users configuring the same brand and model scanner. Scanner setup documents do not come with a guarantee that they will work in all situations. For any other scanner brands or models, the user purchasing is responsible for the configuration of the scanner. As a software vendor FeneTech is not responsible for hardware configuration and maintenance.

The proper procedure to setup a scanner:
1. Follow the requirements below to configure your scanner based on scanner type. Use manufacturer supplied documentation for reference / instructions. Typically a series of "scanner configuration" barcodes must be scanned from the manufacturers scanner setup guide to complete a scanners configuration.
2. Test the configured scanner in an application outside of FeneVision. Use the DOS command prompt for USB scanners. Use a serial application such as PUTTY for serial scanners. Do not test a configured scanner in FeneVision until the scan is proven to meet requirements in an external application.
3. Test the configured scanner in FeneVision.

USB Scanner Setup (keyboard emulation)

USB scanners must be configured to append a special character to the beginning and end of every scan. The special character required is called either "STX" or the "ASCII 02" character.
This special "STX" character will show in the DOS command prompt as "^B" when a test scan is done. A sample of a correct test scan would look like the example: **^B100`1`560`874^B**. Note the preamble and postamble character is "STX".
Usually, you can follow these steps to set up the prefix/suffix:
1. Scan the "Add Prefix" barcode in the scanner's user manual
2. Scan the "0" barcode in the scanner's user manual
3. Scan the "2" barcode in the scanner's user manual
4. Scan the "Save" barcode in the scanner's user manual
Repeat the steps for the "Add Suffix" barcode
*Note: As a test you can type the "STX" character by performing the following key sequence in command prompt: **Hold Alt, 0, 2, Release Alt**. When this is done the screen will display "^B". It is also possible to mimic this key sequence on some scanners when scanner documentation does not include a reference to the "STX" character.*

Do not add any additional characters such as CRLF. This can cause unexpected behavior with a USB scanner because the character is interpreted as the user pressing the "Enter" key on the keyboard which selects buttons on screen.

Serial Scanner Setup (RS232) (COM port)

Serial scanners must be configured to append a "CRLF" (carriage return and line feed) to the end of each scan.

ACK/NAK

Serial scanners are the only scanner type that supports ACK/NAK functionality offered in the FeneVision Trucking application. This functionality will disable the scanner when an incorrect item is scanned that does not belong on the current route. With ACK/NAK functionality turned off the user will be shown a stop sign on the screen as an alert but can continue scanning if they are not watching the screen.
Note only Worth Data brand scanner ACK/NAK functionality is currently supported.

Accepted Barcode Data

Mfg-Part

SchedID`UnitID`masterkey`parentkey

Supported Applications: Tracking, Mobile Tracking, Trucking

Non-Mfg Part:

@OrderNumber-LineItem.SubLineItem (SubLineItem is omitted if zero)

Supported Applications:

Container

%PreassignedContainerID Or CPreassignedContainerID

Supported Applications:

Physical Container

$ContainerID

Supported Applications:

Serialized Inventory

^SerialNumber

Supported Applications:

Purchase Order

Order`LineItem`Quantity

Supported Applications:

FAQ

Q: Can I create a barcode that will automate the employee login process in Tracking?
A: Yes, FeneVision versions 11.3 and higher support an automated employee login scan.

Testing

Simulating a Scan

You can simulate the input of a physical scanner within the UI without physically connecting a scanner. Since the scanner itself is just recognized as keyboard input, you can send the same keystokes that the scanner would with your keyboard. By typing out the string represented by a barcode prefixed and postfixed with the "STX" character into a supported screen, you can replicate a scan. This can be done manually or with the help of a free software called AutoHotkey. Below will give an example of each using the Inventory Issues screen.

1. Type out the barcode manually
    a. Enter the prefix by using the following key stroke combination: ***Hold Alt, 0, 2, Release Alt***
    b. Type of the PartNo followed by the PartNoSuffix in brackets: ***CRL.C2.BCU4.CH[0000]***
    c. Enter the postfix by using the following key stroke combination: ***Hold Alt, 0, 2, Release Alt***

2. Use AutoHotKey to simulate a barcode scan
    a. Download the current version of AutoHotKey from here
    b. Follow the instructions to create a new .ahk file
    c. Create a simple script to bind a key to a series of keystokes that emulate a scan
        i. RAlt::Send {Alt down}{NumpadIns}{NumpadDown}{Alt up}PARTNO[PARTNOSUFFIX]{Alt down}{NumpadIns}{NumpadDown}{Alt up}
        ii. The code above would bind the Right Alt key to those key strokes
        iii. You can bind other keys like the function keys using the syntax below

```
#NoEnv  ; Recommended for performance and compatibility with future AutoHotkey releases.
; #Warn  ; Enable warnings to assist with detecting common errors.
SendMode Input  ; Recommended for new scripts due to its superior speed and reliability.
SetWorkingDir %A_ScriptDir%  ; Ensures a consistent starting directory.

RAlt::Send {Alt down}{NumpadIns}{NumpadDown}{Alt up}CRL.A[0000]{Alt down}{NumpadIns}{NumpadDown}{Alt up}
F9::Send {Alt down}{NumpadIns}{NumpadDown}{Alt up}CRL.C2.BCU4.BN[0000]{Alt down}{NumpadIns}{NumpadDown}{Alt up}
F10::Send {Alt down}{NumpadIns}{NumpadDown}{Alt up}CRL.C2.BCU4.BR[0000]{Alt down}{NumpadIns}{NumpadDown}{Alt up}
F11::Send {Alt down}{NumpadIns}{NumpadDown}{Alt up}CRL.C2.BGC037.CH[0000]{Alt down}{NumpadIns}{NumpadDown}{Alt up}
```

    d. In the Inventory Issues screen, use the new hotkeys to simulate a keyboard scan.