Comtrex Datacash Installation Guide

This guide sets out how to install the Datacash integration with Comtrex. Datacash is a credit\debit card payment solution from Mastercard.

There are 3 parts of the installation process, Datacash software (aka ATS), the Verifone PED and the Comtrex POS.

Versions:

Mastercard - Datacash ATS 5.6

Verifone Vx680 - EFTPay 1.7.8 - Vx 6.2.0 Kernel

Comtrex - App v57

Datacash ATS Installation

To install the you'll need the Install Setup file (currently "SETUP-ATS-Win32-5.3.6-5.3.6-g2016-07-18T12.55.24.exe") and the ATSCFG.XML file. The Setup file is just the software and the ATSCFG.XML file for the client's system only, it contains the MID and TIDs.

We obtain the file from Mastercard once they have setup the TID to MID with the merchant bank, we usually get these from the Mastercard SFTP.

https://cpsft.datacash.com/Logon.aspx?ReturnUrl=/Content.aspx

Checks

Make sure that the PC's date and time are set correctly.

It is recommended that no other applications are running.

When installing, the user should check the digital signature on the installer program to validate that it has not been tampered with. To do this, right-click on the SETUP.EXE program and select properties > Digital Signatures > MASTERCARD PAYMENT GATEWAY SERVICES LIMITED > Details > View Certificate. A good signature will be displayed as follows:
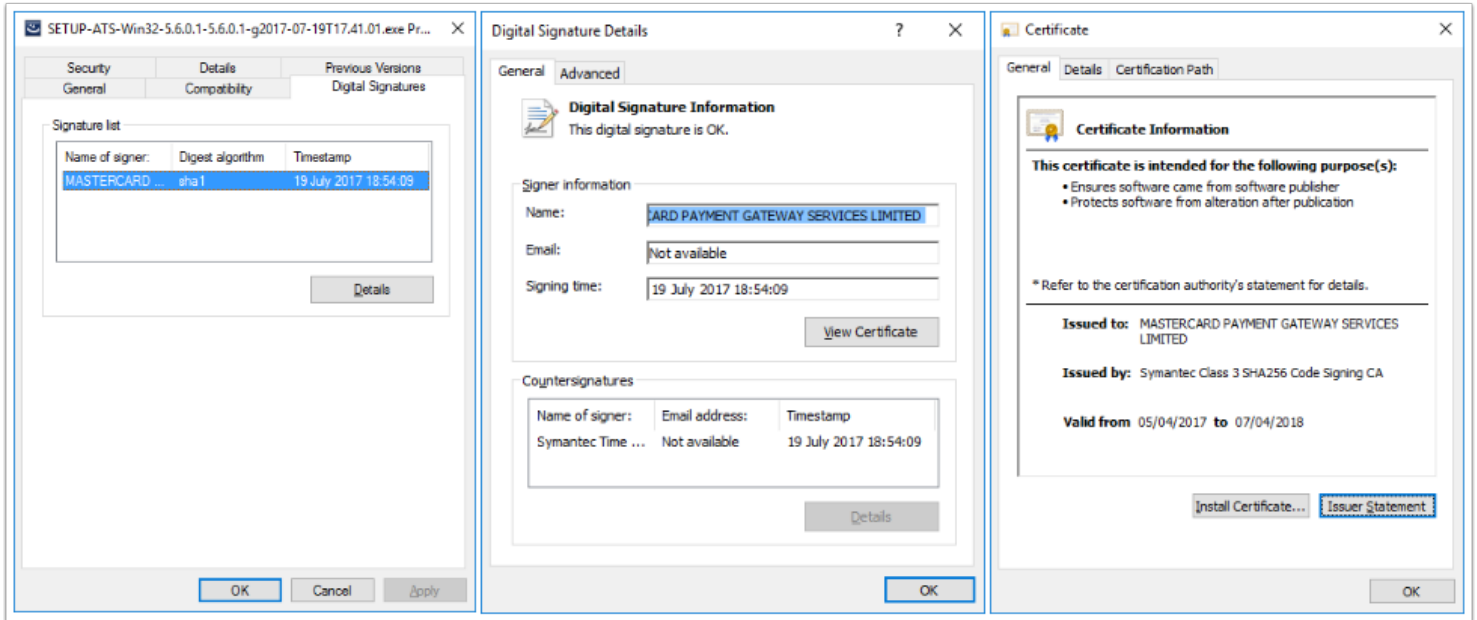
Installing Datacash/Mastercard ATS

1. Right click the setup file and "run as administrator" and press [Next]
2. Accept to the Ts & Cs
3. Click [Next]
4. For PCI-DSS compliance, the software must use separate folders for programs and data. The default directories used will vary by operating system. The directories must not be changed or the audit process will fail. just click [Next] to proceed.
5. Click [Next]
6. Installation is broken down into the following subsets, use what is shown below and do not select "Card Access Device Agent", this is used for a retail operation and not pay at table. So just click [Next]
7. Click install.
8. Click Finish.

This will install two Windows services, Datacash ATS and Datacash ATS Scheduled EOD.
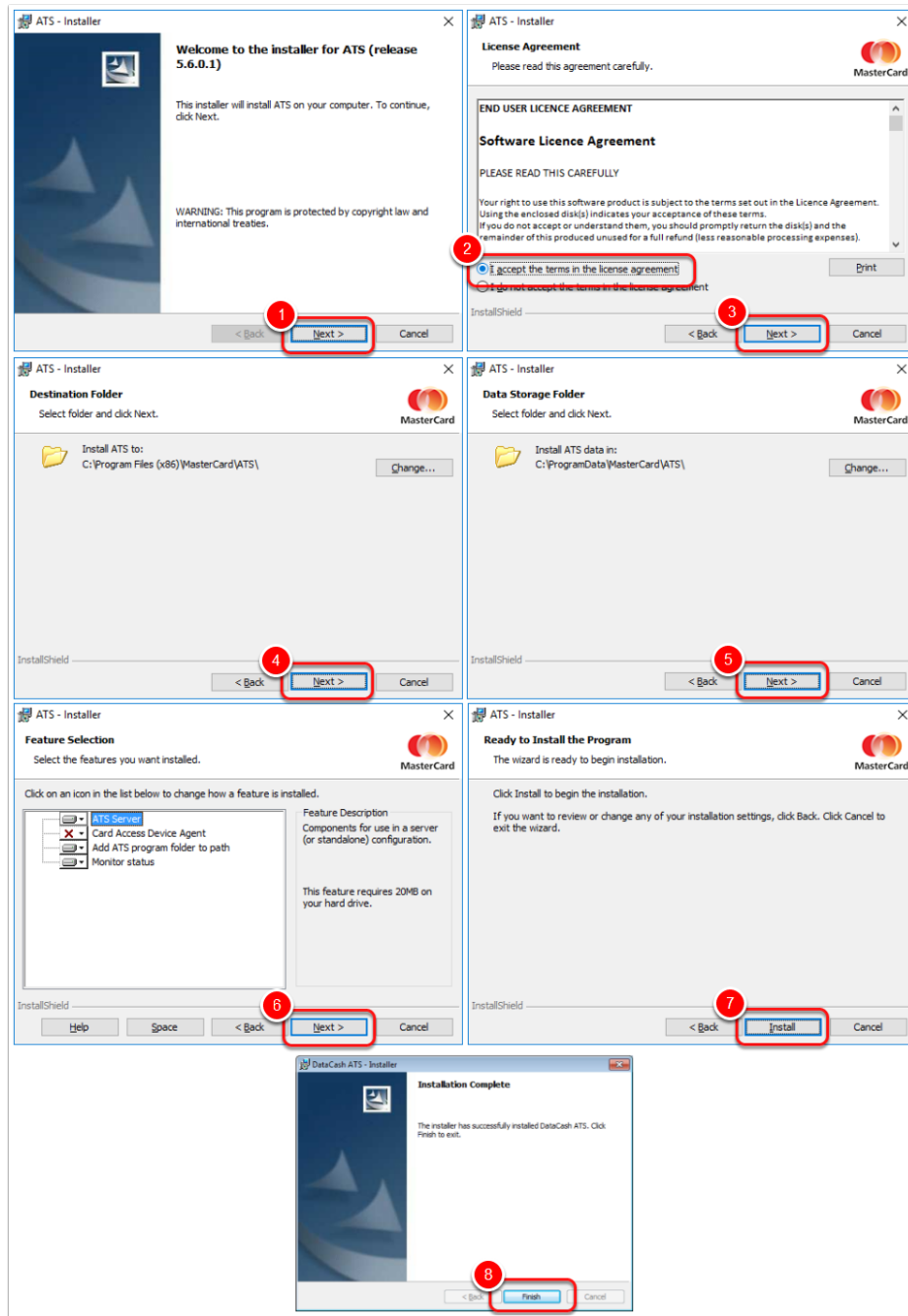
Configure ATS - ATSCFG.XML and Maintenance Manager

The ATSCFG.XML file which has the client merchant ID and also the general settings like gratuity options.

Drop in the ATSCFG.XML file into the program data folder, this may vary from OS, Windows 7, 8, 10 and Server 2008 and 2012 should be in c:\PrgramData\Mastercard\ATS but can be seen in point 2 above of the installation when you install the software.

Mastercard will provide a ARSCFG.XML file for the client but we will need to change a few configurations for the sites requirements:

1. Local Server IP address
2. Gratuity options

To make changes to the configuration you need to open the ATSCFG.XML file using Mastercard's Datacash "Maintenance Manager", this is the ATSMM.exe in program directory but can simply be found in the Start Menu.

To use Maintenance Manager you need to press the [OK] and then [Save] to adjust the ATSCFG.XML file. If you make any changes you can not move off the option you are on without press [OK] or [Cancel]. Press [Exit] to close Maintenance Manager and it will ask you if you want to restart the ATS service effectively applying your changes. You **MUST NOT** restart the Service while the users are using them, transactions and money can be lost.

Once you start Maintenance Manager press [Open] to start editing the config.
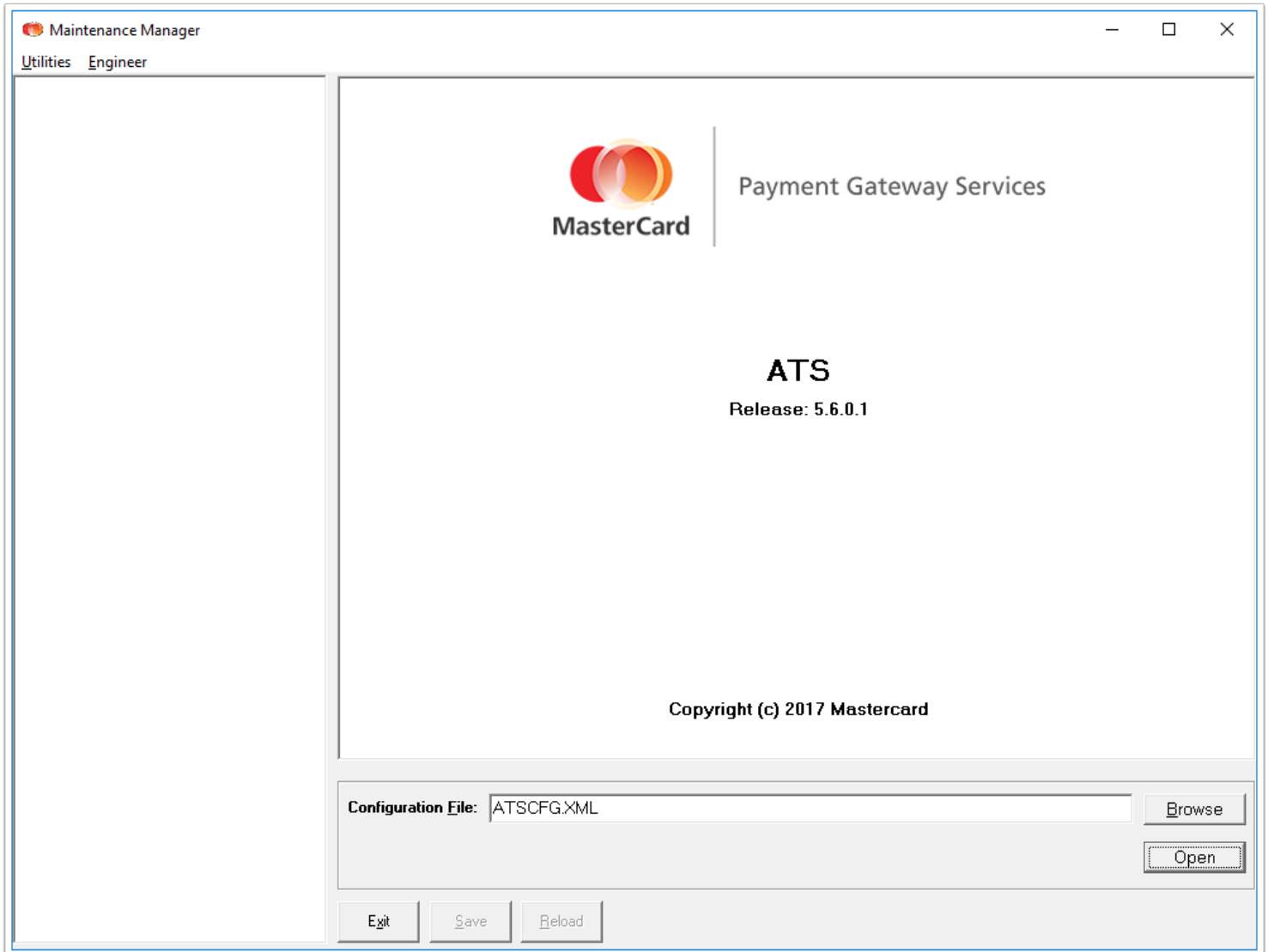
Configure ATS - End-of-Day

This should already be set in our default setup but please check to stop problems.

Tick the box and set the time, this should be a time after when they have finish trade for the day so 4am is a good time for most for when they aren't trading.

Having the time after midnight means funds will not get to the client's bank accounts a day later but because most restauarestaurantsrants can still be finishing up just after midnight it then doesn't really matter if it is a few more hours. It is the same time everyday so need to be a time that takes into account new years eve and when the clocks go forward.

You must ensure the ATS Scheduler service is running.
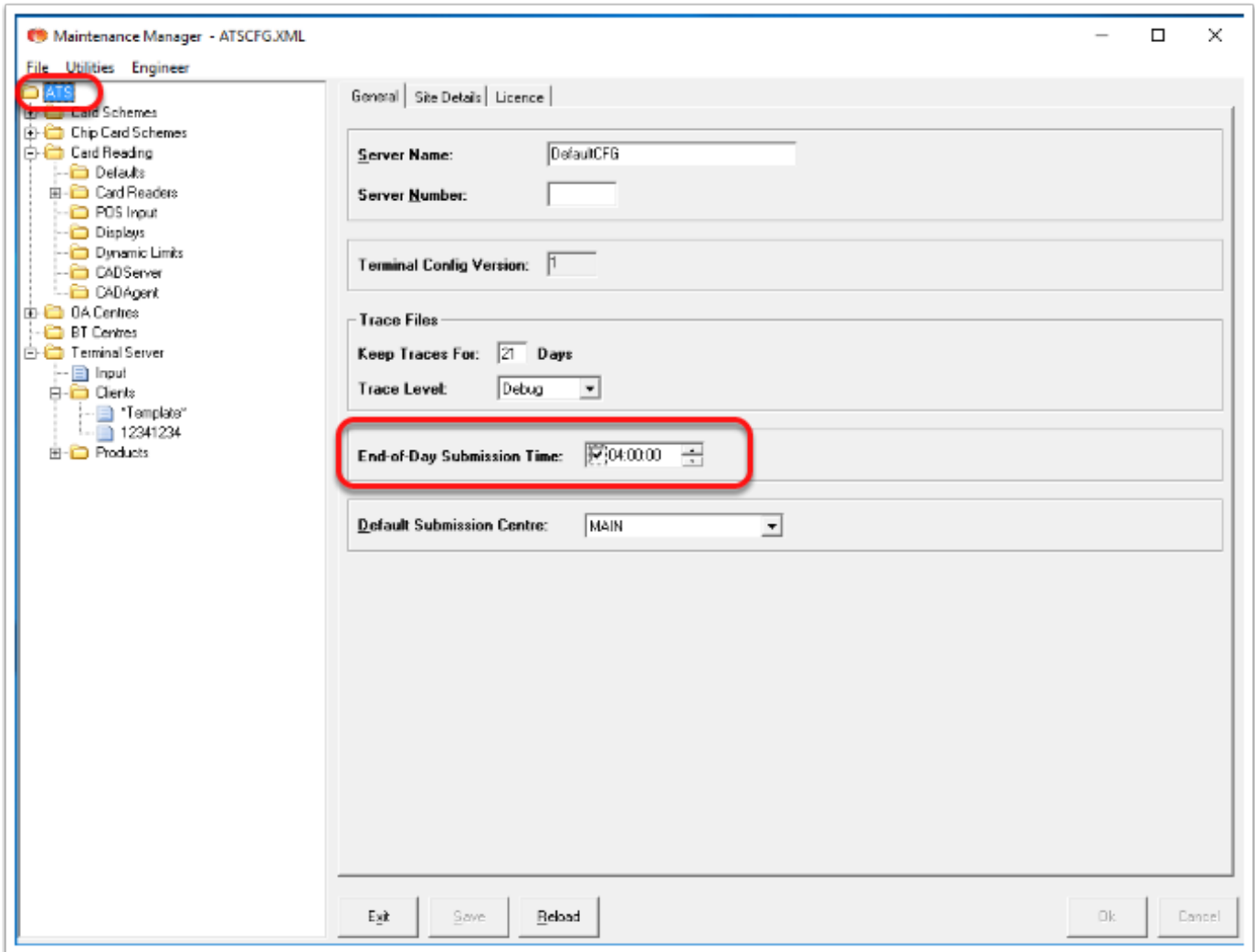
Configure ATS - Check Choice Limit

This should already be set in our default setup but please check to stop problems.
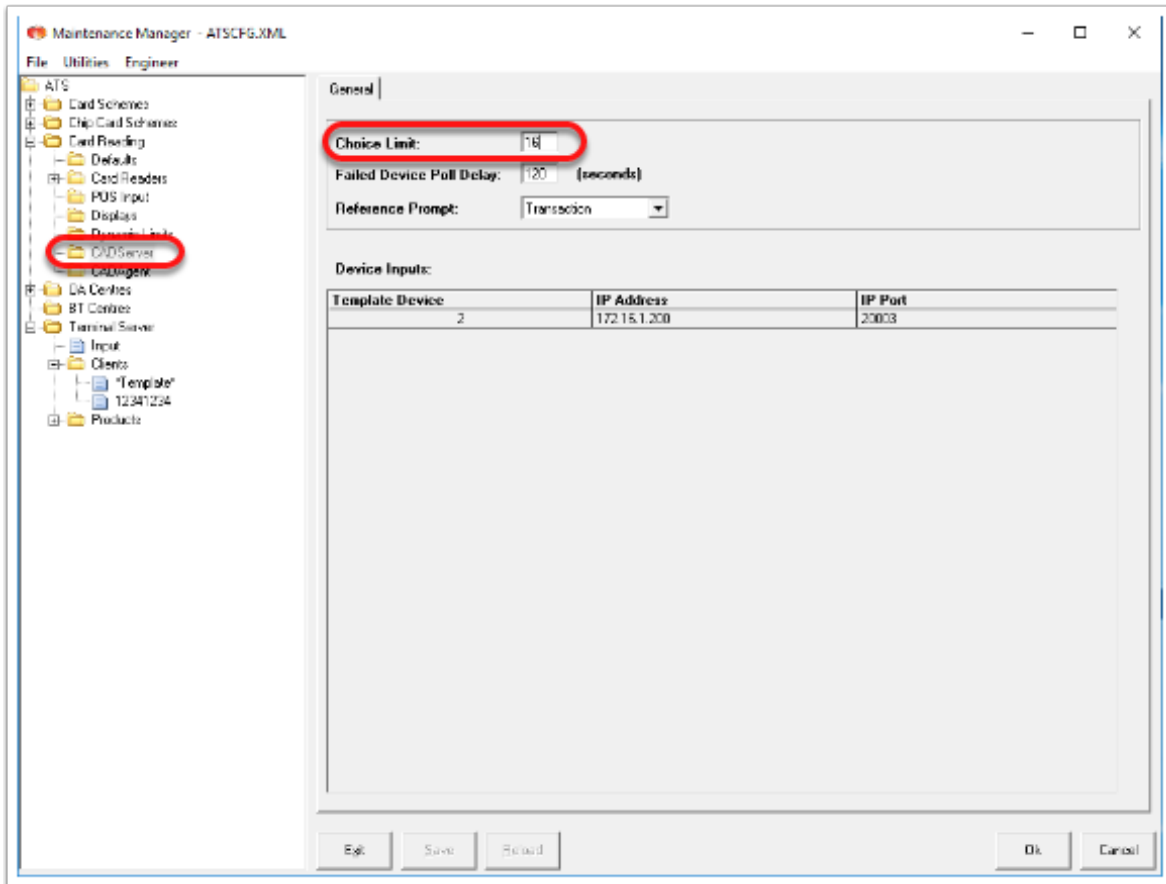
In the tech tree on the left navigate to Card Reading >>> Card Readers >>> CAD Server

There are 8 checks that can show on per page of the checks you can see on the PED and over 8 checks then will automatically enable the page scroll buttons.

I've set 16 in the example below however there is a socket limit of 12 and because each check uses its own socket.

If the Choice limit is set to lower than 12, the user can then add one check more and then the PED will ask for a transaction number. This is the reference we give to ATS, but the PED can only enter in numbers (not letters) and our reference structure is "Tbl 0000 Chk 000", so we can never that select the bills once there is over the Choice Limit.

For our integration it is best to set the Choice Limit higher than the socket limit.

Configure ATS - Local Server IP

In the tech tree on the left navigate to Card Reading >>> Card Readers >>> 2.

On the [CAD Server] tab the internal IP Address should be the server the ATS software is installed on (can not be 127.0.0.1) and the Port number is what is configured onto the PDQ machine, the port number is what identifies the PDQ to the software, this same port is configured on the PDQ.
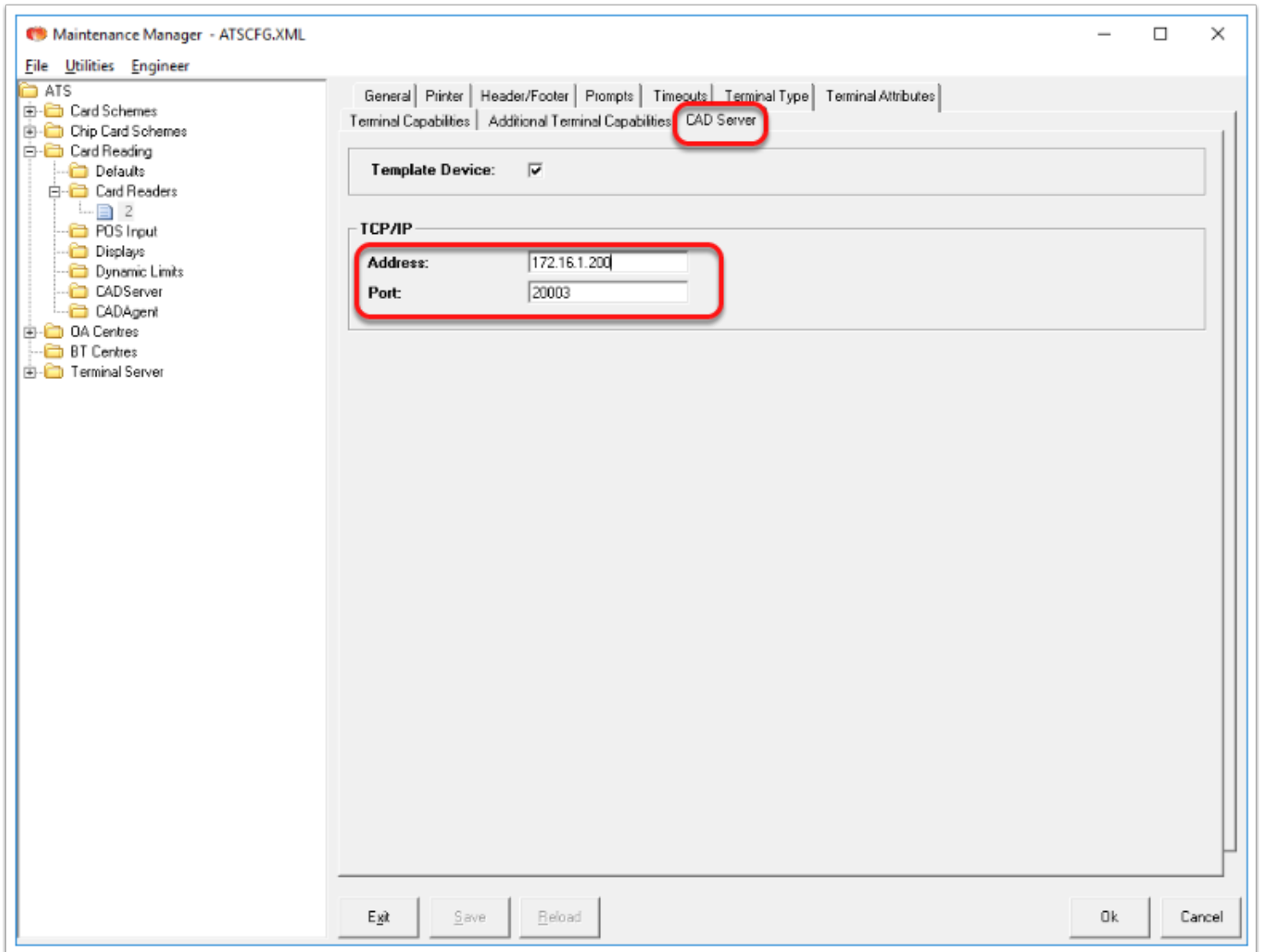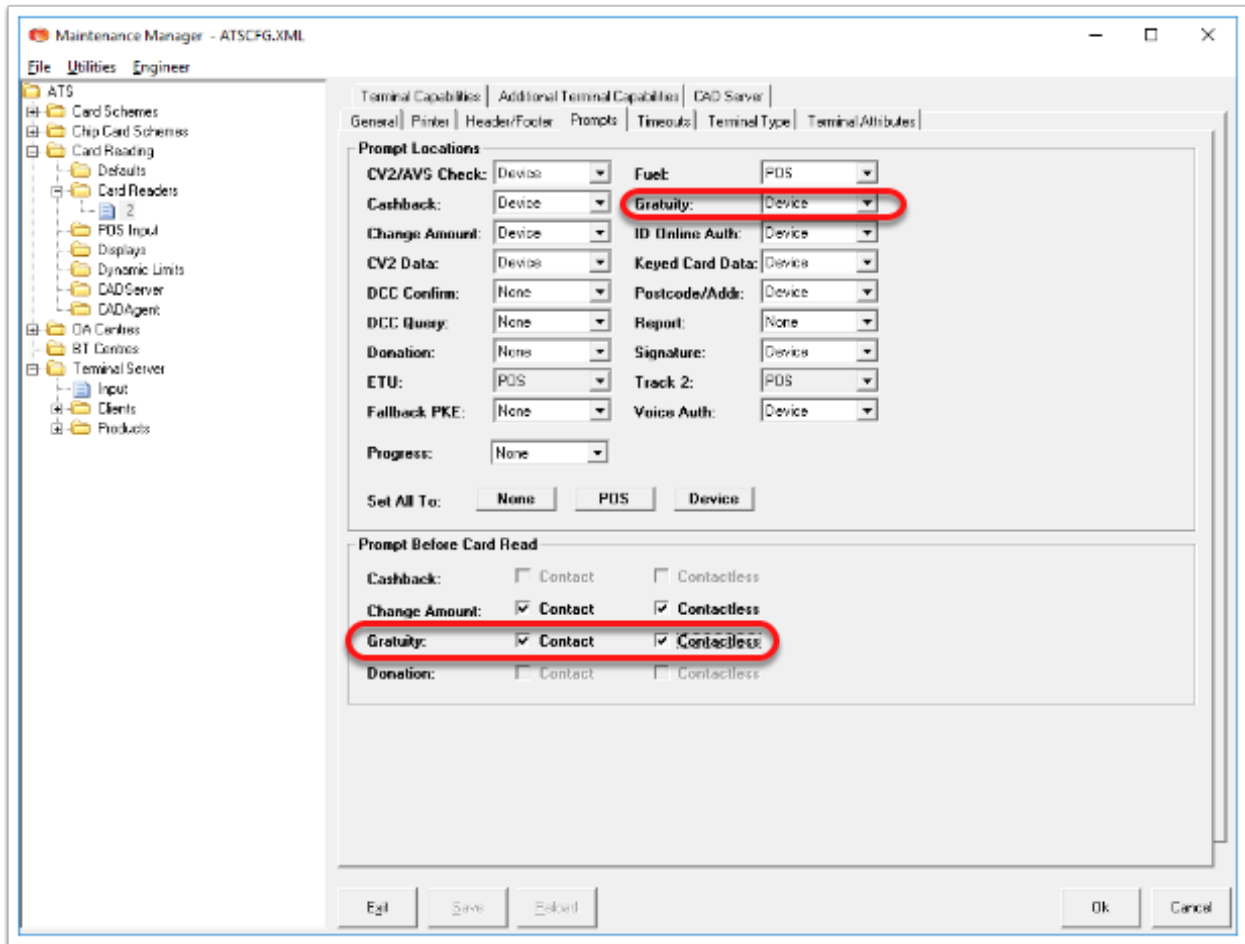
Configure ATS - Gratuity Prompt

In the tech tree on the left navigate to Card Reading >>> Card Readers >>> 2.

There are three options here, the first option turns the question on or off and the next two change when and how the question is asked.

To turn on asking for gratuity go onto the [Prompts] tab and the [Gratuity] drop down list and you have the options for [Device], [POS] or [None]. This **must not** be set to [POS]. To turn it on select [Device] orot to turn it off select [None]. If turned off the other options will not matter.

If you make changes to the PDQ device options, it would be best if you make the same changes to Defaults, this will make any new device (PDQ) added to the system have the same options.

To change when the question is asked you can tick the boxes at the bottom in the "Prompt Before Card Read" section on the Gratuity line.

Configure ATS - Gratuity Option

The next option is how it asks for gratuity, the option is to have predefined percentage suggestions. This option is in tech tree Terminal Server >>> Input >>> Gratuity (Tab) .

Tick the Gratuity Confirmation Screen box to turn it on. The percentage options are what the card holder will see as suggested gratuities. There will always be options for "None" and "Enter Amount", these will be at the end if all suggested amounts are filled in, or "None" will be where the first 0% is.
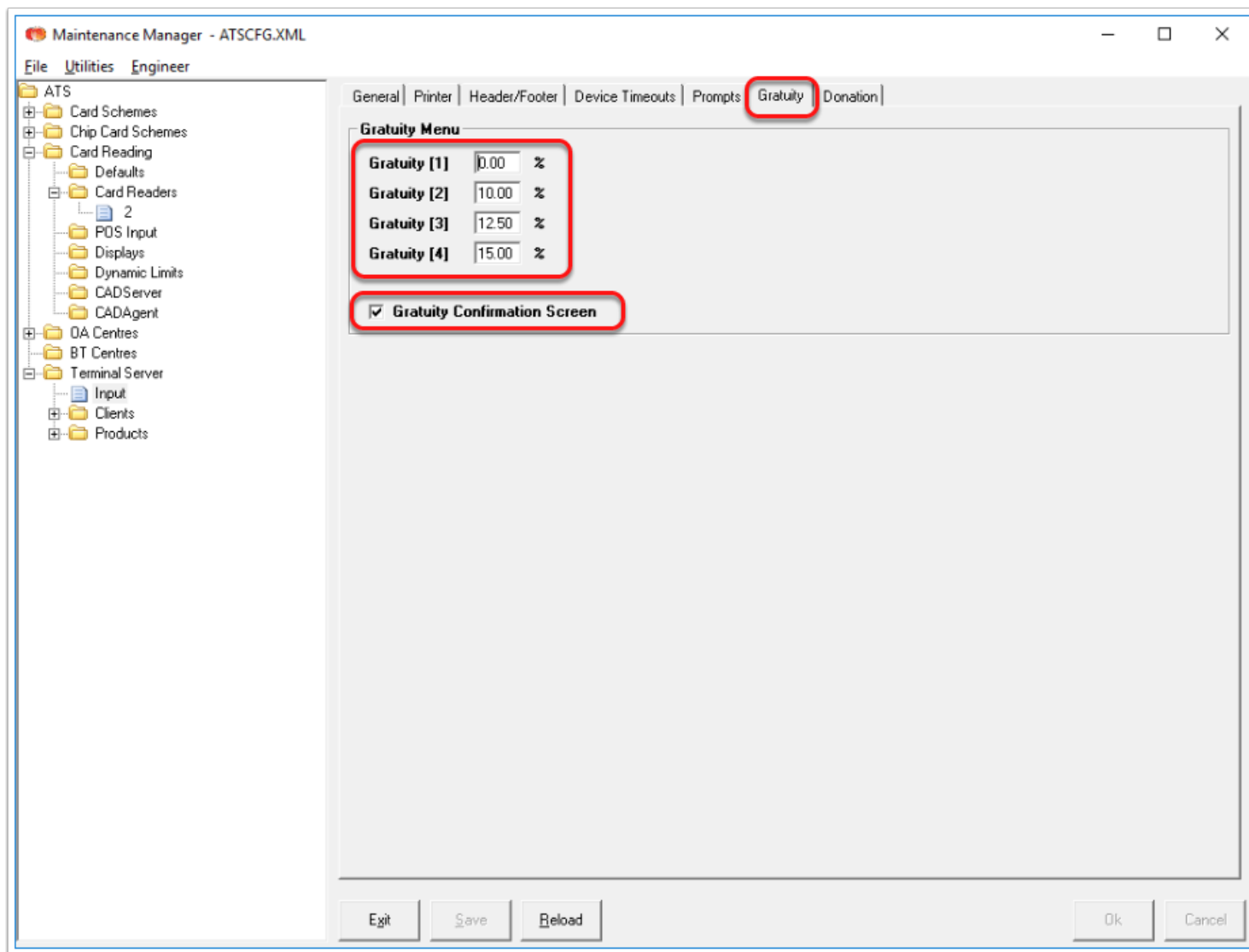
Configure Windows Firewall

If the Windows firewall is on you need to setup an incoming & outgoing rules.

Ports 20002 & 20003 to excutable C:\Program Files (x86)\Mastercard\ATS\ATS.exe and the Datacash ATS service.

1. Go to "Windows Firewall with Advanced Security" under administrator tools.
2. Go to "Inbound Rules" and click on "New Rule..."
3. Select the option "Port" and press [Next].
4. Select "TCP", enter in ports 20002, 20003 and press [Next].
5. Select "Allow the connection" and press [Next].
6. Ensure "Domain", "Private" & "Public" are tick and press [Next].
7. Name the rule "Datacash ATS - IN" and press [Finish].
8. Right click the rule and go to Properties
9. Go to the "Program and Services" and select the C:\Program Files (x86)\Mastercard\ATS\ATS.exe program and then go to [Services].
10. Select the Datacash ATS service and press [OK]
11. Press [OK].
12. Repeat from step 2 but for "Outgoing Rules" and name it "Datacash ATS - OUT".
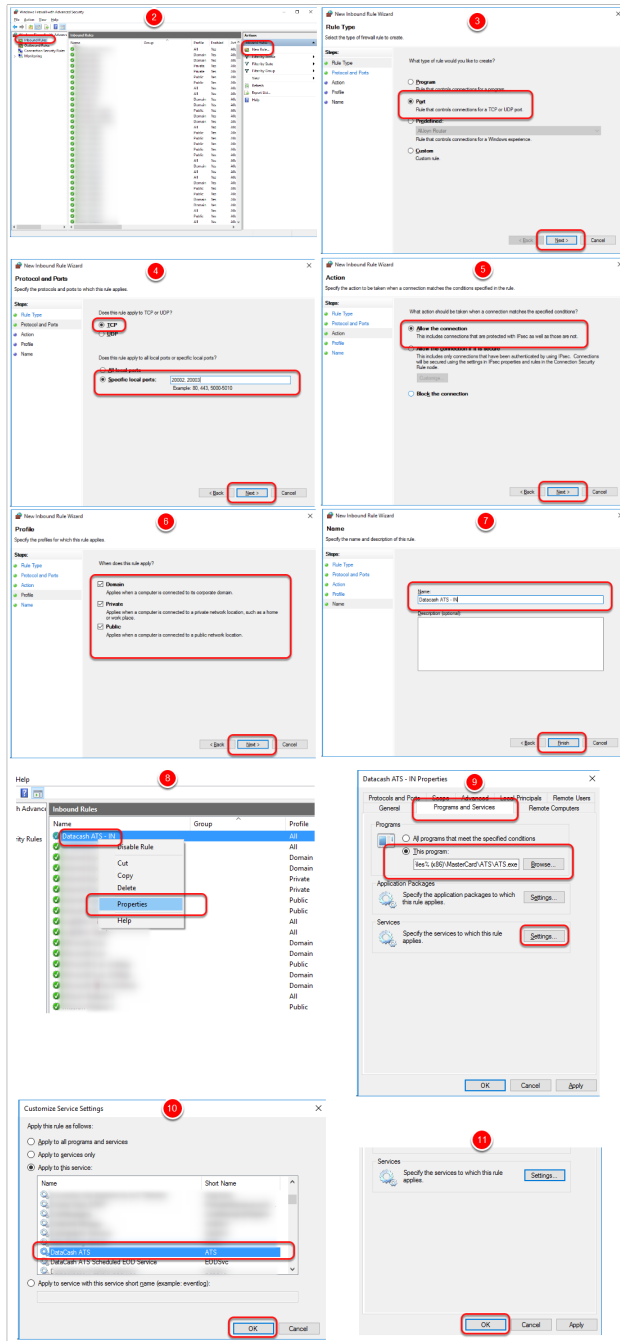
PDQ Hardware (aka PED)

There are three parts to setting on the hardware, Local Network, Wi-Fi and Server IP & Port.

PED Hardware -Step 1 (Comms Mode)

A new Vx680 supplied with EFTPay loaded will either display "Comms Mode" (left) or "Comms Configuration Required" (Right)
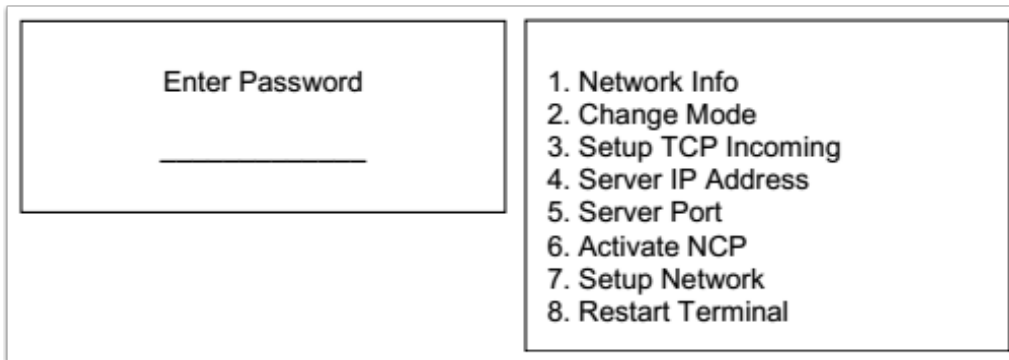
If you can choose now select Wi-Fi.

If you can't select enter the Comms Mode then you can adjust as described in step 3.

PED Hardware -Step 2 (Comms Mode)

To get to the setup menu press the green [Enter] button and the [5] button at the same time, it will then prompt for a password. The default password is 12345678

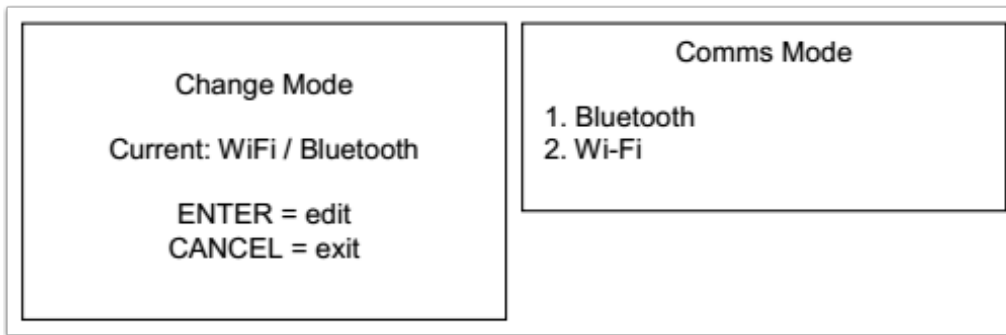Once in the setup menu you'll see the following options.

PED Hardware -Step 3 (Comms Mode)

If the "Comms Configuration Required" showed when the PDQ first started then you need to select the mode, it is either Wi-Fi or Bluetooth, select Wi-Fi.
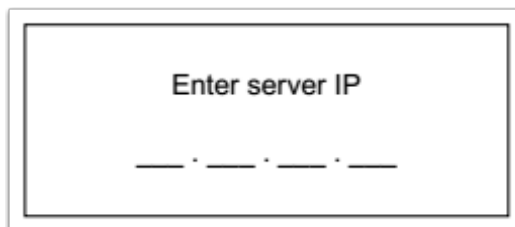
Select "Change Mode"

Then select "Wi-Fi"

```
┌─────────────────────────────┐  ┌─────────────────────────────┐
│      Change Mode            │  │        Comms Mode           │
│                             │  │                             │
│  Current: WiFi / Bluetooth  │  │  1. Bluetooth               │
│                             │  │  2. Wi-Fi                   │
│      ENTER = edit           │  │                             │
│      CANCEL = exit          │  │                             │
│                             │  │                             │
└─────────────────────────────┘  └─────────────────────────────┘
```
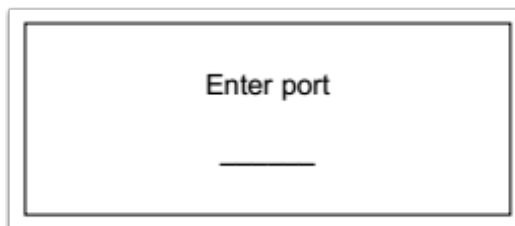
PED Hardware -Step 4 (ATS Server IP)

You need to set the Server IP, in the setup menu select "Server IP Address" and enter in the IP of the server that is running the ATS software.

The IP must be in nnn.nnn.nnn.nnn format e.g. 172.16.1.200 will not work and must be 172.016.001.200.

```
┌─────────────────────────────────┐
│                                 │
│        Enter server IP          │
│                                 │
│      ___ . ___ . ___ . ___      │
│                                 │
└─────────────────────────────────┘
```

PED Hardware -Step 5 (ATS Server PED Port)

You also need to enter in the Server Port, select "Server Port" and enter in the port number of that system, each PDQ device will not have its own port number there is a port for each system and they can be the same. Our default is 20003

```
┌─────────────────────────────────┐
│                                 │
│          Enter port             │
│                                 │
│           _____                │
│                                 │
└─────────────────────────────────┘
```

PED Hardware -Step 6 (Wi-Fi Setup)

1. Press [Menu] to adjust the network settings you need to use the Network Control Panel, select "Active NCP" to start this. If the PDQ hasn't been setup before you'll see.
2. Starting at the NCP 'main screen', press the Menu button and select [WiFi].
3. Select [Setup].
4. Enter the Group 1 password (166831) and Press the green [Enter] button. (Note: that password entry uses the 'mobile phone' style of entry, where if the same key is pressed in quick succession, the current character will cycle through the alphabet characters for that key. Therefore if entering consecutive digits, you must pause for 2-3 seconds between each key press.
5. The WiFi setup menu will now be displayed. To set up a new network, select [Scan Networks]
6. A 'searching...' screen will be shown, followed by a screen showing the number of networks found, then a list of found SSIDs. Select the SSID.
7. To connect to, and then select [Add Profile].

8. The network profile has now been added. The terminal will now show a menu enabling the settings for the selected network to be viewed/edited. Press [WEP/WPA Info]. NB this is on the 2nd page. Press the 'page down' button near the bottom of the screen if not done so in the screen below.
9. The current Pre-Shared Key will be displayed, with a value of (empty). Press the yellow [Clear] backspace button to enter a key.
10. Enter the pre-shared network key and press the green [Enter] button. Note that alpha characters, including lower-case characters can be entered by repeatedly pressing the same key.
11. When asked 'Save Changes?' press the [ENTER] to confirm.
12. To exit NCP and reboot, press CANCEL repeatedly.

If you have setup the Wi-Fi before you may need to delete the Wi-Fi profile and start again from step 5 in the Wi-Fi setup. You can only delete a profile if it isn't talking with the access point, so you may need to switch off the old AP to do this.

PED Hardware - Step 7 (Static IP)

This step will show you how to adjust the IP settings, by default the unit will be set to DHCP and will work with the integration... however some client do not have DHCP turned on and static addresses will be needed.

When entering IPs they must be in nnn.nnn.nnn.nnn format e.g. 172.16.1.200 will not work and must be 172.016.001.200.

1. On the Main menu screen select option 7 [Setup Network]
2. Press the green [Enter] button to edit.
3. Select Static or DHCP, if you choose DHCP jump to step 9
4. Press the yellow [Clear] button and enter in the new IP and press the green [Enter] button.
5. Press the yellow [Clear] button and enter in the new Subnet (usually 255.255.255.000) and press the green [Enter] button.
6. Press the yellow [Clear] button and enter in the new Gateway and press the green [Enter] button.
7. Press the yellow [Clear] button and enter in the new DNS 1 (usually 008.008.008.008) and press the green [Enter] button.
8. Press the yellow [Clear] button and enter in the new DNS 2 (usually 008.008.004.004) and press the green [Enter] button.
9. This will show the current IP and press the red [Cancel] to come out of the main menu and press [Cancel] again to restart the unit.

PED Hardware Testing - if required

NCP contains several useful tools for diagnosing the connectivity status of the terminal.

The following default tests are performed:

1. Ping test to the default gateway
2. Ping test to the primary DNS server
3. Ping to a URL "google.com" - NB tests DNS lookup as well
4. DNS lookup for URL "verifone.com"
5. TCP socket connection to 'time-a.nist.gov'

To configure a network diagnostic test follow these steps from the main NCP menu:

1. Press 'Menu'
2. Select 'Setup'
3. Enter Group 1 password
4. Select 'Diagnostics'
5. Select the item to edit
6. The default/current value will be displayed for the selected item. Press backspace/clear to edit the value.

Note: in order for tests 3 to 5 to succeed, the terminal must be connected to a network that has internet access. In many cases, this won't be true.
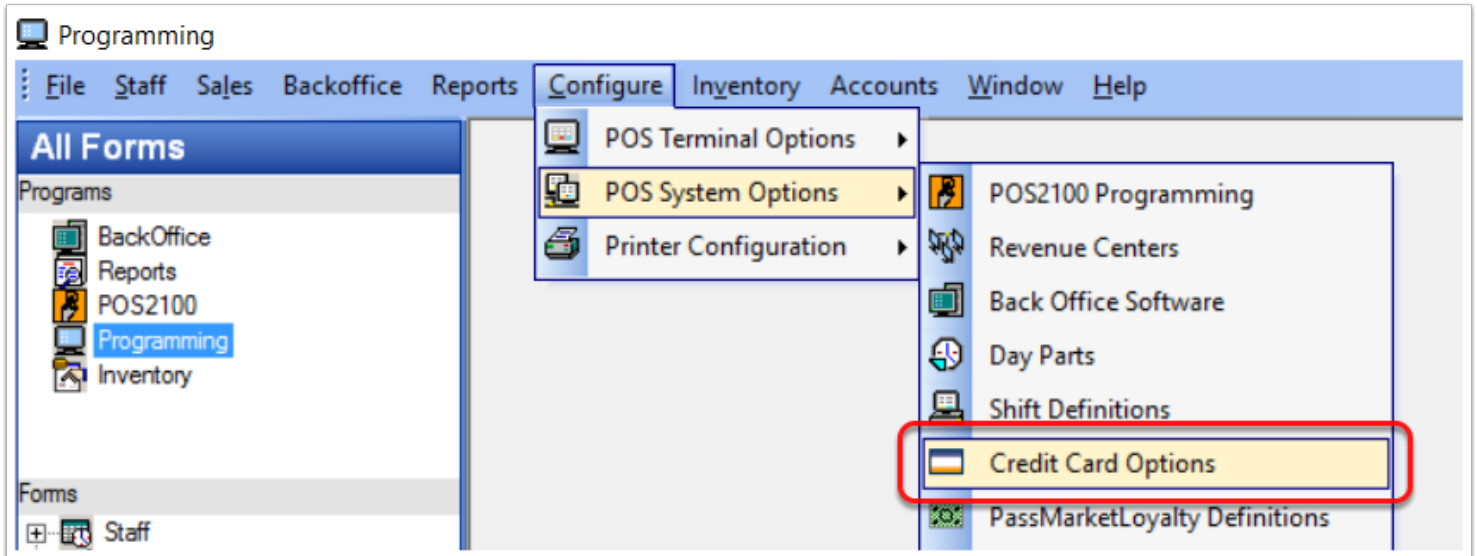
Comtrex POS

First ensure that the POS system is up to date.

It is best to speak with the Programing team about this part as Desktops and Medias can be different for each client's system.

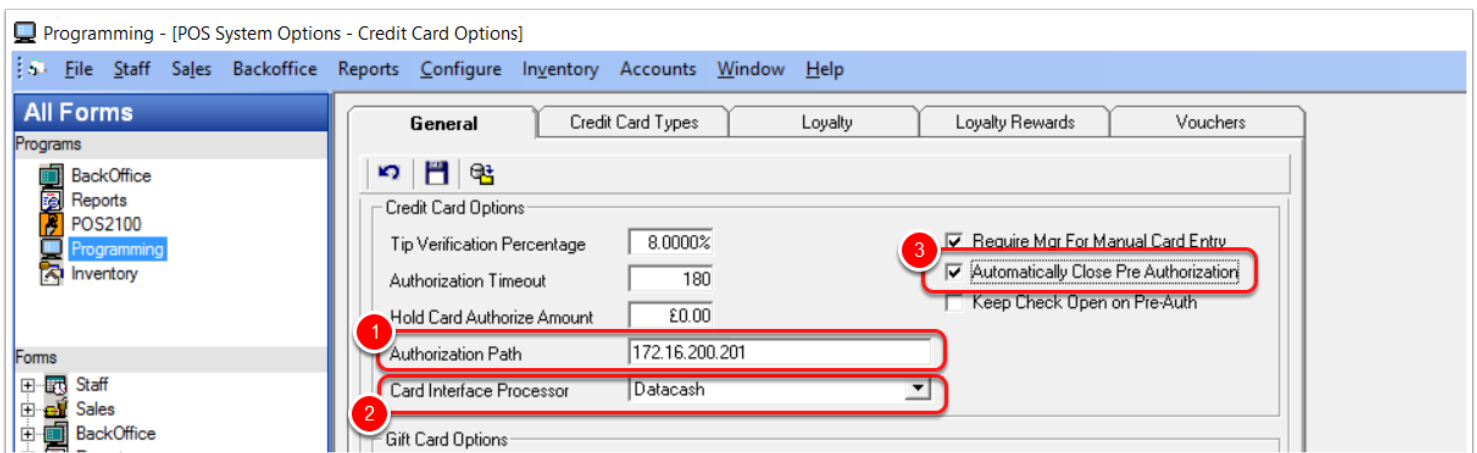## Configure Credit Card Interface Configuration- Step 1

In Programming go to "Credit Card Options"

Configure Credit Card Interface Configuration- Step 2
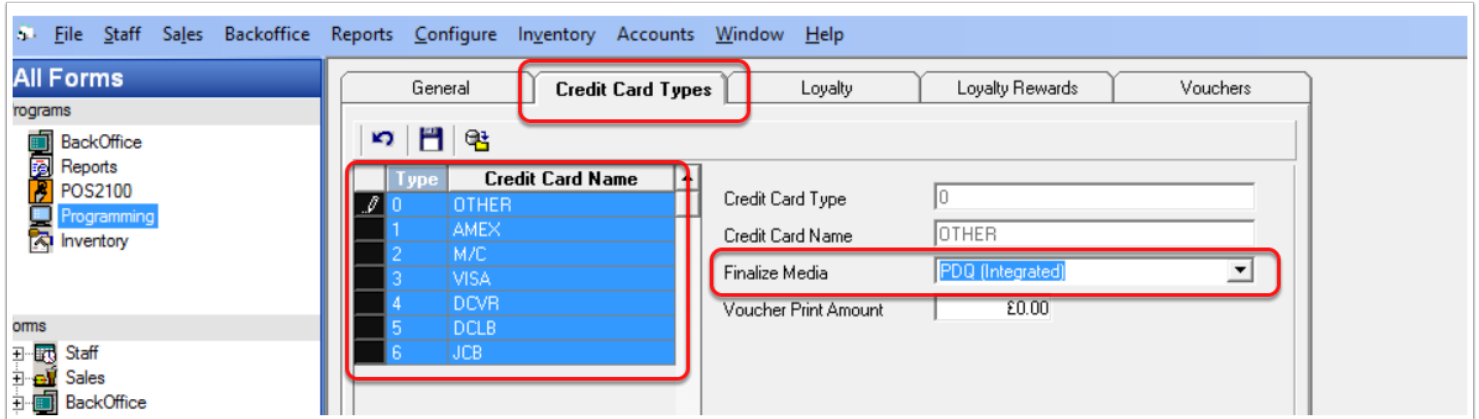
Configure the General Tab:

1. Set the Authorisation Path to be the internal IP of the Server
2. Set the Card Interface Processor to be Datacash
3. Check the Automatically Close Pre Authorisation

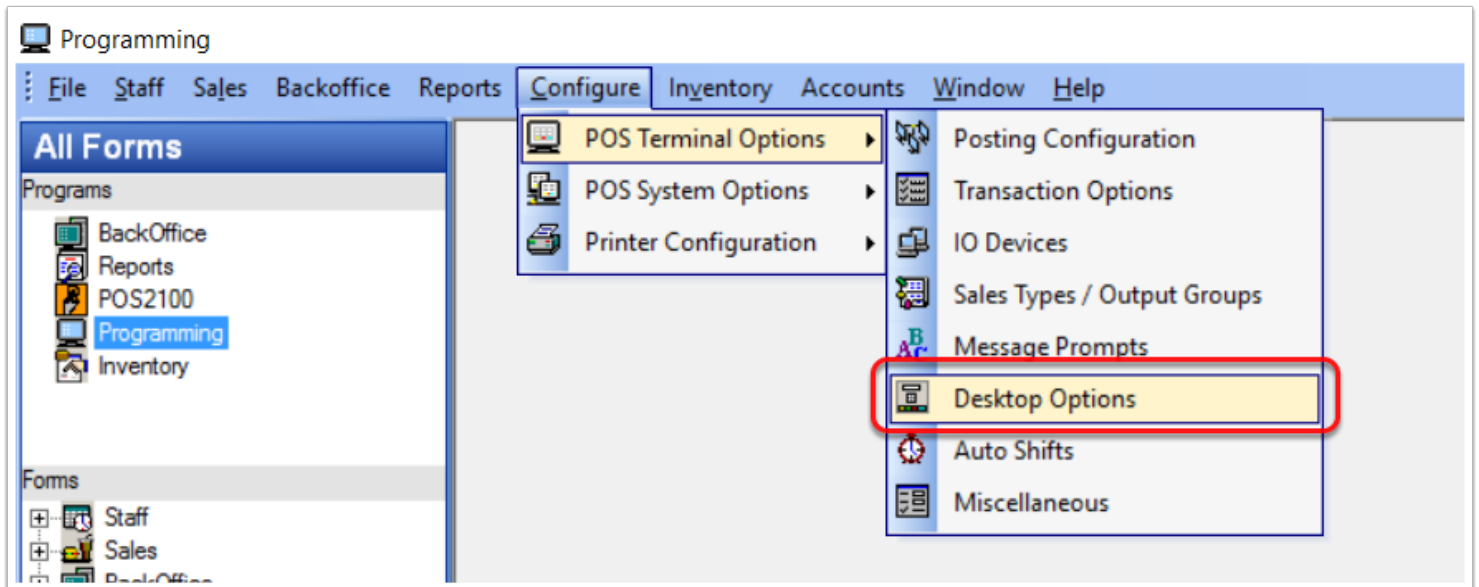# Configure Credit Card Interface Configuration- Step 3

Next link the Credit Cards on the Credit Card Types.

Link all Credit Card Types to the Finalize Media, PDQ (Integrated)

Configure Credit Card Interface Configuration- Step 4

Switch the desktops to link to the Integrated PDQ button

Configure Credit Card Interface Configuration- Step 5

Change the Default Sales Desktop and Closed Check Desktop, to be the equivalent desktop with CP appended to the end. Take care there are two sets of every desktop, if their desktop has Trial in the name select the Trail CP desktop, e.g. DRINKS TRIAL DRINKS TRIAL CP, or DRINKS DRINKS CP