

ATM/POS DVR Journal Overlay for ICR Touch

Suitable for QVIS DVR's and others with ATM/POS Capability

Configuration Guide

Introduction

The ATM/POS DVR Tool works by collecting the journals in realtime directly from your ICR Touch installation(s) and sending them to a compatible DVR using the ATM/POS protocols.

All that is required is a valid licence key for ATM-POS for each ICR Terminal you wish to send the data to your DVR from. The software can reside multiple times on a single windows based PC if preferred or on each individual ICR Terminal. You will also require a DVR that is capable of receiving the ATMPOS format. Most of the current DVR's have the capability, but most noticeable the QVIS range. Before purchasing a licence, you should check either the manual for your DVR or the configuration for your DVR for the presence of ATMPOS as a configurable option. So long as your DVR has the ATMPOS functions present and you have a valid ATMPOS licence for each ICR Terminal then the software should provide a seamless integration of journal data to the DVR.

Configuring ATM-POS Tool

The latest version of the ATM/POS tool can be downloaded from <http://www.e-pos.com/atmpos.html> . This should be downloaded either onto the EPOS terminal itself, or a separate PC you wish to delegate to communicate with the DVR's. The software can run as multiple instances collecting the data from multiple ICR Terminals and sending the journal to Multiple DVR's if required.

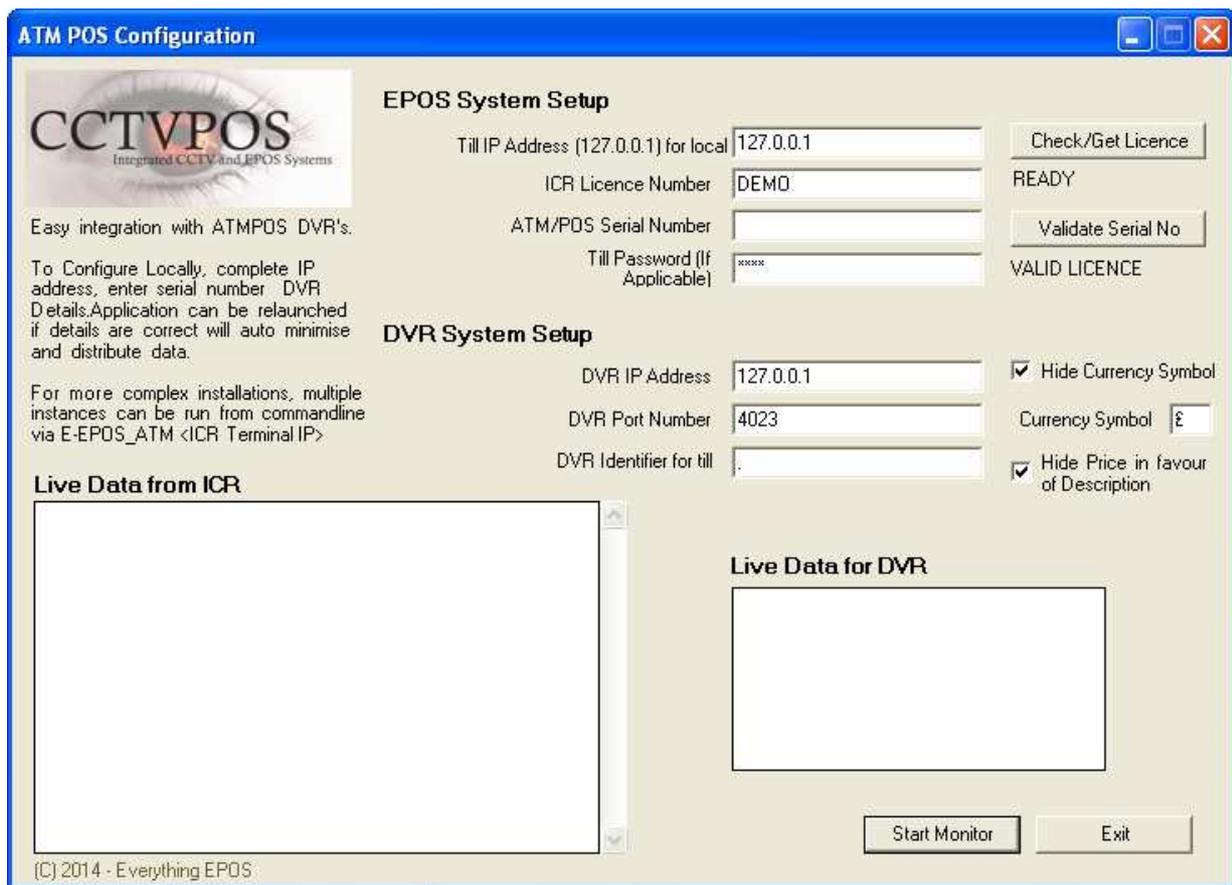
Once you have copied this file to your designated PC (EPOS Terminal or separate PC), store it in a place which is not going to get removed or tampered with such as the ICRTouch folder, Route of your hard drive or program files. Keeping it in your downloads folder is not recommended incase you remove it accidentally.

You should put in suitable Firewall rules to prevent the program from being blocked by Windows or your AntiVirus solution. Do this either from the Windows Control Panel – Firewall Settings, or from within your AntiVirus software's firewall settings. Simply select the ATM-POS executable and allow it to communicate with your network.

Launch the software for the initial configuration :-

The fields we need to concern ourselves with initially are the IP addresses each of the EPOS terminals you wish to communicate with.

If you are configuring a single PC to monitor multiple EPOS Terminals, then you should follow the steps in this section for each EPOS Terminal, if you are installing it on each EPOS terminal, then you can safely leave the IP address as the default of 127.0.0.1



Step 1

Ensure the ICR Touch software is open and running on the terminal you are attempting to configure. You can always minimise the ICR Touch software if you are installing on the same terminal as the ATM-POS software. If your EPOS software was not open when launching ATM-POS, the software will report there was no terminal on that IP address. Simply press 'Check/Get Licence' once you have the ICR Touch Software open on the IP address entered.

If you are successful, then the 'ICR Licence Number' will be filled in for you either as 'DEMO' which will not require a licence or as your actual ICR Licence Number.

Step 2

Assuming the licence number is not 'DEMO' then you will need to enter a valid Serial Number for the ATM/POS software. Once entered, press 'Validate Serial No' until the text below shows 'VALID LICENCE'.

Step 3

If your EPOS system has a 'Back Office TCP Socket Password' (From ICR Touch – Program 3 – System Programming – System Config) then you should enter this here.

Step 4

Press the 'Start Monitor' button at the base of the screen. If ATM-POS is able to connect to your terminal, ie the password and IP address are correct and you have a valid serial number, then you should see no errors or messages. If the password is incorrect, or if it cannot connect with your terminal, the software will report what the problem is and you should correct the IP address, Firewall Settings or Backoffice Password.

Step 5

Swap back to the ICR software and make a 'dummy sale', You can simply switch between the home mode and the Sales mode a couple of times instead of making a sale if you prefer. Once done, minimise ICR Touch or bring the ATM-POS window to the front again and you should see the transaction on the left hand side under 'Live Data from ICR'. If this is displayed, then your Till communication is successful.

Step 6

Under DVR System Setup, enter the IP address for your ATMPOS compatible DVR together with the Port Number you will use for the DVR. Most DVR's will expect the ATMPOS data to arrive on port 37778.

Step 7

Each till always requires an 'Identifier' for the DVR. This is a single digit character which the DVR can recognise to pick up that the data sent has been sent from THIS terminal. Most organisations would use 1 for Till 1, 2 for Till 2, etc but anything is acceptable so long as no 2 terminals are sending the same identifier. You should make a note of the identifier used since you will need to put this in the relevant field on your DVR later.

Since the ATMPOS data has a maximum field length of 20 characters and most journal data is around 40 characters long, the ATM-POS software makes some adjustments to the journal data submitted to the DVR to make it fit as 1 transaction per line. Some settings have been provided to optimise this for your environment, these on on the right hand side.

'Hide Currency Symbol' – Since space is short, often it is preferable to hide the currency symbol. If the figure is being displayed as a price anyway, it is generally the same currency. Obviously with ICR you can use multiple currencies so this may be required but in the vast majority it is good practice to hide the currency symbol

'Currency Symbol' – This is the character to hide when the 'Hide Currency Symbol' checkbox is ticked.

'Hide Price in favour of Description' – Since the maximum length of a line on the DVR is 20 characters and a sale line would usually comprise of Qty Sold, Description, Price – the ATM-POS software can if this is selected check the length of the description & quantity and hide the price if the description is likely to be meaningless.

Step 8 – Final Step for each ICR Terminal

If you are configuring multiple instances (ie a single PC to communicate with multiple terminals) then you should now enter the next IP address in the 'EPOS Till IP Address' field and repeat these steps for as many terminals as required.

There is no save button, since the software will save your settings for each till automatically on completion of entry in any field so long as the serial number is valid. If you are not using a valid serial number for any licence, the settings for that till shall not be saved.

Final Step once all EPOS communications have been configured for this PC.

Close the software by pressing the 'Exit' Button or the 'Close X' in the top right corner.

Locate the ATM-POS Executable, right click and choose 'Copy'.

Navigate to your Startup Items Folder by pressing 'Start' – 'Programs' – 'Startup' then right click and select the option 'Explore All Users'.

Right click on a blank area, and select 'Paste Shortcut'



If you are installing the software on each EPOS terminal, you can skip the next section.

For cases where you need to run multiple instance of the software on a single machine – ie where you are running the ATM-POS software on a separate PC to transmit the data for multiple terminals :-

You will need to repeat the 'Paste Shortcut' process for as many terminals you are looking to monitor.

Once done, rename each of the shortcut's to something meaningful – for example 'ATM Monitor Till 1', 'ATM Monitor Till 2' etc.

The next step is to tell the shortcut which till it is responsible for monitoring. For each shortcut, right click the link and choose properties. Within the properties window, select 'Shortcut'

In the 'Target' box put a space followed by the IP address of the terminal you are looking for the software to monitor.

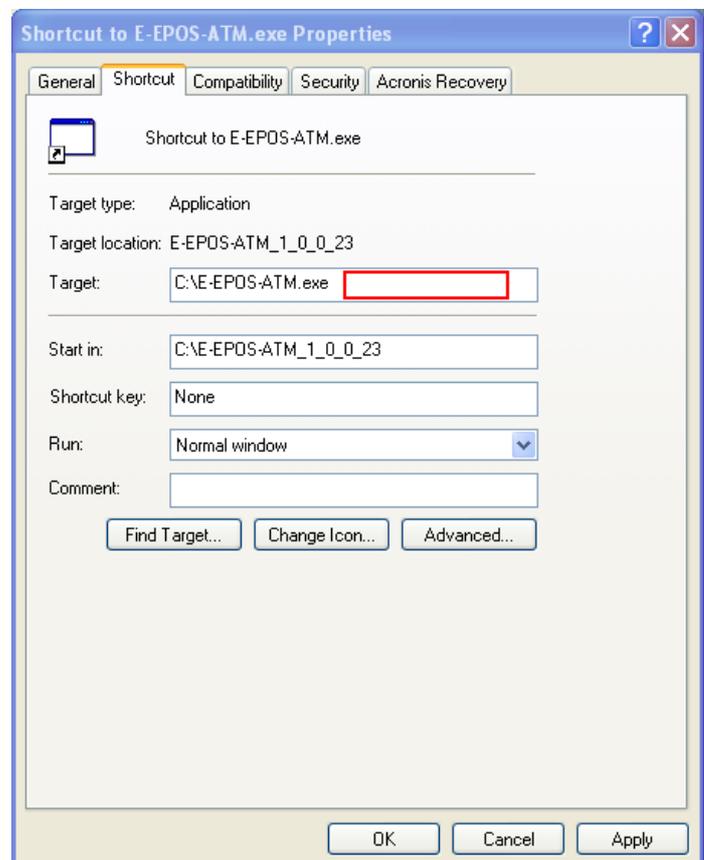
For example :-

Shortcut ATM Monitor Till 1 could be
C:\E-EPOS-ATM.exe 192.168.0.101

Shortcut ATM Monitor Till 2 could be
C:\E-EPOS-ATM.exe 192.168.0.102

etc

Once you have done this for each shortcut, save your changes by hitting 'Apply' then 'OK'.



To Test that everything has been done successfully from the ATM-POS installation side, simply launch each of the shortcuts created from your 'Start' – 'Program Files' – 'Startup' folder.

Each shortcut should launch in a minimised state. If there are problems, then generally the software will launch full size. Bring each of the windows to full size by selecting them from the Windows taskbar. Each of the 'Start Monitoring' buttons should read 'Stop Monitoring'. Even if an ICR Touch terminal is not running, whilst the 'Live Data from ICR' box may say 'Till Disconnected' so long as the button says 'Stop Monitoring' then the ATM-POS solution should be running correctly.

Configuring your DVR

Obviously, various DVR's configuration screens may vary, but each of the screenshots and the basic instructions below should be roughly consistant between DVR models.

The configuration below is for a QVIS Appolo 5 DVR, but all you should need to check is that the DVR has a UDP socket for communicating with ATMPOS solutions and an ATMPOS section in the configuration.

Some DVR's without ATM/POS functionality can have a firmware update applied to provide the functionality, so even if your DVR appears not to have ATMPOS functions, you should check with the vendor to see if a firmware upgrade is available.

Step A – Review the Network settings of the DVR

Locate the Network configuration window of the DVR, should look similar to the one pictured below. Whilst unlikely to need to change something, the ATM-POS software will need to know the IP address of the DVR and the port number used. Whilst normally the port number is 37778, this can be changed but you should ensure that both the ATM-POS installations and the DVR are using the same port number.

NETWORK			
Ethernet Port	Port 01	<input type="checkbox"/> DHCP	
IP Address	192 . 168 . 1 . 7	Mac Address	90:02:a9:a7:a9:8f
Subnet Mask	255 . 255 . 255 . 0		
Gateway	192 . 168 . 1 . 1		
Device Name	DVR		
TCP Port	37777	HTTP Port	4002
UDP Port	37778	Max Connection	10
Preferred	8 . 8 . 8 . 8		
Alternate DNS	8 . 8 . 4 . 4		
<input type="checkbox"/> Transfer	Latency	<input type="checkbox"/> LAN Download	

In this example, the DVR IP address is set as 192.168.1.7 and the UDP Port is 37778. These are the values required in the DVR IP & Port settings of your ATM-POS software. If you will be communicating with multiple DVR's, simple remember which IP and Port the DVR is that you would like the ATM-POS software to submit the journal to.

Step B – Configuring the DVR to accept data from your POS terminal

Locate the ATMPOS configuration window of the DVR, should look similar to the one pictured below.

The screenshot shows a configuration window with the following fields and values:

- Group: 1 (highlighted with a red box)
- Source IP: 192.168.1.29 (highlighted with a red box)
- Source Port: 0
- Destination IP: 192.168.1.7
- Destination Port: 0
- Record: 12 (highlighted with a blue box)

Below these fields is a table with columns: Frame ID, Start Position, Length, Key, and Data.

Frame ID	Start Position	Length	Key	Data
Frame ID1	1	1	1	Data
Frame ID2	1	0		Data
Frame ID3	1	0		Data
Frame ID4	1	0		Data
Frame ID5	1	0		Data
Frame ID6	1	0		Data

The number of journal feeds the DVR can handle is controlled by the 'Group' dropdown menu. If this menu has only 4 groups, then this DVR can only accept journal data from upto 4 EPOS terminals for example.

We need to repeat the following block of steps for each 'Group' or 'EPOS Terminal'

Step 1

Select the Group / EPOS Terminal we are configuring, for example 'Till 1' may be 'Group 1' It doesn't matter which camera you are putting the image on so the most logical naming convention should perhaps be Till number

Step 2

Ensure the IP address of the ATM-POS installation responsible for sending the journal to this DVR Group is put into the 'Source IP' box. If you are using the software on each till, this would be the IP address of the till, if however you are using multiple instances from a single PC this would be the IP address of this PC.

Step 3

Ensure the Destination IP is the address of the DVR, and that the Source Port and Destination Port are both set as '0'.

Step 4

Select the Camera number you are looking for the Journal to be overlaid on and then complete the Frame ID table as pictured above.

Frame 1 always requires a start position of '1' and a length of '1'. The 'Key' field on frame 1 should be the 'DVR Identifier for till' value from the ATM-POS installation for this till. This identifier is essential to ensuring the data is displayed for this camera and this till. The pairing is provided by this digit rather than the Source IP address on the majority of DVR's.

Frames 2 onwards, are not required so should always have a length of '0' entered. This will stop the DVR picking up test for display that is not required for the journal system.

Step 5

Press the 'Data' button to the side of 'Frame 1' to configure the format for which the Journal data is to be displayed. This should be configured as follows :-

	Start	Length	Title
Field1	2	20	
Field2	22	20	
Field3	42	20	
Field4	62	20	

Once completed, simply press the 'Apply' / 'Save' buttons on this configuration window and the 'Apply' / 'Save' buttons on the initial ATMPOS window

Repeat these steps as applicable. If you have more than 1 Journal feed to configure, select the next group and repeat steps 1-5 above.

Once all the above steps have been completed, close and save any remaining configuration windows, ensure the DVR is set as 'RECORDING'. Some DVR's require the recording to be entered into a Scheduled recording pattern instead of manual record for the ATMPOS data to be overlaid.

Once the DVR is recording, you should be able to make transactions on the EPOS terminal and the journal data should be displayed on your DVR.

Many DVR's have a search function in the playback area. If your DVR features this, you can search for any of the text directly from your DVR so that it may locate appropriate footage for you.