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Purpose of this software:

"Link" a normal POS Software to the DVR. To print from a POS Software directly to the DVR without any modifications on the POS Software.

Setting up a generic printer in Windows XP and running POS connector, you will be able to print using this printer and it will send the POS text to the DVR.

If the user wants to printer to the DVR AND to a printer at the same time, then he has to select the desired printer from the list.



Diagram:

Windows PC



Requirements:

- ♦ OS: Windows XP.
- \diamond The DVR with firmware must be 1.5.2 or higher.
- ♦ Disable the firewall or configured it to let this program pass.
- ♦ Only ASCII Text allowed. No images, etc.

Environment:

- ♦ DVR and the PC with the Simulator must be in the same LAN.
- \diamond If there is a router, make sure that the port you select is allowed to pass.

Release dates & fixes:

- ♦ 2009-09-02 v1.0
- ♦ 2009-10-14 v1.1 Added tcpClient_error event.



¢	2010-03-12	v1.2 Can select a printer and send the text to a printer and the DVR at the
	same time.	
∻	2010-11-12	v1.3 Schedule function and Auto Connect option



Configure the Generic IP Printer in Windows XP

1. Click on "Printers and Faxes".



2. Click on "Add a printer".



3. Click on "Next"



4. Uncheck "Automatically detect and install my Plug and Play printer".

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POS Connector

ld Printer Wizard	
Local or Network Printer The wizard needs to know which type of printer to set up.	
Select the option that describes the printer you want to use:	
Cocal printer attached to this computer	
Automatically detect and install my Plug and Play printer	
A network printer, or a printer attached to another computer	
To set up a network printer that is not attached to a print server, use the "Local printer" option.	
< Back Next > 0	Cancel

5. Select "Create a new port:" and then "Standard TCP/IP Port".

dd Printer Wizard				
Select a Printer Port Computers communicate w	ith printers through ports.			
Select the port you want yo new port.	our printer to use. If the port is not listed, you can create a			
OUse the following port:	LPT1: (Recommended Printer Port)			
Note: Most computers i The connector for this p	use the LPT1: port to communicate with a local printer. port should look something like this:			
 Create a new port: Type of port: 	Standard TCP/IP Port			
	< Back Next > Cancel			

6. Click on "Next"

Add Standard TCP/IP Prin	iter Port Wizard 🛛 🕅
	Welcome to the Add Standard TCP/IP Printer Port Wizard You use this wizard to add a port for a network printer. Before continuing be sure that: 1. The device is turned on. 2. The network is connected and configured.
	To continue, click Next.



7. Enter the localhost IP (127.0.0.1) and click next.

For which device do you war	it to add a port?	
Enter the Printer Name or IP a	address, and a port name for the desired dev	vice.
Printer Name or IP Address:	127.0.0.1	
Port Name:	IP_127.0.0.1	

8. Select "Custom" and click on "Settings"

Add Standard TCP/IP Printer Port Wizard 🛛 🛛 🔀				
Additional Port Information Required The device could not be identified.				
The detected device is of unknown type. Be sure that: 1. The device is properly configured. 2. The address on the previous page is correct. Either correct the address and perform another search on the network by returning previous wizard page or select the device type if you are sure the address is correc	to the st.			
Device Type Standard Generic Network Card Custor Settings				
< Back Next >	Cancel			

9. Verify that the IP is correct (127.0.0.1), select "**Raw**" and select the Port. This port is the **Connector's**

Listening Port that you must enter in the POS Connector. Please remember this port number.

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POS Connector

Additional Port Information Bequired	Configure Standard TCP	/IP Port Monitor
The device could not be identified.	Port Settings	
he detected device is of unknown type. Be sure that: . The device is properly configured. 2. The address on the previous page is correct. 	Port Name: Printer Name or IP Address: Protocol Raw	IP_127.0.0.1 127.0.0.1 O LPR
Device Type	Raw Settings Port Number:	2001
© <u>C</u> ustom S <u>ettings</u>	LPR Byte Counting Er	iabled
	SNMP Status Enabled	
< Back	Community Name:	public
	SNMP Device Index:	1

10. Click on "Finish".

Add Standard TCP/IP Printer Port Wizard			
	Completing the Add Standard TCP/IP Printer Port Wizard You have selected a port with the following characteristics.		
	SNMP:	No	
11 11	Protocol:	RAW, Port 2001	
all all the	Device:	127.0.0.1	
All and a second se	Port Name:	IP_127.0.0.1	
	Adapter Type		
	To complete t	his wizard, click Finish.	
		< <u>Back</u> Finish Cancel	

11. Select "Generic" in "Manufacturer" and select "Generic / Text Only" in "Printers"



Coloret the manufac		d soudel of your wister. If your wister as we with an installation
disk, click Have Dis	sk. If you sk. If you	a model of your printer. If your printer came with an installation ar printer is not listed, consult your printer documentation for
companying printer o		
15		
Manufacturer		Printers
GCC Generic / Text Only		🖼 Generic / Text Only
Gestetner		Service IBM Graphics Spin
HP		🖙 Generic IBM Graphics 9pin wide
BM	~	S MS Publisher Color Printer
		Windows Update Have Disk
 This driver is digitally sig 		
		Windows Update Have Disk

12. Name your printer.

Add Printer Wizard	
Name Your Printer You must assign a name to this printer.	
Type a name for this printer. Because som name combinations of more than 31 chara possible.	e programs do not support printer and server icters, it is best to keep the name as short as
Finter name: Generic / Text Only	
	< Back Next > Cancel

13. Select "No" and click on "Next".

Add Printer Wizard
Print Test Page To confirm that the printer is installed properly, you can print a test page.
Do you want to print a test page? ○ Yes ⓒ No
< Back Next > Cancel



14. Check the parameters of this generic printer and click on "Finish".

Add Printer Wizard		
Com Wiza You hav You spe	Completing the Add Printer Wizard You have successfully completed the Add Printer Wizard. You specified the following printer settings:	
Name:	Generic / Text Only	
Share n	ame: <not shared=""></not>	
Port:	IP_127.0.0.1	
Model:	Generic / Text Only	
Default:	Yes	
Test pa	ge: No	
To close	e this wizard, click Finish.	
< Back Finish Cancel		

15. You will see a new printer in "Printers and Faxes".

🖏 Printers and Faxes	
File Edit View Favorites Tools	Help
🕜 Back - 🕥 - 🏂 🔎 Sea	arch 🎼 Folders 🛄 🗸
Address 🍓 Printers and Faxes	
Printer Tasks Image: Comparison of the system Image: Add a printer Image: Comparison of the system Image: Set up faxing Image: Comparison of the system	Generic / Text Only 0 Ready
See Also 🛞	
 Troubleshoot printing Get help with printing 	



Configuring the DVR

1. Check if you have license for POS.

System Setup Record Setup Alarm Motion Detection	VP ON
Password Protect Video Video Input Disks TV Output OSD Text GPIO TCP/IP Account Audio POS Lan Device Serial Ports System Info Date/Time ISP Registry Running Mode Algorithm NTP Setup License	Image: Second system 8/18/2008 IS:S2: IS IM B/ 000HB Lan M G R M G 0 9 9 0 0 0 11 0 0 0 11 0 0 0 12 0 0 0 15 0 0 0 16 0 0 0 16 0 0
	ĸ

"#POS(16)" means that you have license for 16 POS connections.

 Go to "System Setup" -> "POS Lan Device", enable the Device and enter the IP and Port of the PC running the POS Connector. Then click "OK". The DVR will reboot after this operation.



System Setup Reco	rd Setup Alarm Motion Detection
Password Protect - Video Disks TV Output OSD Text GPI TCP/IP Account Audio POS Lan Device Serial Ports System Info Date/Time ISP PPPoE 3G Registry	POS Lan Device POS on Lan Device Device 1 Enable Yes Static IP IP 10.11.9.51 Port 1001 O Dynamic IP (Regist by OCX) Device Name Select & Update
Running Mode Algorithm NTP Setup	NetIO Prefix IP Addr. 192.168.254.xxx NetIO VP204-1
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Note: the port configured in the DVR must be the same port number as the one configured in the POS Connector.

	Connector's Listening	BOS - > Copportor	Connector < > DV/R				
Enable?	Port	Status	Status	DVR's IP	DVR's Port	Act	ions
V	2001	Listening	Connected	10.11.115.103	1001	Connect	Disconnect
	2002	Closed	Not Connected	10.11.9.36	2101	Connect	Disconnect
	2003	Closed	Not Connected	10.11.9.37	2102	Connect	Disconnect
	2004	Closed	Not Connected	10 11 9 38	2103	Connect	Disconnect

 Go to "System Setup"->"Serial Ports". Select the appropriate LAN Device. (SIP= Static POS, DIP=Dynamic POS).

IMPORTANT:

Remember to change the device to "DATA capture", or the connection will never be established. Remember to select a Camera.



Configuring the POS Connector

	DVR=	Server					
	Connector's Listening	POS sue Connector	Connector <> DVR			-	
ile?	Port	Status	Status	DVR's IP	DVR's Port	Act	ions
]	2001	Closed	Not Connected	10.11.115.103	1001	Connect	Disconnect
1	3002	Closed	Not Connected	10.11.115.115	2002	Connect	Disconnect
[3003	Closed	Not Connected	10.11.9.37	2102	Connect	Disconnect
[3004	Closed	Not Connected	10.11.9.38	2103	Connect	Disconnect
[3005	Closed	Not Connected	10.11.9.39	2104	Connect	Disconnect
[3006	Closed	Not Connected	10.11.9.40	2105	Connect	Disconnect
[3007	Closed	Not Connected	10.11.9.41	2106	Connect	Disconnect
[3008	Closed	Not Connected	10.11.9.42	2107	Connect	Disconnect
	3009	Closed	Not Connected	10.11.9.43	2108	Connect	Disconnect
	3010	Closed	Not Connected	10.11.9.44	2109	Connect	Disconnect
	3011	Closed	Not Connected	10.11.9.45	2110	Connect	Disconnect
	3012	Closed	Not Connected	10.11.9.46	2111	Connect	Disconnect
	3013	Closed	Not Connected	10.11.9.47	2112	Connect	Disconnect
ļ	3014	Closed	Not Connected	10.11.9.48	2113	Connect	Disconnect
	3015	Closed	Not Connected	10.11.9.49	2114	Connect	Disconnect
	3016	Closed	Not Connected	10.11.9.50	2115	Connect	Disconnect
						ConnectAli	DisconnectAli
nter —			- Options				
			- 🗆 🗖 Sta	rt in Hidden Mode?		🔲 Enable Sch	iedule?
ame:	No Printer		의 글 글 글 글 글 글 글 글 글 글 글 글 글 글 글 글 글 글 글				
				nnect when program is sta	arted / St	arting Hour 🔳	▶ 11
	Set					and Hour A	 10

To change the settings, you must first disconnect the connection.

- ✓ **Enable:** Click on it to enable the connection.
- Connector's Listening Port: The POS Machine will connect to this port. This is the port you choose in:

Additional Port Information Required	Configure Standard TC	CP/IP Port Monitor	?
The device could not be identified.	Port Settings		
The detected device is of unknown type. Be sure that: 1. The device is properly configured. 2. The address on the previous page is correct.	Port Name: Printer Name or IP Addres	IP_127.0.0.1	
Either correct the address and perform another search on the he previous wizard page or select the device type if you are sure th			O LPR
	Raw Settings		
	Port Number:	2001	
Device Type	LPR Settings		
O Standard Generic Network Card	Queue Name:		
⊙ <u>C</u> ustom S <u>ettings</u>	LPR Byte Counting	Enabled	
	SNMP Status Enabl	led	
< <u>B</u> ack	Community Name:	public	
	SNMP Device Index:	1	
		L	
4			

✓ DVR's IP: The IP of the DVR that the POS Connector will connect to. The IP should be taken from:





✓ DVR's Port: The port of the DVR that the POS Connector will connect to. This is the port you choose in:

System Setup Record	Setup Alarm Motion Detection
Password Protect Video Video Input Disks TV Output OSD Text GPI0 TCP/IP	POS Lan Device POS on Lan Device Device 1 Enable Yes © Static IP
Account Audio POS Lan Device Serial Ports System Info Date/Time ISP Registry Bunning Mode	IP 10.11.8.51 Port 1001 C Dynamic IP (Regist by OCX) Device Name POSSimulator Select & Update
Algorithm NTP Setup License	Netio Prefix IP Addr. 192.168.254.xxx ▼ NetIO VP204-1 ▼ ▼
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- ✓ Start in Hidden Mode?: Click to enable hide (DOES NOT SAVE THE CONFIGURATION, must click on "Save Settings")
- Connect when program is started?: Click to start the connection automatically when the program is started.
- Printer: Select the desired printer from the list (will show all the printers configured in Windows) and press on "Set"
 - Name: Select the desired printer and press on "Set".
 - Set: Set the selected printer





If the user doesn't want to send text to the printer, please select the option "No Printer".

Printer			
THING			
<u>N</u> ame:	No Printer	•	
	PDFCreator		
	Microsoft XPS Document Writer		
	Generic / Text Only		
	FX Document Centre C250 PCL 6		
_	DocuLentre-III 2200		
	No Printer	•	No1
	Print		
	No Printer set => don't send to printer		
	確定		

- ✓ **Enable Schedule**: Click to enable the schedule function.
- Starting Hour: Use the scroll bar to set the desired hour for the program to start trying to connect to the DVR.
- End Hour: Use the scroll bar to set the desired hour for the program to stop trying to connect to the DVR.
- ✓ Save Settings: Save the configuration in the POSConnector.ini
- Save Settings and Hide Window: Save the configuration in the POSConnector.ini and hide the program.
- Save Settings and Close: Save the configuration in the POSConnector.ini and close the program.

PosConnector.ini

[Setup] Printer=DocuCentre-III 2200 => Shows the name of the configured printer. Hide=0 => "0" to show the Program ; "1" to hide the program. EnablePrinter= 1 => Enable the printing to a printer (1 = ON ; 0 = OFF). EnableSchedule=0 => Enable the schedule. (1 = ON ; 0 = OFF). StartHour=11 => Starting hour (0 ~23) EndHour=18 => Ending hour (0 ~23) AutoRun=0 => Enable auto run (1 = ON ; 0 = OFF). [Connection 1] => Configuration of the first connection ENABLE=1 => "0" to disable this connection; "1" to enable. POS_PORT=2001 => Connector's Listening Port for this connection

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DVR_PORT=2001=> DVR's Port for this connection
IP=10.11.115.108 => DVR's IP for this connection
[Connection 2] => Configuration of the second connection
ENABLE=0
POS_PORT=2002
DVR_PORT=2101
IP=10.11.9.36

How to run it automatically when the Window starts?

There are two options:

You can add it in the "Startup" of Windows.



Add it in the "autoexec.bat"

Let's do a test

1. Open Notepad



- **Untitled Notepad** File Edit Format View Help This text was printed from the NotePad!
- 2. Configure the "Page Setup"

ile Edi	it Form	at Vie	w Help
New		Ctrl+N	i ted
Open	ine i	Ctrl+C	
Save		Ctrl+S	
Save	As		
Page	Setup	i.	
Print.	<u>v</u>	Ctrl+P	6
Exit			

3. NotePad, like all document writers, it adds a margin to the left, right, top and bottom. We have to set it to 0, since we are not printing on a conventional printer. Remember to "Header" and "Footer" in blank.

Page Setup		? 🛛
Paper Size:	Letter	Preview
Source:	Automatically Select	Antice of the second se
 Portrait Landscape 	Left: 0 Right: 0 Top: 0 Bottom: 0	Constructions of the second se
Header:		
	0	Cancel Printer

4. Now let's print!



ile	Edit	Format	View	Help
Ň	ew	C	trl+N	rec
0	pen	C	trl+0	
s	ave	C	trl+S	
S	ave As			
P	age Se	tup		
P	rint	C	trl+P	
E	xit			

5. Select the printer we configured and click on "**Print**".

Print	?
meral	
Select Printer	
Add Printer Generic / Text Only	
Status: Ready Location: Comment:	Print to file Preferences
Page Range	
⊙ All	Number of copies: 1
Selection Ulurrent Page	
U Pages:	

6. We can see the text in the DVR.





Note: If you selected a printer, it will also print that message in the printer.