

Merchant Communications Checklist

The following checklist outlines the information necessary to install a Dial, Ethernet (hardwired), Bluetooth or WI-FI connected terminal at your location. Please review the information below and make note of the information that will be necessary during installation. If you are not familiar with the information in this checklist, you may need to arrange to have someone familiar with your network on site at time of installation to properly configure the network and terminal. For more information, contact the First Data Customer Service Help Desk at 1-888-263-1938.

KEEP THIS DOCUMENT HANDY FOR TERMINAL INSTALLATION AND FOR FUTURE TROUBLESHOOTING.

WiFi and IP Terminal Installation Frequently Asked Questions

How do I find the my WI-FI security configuration page on my PC?

The configuration page is unique to each router manufacturer. To find the configuration for your router, refer to your router's *Quick Installation or Setup Guide*. If you do not have that guide, call your router's Customer Service or Support Desk. The router's support phone number is typically located on the router.

Where do I find the SSID? Most commonly, the SSID will appear in the settings related to the *Wireless Networking* options.

What is WPA-PSK and WPA2-PSK? WPA-PSK and WPA2-PSK are security protocols developed by the *Wi-Fi Alliance* to secure wireless networks. WPA-PSK level encryption is required for PCI Compliance when using Wi-Fi terminals.

What is TKIP and AES? TKIP and AES are different types of encryption protocols used in Wi-Fi networks with AES being considered a more secure protocol.



The VX670 terminal uses WPA-PSK and TKIP, it will not connect using AUTO, AES Cipher modes, or if WPA2 encryption security.

The VX 680 terminal can use WPA-PSK with TKIP and WPA2-PSK with AES. *WPA2-PSK with AES is recommended.*

What does PCI Compliance mean?

PCI stands for Payment Card Industry. All merchants are required to adhere to these specific cardholder data security standards. When you process over the Internet, particularly in a wireless environment, you are required to remain in PCI-DSS compliance to protect your network and payment data to protect your customer's card data.

What is a Security Key?

The Security Key of your router is a pass phrase, usually up to 63 alphanumeric case sensitive characters, which are used to provide a password that allows the Wi-Fi device to connect to that router. **NOTE:** The terminal will support alphanumeric characters, capital and lower case letters, and some special characters. The "_" underscore character is not supported.

What is the difference between "Dynamic" and "Static" IP?

A static IP is one that will never change. A dynamic IP could change frequently, or not change for more than 1 year, depending on how the DHCP server (that assigns the IPs) is set up.

What are the common errors and what do they mean? Please contact the First Data Canada HelpDesk at 1-888-263-1938 for more details if these errors appear.

TCP Error 1001	Your terminal may need to be provisioned on our host, or there may be an issue with the IP-enablement.
TCP Error 1009	Your terminal is not able to connect to your WiFi or IP network and cannot communicate beyond itself. Our HelpDesk will be able to check your Communications Server parameters match your network parameters. We'll need your network administrator to verify if you are using Static IP or if you do not know your Wi-Fi Configuration settings.
TCP Error 1019	The terminal is not able to connect. Please refer to the <i>IP Quick Setup Guide</i> that came with your terminal to attempt to repair your connection. If that fails, please contact our HelpDesk.

Questions regarding Dial		Answers	
1.	Do you have an analog phone jack available for your POS Device?	<input type="checkbox"/> Yes <input type="checkbox"/> No	You will need an analog telephone line. If you have digital lines or VOIP, your terminal will experience communication failures.
2.	Do you have rollover lines or use PABX / PBX? For example, you need to dial "9" to get an external line?	<input type="checkbox"/> Yes <input type="checkbox"/> No	If yes, what is the PABX or PBX code required? _____ The Host needs to be configured for all applicable prefixes that may be required when dialing out on your phone line.
3.	Are you using a splitter or sharing your terminal's phone line with other devices?	<input type="checkbox"/> Yes <input type="checkbox"/> No	Splitters are not recommended. The more devices you are sharing, the more often the terminal will experience communication errors. If yes, how many devices are you sharing this line with? _____
4.	Do you have voicemail or other alerts on this line?	<input type="checkbox"/> Yes <input type="checkbox"/> No	Voicemail alerts commonly used by phone carriers often change the tone or cause it to beep. You need to disable the voicemail alert on the terminal line.

Questions regarding IP		Answers	
1.	How do you connect to the Internet?	<input type="checkbox"/> Wired <input type="checkbox"/> Satellite	Satellite Internet connections are not recommended due to high instances of slow communication and bad weather downtime. We recommend <i>Analog Dial Backup</i> at the terminal for Satellite internet users.
2.	Does your IP Router support dynamic IP or static IP addresses?	<input type="checkbox"/> Dynamic <input type="checkbox"/> Static	Static IP installations require manual updating anytime the terminal is replaced or the memory is wiped.
3.	If you are using Static IP, what is/are the IP address(es) being used?	My Static IP Address is: _____ The format would be <i>NN.NN.NN.NN</i> . You will need to use a unique IP address for each terminal that is installed.	
4.	If you are using Static IP, what is the MASK address that will be used?	My MASK IP Address is: _____ The format would be <i>NNN.NNN.NNN.NNN</i>	
5.	If you are using Static IP, what is the GATEWAY address that will be used?	My GATEWAY IP Address is: _____ The format would be <i>NN.NN.NN.NN</i>	
6.	If you are using Static IP, what is the DNS1 address that will be used?	My DNS1 address is: _____ The format would be <i>NN.NNN.NN.NN</i>	
7.	If you are using Static IP, what is the DNS2 address that will be used?	My DNS2 address is: _____ The format would be <i>NN.NNN.NN.NN</i>	

Questions regarding IP (continued)		Answers	
8.	Are ports 19000-19999 open for out-bound communication?	<input type="checkbox"/> Yes <input type="checkbox"/> No	Ports 19000-19999 must be open for outbound communication in order for the device to process transactions.
9.	Is port 443 open for outbound communication?	<input type="checkbox"/> Yes <input type="checkbox"/> No	Port 443 must be open to perform application downloads for all devices. Port 443 must also be open for the VX 820 and VX 680 devices to process transactions.
10.	Does your router have its firewalls turned on?	<input type="checkbox"/> Yes <input type="checkbox"/> No	Firewalls may block communications. Firewalls should be located on devices rather than on the router as the router can prevent the terminal from connecting due to firewall restriction.

Questions regarding WiFi		Answers	
1.	Did you setup your own WiFi router?	<input type="checkbox"/> Yes <input type="checkbox"/> No	If you did not setup your WiFi Router , you will need assistance from the person who installed your router during the WiFi terminal installation. First Data strongly recommends using the WiFi in a Box solution to avoid configuration and support issues.
2.	If you do not already have a WiFi router setup, who will set it up for you?	My contact is: _____ You will need your WiFi router installed and operational prior to installing your terminal.	
3.	Do you know how to get the router's configuration page on your PC?	<input type="checkbox"/> Yes <input type="checkbox"/> No	If you do not know how to get to your router's configuration page , you will need to contact your network administrator or refer to your router installation guide.
4.	What is your SSID for your secure wireless network?	<input type="checkbox"/> Yes <input type="checkbox"/> No	My SSID is: _____ If you do not know your SSID, you will need to contact your network administrator or refer to your router's installation guide.

Questions regarding WiFi (continued)		Answers	
5.	Is your cipher type or encryption mode set to TKIP or AES?	<input type="checkbox"/> Yes <input type="checkbox"/> No	The Vx670 terminal only supports TKIP. The VX 680 terminal supports both TKIP and AES.
6.	What is your security key or "pass phrase"?	<input type="checkbox"/> Yes <input type="checkbox"/> No	My security key is: _____ You should change your Security Key (pass phrase) periodically for security purposes. Refer to the <i>WiFi Installation Guide</i> that came with your terminal for directions on configuring the WiFi changes.
7.	Do you use MAC Filtering or restrict any Ports, Firewall protect, or use Static IP	<input type="checkbox"/> Yes <input type="checkbox"/> No	MAC Filtering can prevent the terminal from connecting. If you use Static IP, see the <i>Static IP section</i> above. Firewalls should be located on devices rather than on the router as the router can prevent the terminal from connecting due to firewall restrictions.
8.	Do you use WPA-PSK (aka WPA-Personal) or WPA2-PSK (aka WPA- Personal2) protocol to secure your network?	<input type="checkbox"/> Yes <input type="checkbox"/> No	WPA-PSK protocol is required to comply with PCI compliance regulations. IMPORTANT: The Vx670 terminal only supports WPA-PSK. The VX 680 terminal supports both WPA-PSK and WPA2-PSK.

First Data strongly recommends use of the WiFi in a Box solution to avoid configuration and support issues. For more information, contact the First Data Customer Service Help Desk at 1-888-263-1938.

IMPORTANT: If you have a restricted network, below are the URLs that your terminal will be using to connect to our hosts. You will need to update your firewall if migrating from a Vx810/670/K23 terminal to a VX820 or VX680 terminal **as the ports used for transaction processing have changed for the VX820 or VX680 terminals.**

VX810 and VX670 Terminals	Port	URLs
HOST TRANSACTIONS: Credit, Debit and Valuelink	19000-19999	vxn.datawire.net, vxn1.datawire.net, vxn2.datawire.net, vxn3.datawire.net, vxn4.datawire.net, support.datawire.net
Payment Application Downloads	443	vcprod.firstdata.com
GIVEX Transaction Processing	50019	dc-ca1.givex.com and dc-ca2.givex.com *GIVEX performs the merchant configuration of the Givex application.*
GIVEX Application Downloads	58013	149.99.39.157
Valuelink Application Downloads	8013	Tdl.tasq.com
VX820 and VX680 Terminals	Port	URLs
HOST TRANSACTIONS: Credit, Debit and Valuelink	443	vxn.datawire.net, vxn1.datawire.net, vxn2.datawire.net, vxn3.datawire.net, vxn4.datawire.net, support.datawire.net
Payment Application Downloads	443	vcprod.firstdata.com
GIVEX Transaction Processing	50019	dc-ca1.givex.com and dc-ca2.givex.com *GIVEX performs the merchant configuration of the Givex application
GIVEX Application Downloads	58013	149.99.39.157
Valuelink Application Downloads	8013	Tdl.tasq.com