

Connecting a payment terminal with WLAN

Checklist

Have you ensured that you're ready to install your terminal? Please note the following points from this checklist.

To use the wireless Local Area Network (WLAN), you need Internet access as described in the separate "Connecting a terminal to a broadband Internet" leaflet. You should have your network infrastructure tested and, if necessary, installed by a specialist.

Introduction

This document gives you an introduction to the configuration of the WLAN connection between the payment terminal and the WLAN access point at the terminal location. In addition, a list is provided showing which settings are possible and which are obligatory from the terminal point of view.

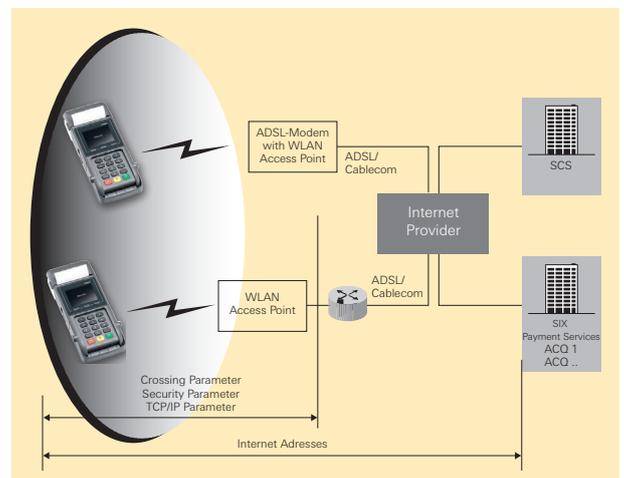
SIX Payment Services recommends you use a dedicated WLAN network with a separate access point for the WLAN-capable payment terminal. An encrypted network is required to use the payment terminal with WLAN.

General Wlan Characteristics

- Wireless Local Area Network is the name given to a local, radio-based network (generally involving a standard from the IEEE 802.11 family).
- The typical WLAN environment is a point-to-multi-point system in which one access point communicates with several devices.
- The typical wireless coverage stretches over a radius of 30 m. The location of the access point should be selected so as to cover the largest possible area. Walls, metal objects and other obstructions can cut down considerably the maximum coverage.

Further Notes

- The terminal's use can be expanded employing additional access points. If you have any questions, you should contact your network manager.
- You should keep the chosen network name (SSID) and the password in a secure place and ensure that this data is to hand in the event of a fault.



Programming the access point/access router (AP/AR)

Add your personal access data on this page so that they are to hand at all times:

- 1 Wireless standard 802.11b/802.11g/802.11n _____
The following standards are supported:
yoximo: 802.11b/802.11g/802.11n
xentissimo: 802.11b/802.11g
xenta: 802.11b
- 2 Defining the network name (SSID)* _____
 A maximum of 32 characters can be entered.
- 3 Radio channels 1 to 11 _____
 The terminal supports the channels 1 to 11. **Please ensure these settings are made on the router.**
- 4 Defining the encryption type _____
 The terminal currently supports the WEP, WPA and WPA2 encryption types.
"No encryption" is not possible.
- 5 Defining the password _____
 The terminal currently supports the following minimum/maximum password lengths:

Password lengths

		ASC II	HEX
WEP	64 Bit	5**	64
	128 Bit	13**	64
WPA/WPA2	Minimum	8	64
	Maximum	63	64

* Input of alphanumeric values: see next page.

** The number characters given must be entered.

Password											

- 6 The DNS servers must (generally on the access point) be specified. The terminal must be able to resolve the DNS addresses. You should ensure that the DNS servers are correctly configured in the access point. Whenever possible, enter the DNS server information when configuring your broadband router. Your Internet provider can assist you if necessary.
 Example: Swisscom DNS1: 195.186.1.111 DNS2: 195.186.4.111
- 7 With some routers, it is possible to terminate the dedicated line when not in use ("Connect on Demand"). We recommend that you always keep the connection "active".

Important: Please note that some access points have to be restarted after programming before they apply the adjusted configuration.

Enter the network name (SSID) and password

Use the network name (SSID), the encryption type and the WLAN password provided to you by your internet provider or IT technician. Please be careful with your use of upper and lower case letters; these fields are case-sensitive.

yoximo

1. Several letters and the stated digit are assigned to each button on the number pad. You can access the individual characters by pressing the relevant key several times in quick succession. Use the <MENU> button to switch between upper and lower case letters and digits. You can select special characters via the <1> key.
2. Use function keys 1 and 3 to move the cursor left and right in the entry field.
3. Confirm your entry using the <OK> button, You can delete your last entry with the <CORR> button.



xenta/xentissimo

1. Use the <MENU> button to switch between upper and lower case letters, digits and special characters.
2. Use function keys 1 and 3 to select the character required, and confirm with function key 2.
3. Confirm your entry using the <OK> button, You can delete your last entry with the <CORR> button.



WLAN connection

After confirming the WLAN data, a configuration slip will be printed. Keep this for any subsequent reactivation. The payment terminal establishes an internet connection and shows the IP address of the server of SIX as soon as it is connected. If the payment terminal displays "Connection not ready", please contact our hotline.

**If you have any questions about installing a WLAN, the specialists will be pleased to help you:
+41 58 399 6751**

Glossary

Access point	An access point is a device used to connect devices to a network.
AES	The Advanced Encryption Standard (AES) is a symmetric encryption method.
DHCP	The Dynamic Host Configuration Protocol (DHCP) allows an IP address to be assigned automatically.
DNS	Translates domain names into IP addresses.
HEX	The hexadecimal system uses numbers from 0 to 9 and letters from A to F.
IEEE 802.11i	The IEEE 802.11i standard, also known as WPA2, is a security protocol for wireless LANs that was ratified in June 2004.
SSID	The Service Set Identifier (SSID), or network name, defines a wireless network based on IEEE 802.11. Each wireless LAN possesses a configurable SSID or ESSID (Extended Service Set Identifier) enabling the wireless network to be clearly identified. Thus it represents the name of the network.
TCP/IP	TCP/IP (Transmission Control Protocol /Internet Protocol) is a network protocol; because of its importance for the internet, it is often simply termed "internet protocol".
TKIP	The Temporal Key Integrity Protocol (TKIP) is part of the IEEE 802.11i standard used to encrypt data in wireless LANs.
WEP	Wired Equivalent Privacy (WEP) is the old standard encryption algorithm for WLAN. It is intended to both govern access to the network and secure the confidentiality and integrity of the data. Considered insecure due to various weaknesses, the procedure can encrypt in a few seconds following the recording of adequate quantities of data (which happens in a few minutes). Consequently current WLAN installations should use the more secure WPA encryption method.
WLAN	Wireless Local Area Network (WLAN) describes a local radio network, generally involving a standard from the IEEE 802.11 family.
WPA	Wi-Fi Protected Access (WPA) is an encryption method in the WLAN world, contains the WEP architecture, but supplies additional protection thanks to dynamic keys based on the TKIP.
WPA2	As the IEEE 802.11i standard, which is based on the AES encryption algorithm, has been refined, efforts have also been undertaken to integrate AES in WPA. This gave rise to the WPA2 standard.

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