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YSQ Xerox Network Card Reader v1.3

Installation and Usage Guide

Version 0.1

Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Caution: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

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1 INTRODUCTION

This document provides essential information on installation, configuration and usage of YSQ Xerox Network Card Readers for SXTE for 1.3 HW. It is realized in form of an external hardware device. YSQ Xerox Network Card Reader has no display available; therefore user interaction is limited.

Compatibility with following YSoft SafeQ editions is guaranteed:

- YSQ Device Server 1.33

2 OVERVIEW

The key function of the YSQ Xerox Network Card Reader for SXTE is to handle user authentication and authorization to the device.

User authentication is possible with card.

The YSQ Xerox Network Card Reader is displayed on the Picture 1.

Picture 1 - YSQ Xerox Network Card Reader v1.3

The YSQ Xerox Network Card Reader is equipped with a 2-ports network switch and so it is not necessary to provide another Ethernet socket for connection - the copier or printer can be connected via the terminal. It features a microcomputer, flash ROM, network interface and a card reader.

Terminal is powered by external power supply that is also included in installation package.

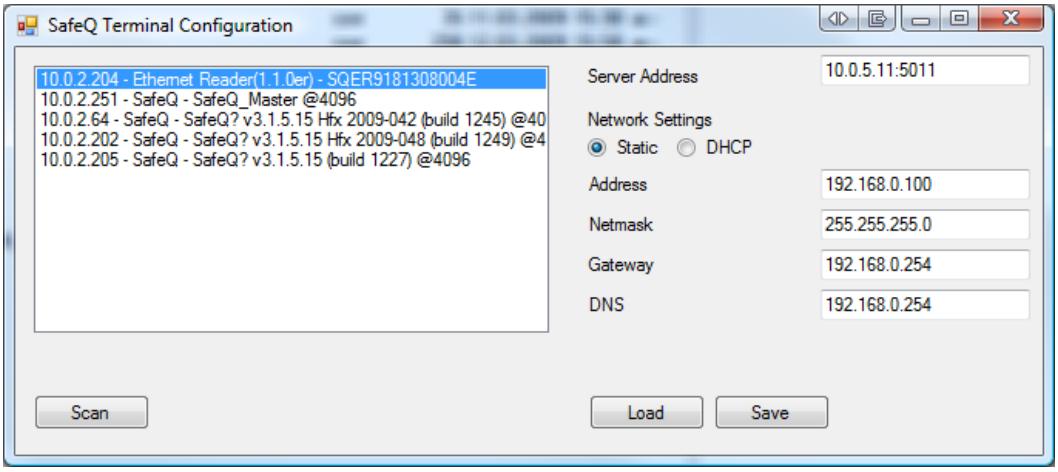
Picture 2 - Interface of YSQ Xerox Network Card Reader

The emergency button is used for reset the terminal into default settings.

3 XEROX NETWORK CARD READER CONFIGURATION

YSQ Xerox Network Card Reader requires TCP/IP connection to the YSoft SafeQ server. Terminal has own IP and MAC address.

There is special tool for configuration of YSQ Xerox Network Card Reader – SafeQ Terminal Configuration utils – see Picture 3.



Picture 3 - SafeQ Terminal Configuration util

When you start this tool and press on **Scan** button, the tool discovers all the terminals in the same network (independently on the network settings. You can change settings for the particular terminal in the list and using **Save** button the configuration is applied. Upon successful configuration change the terminal will be rebooted.

There is a default network configuration used for YSQ Xerox Network Card Reader:

- DHCP=0
- IP=192.168.0.100
- NETMASK=255.255.255.0
- GATEWAY=192.168.0.254
- DNS=192.168.0.254
- SERVERIP=192.168.0.254:5011
- UPDSERVER=192.168.0.254:4096

Emergency button is the way how to reset the network reader into default settings if anything goes wrong with the configuration. Also it is possible to do some other actions such as force firmware update.

The correct procedure of using the emergency button is the following:

- Unplug the network reader power cable
- Use a paper clip or a tiny screwdriver to push the emergency button. Hold the button pressed.
- Plug the network reader power back.

- The network reader now starts with short series of beeps with a longer pause between them. The action is selected by releasing the button in the pause. Once the beep count reaches selectable maximum it starts over again from 1. To cancel any selection unplug the power cable and release the button.
- 1 beep - do a set default configuration
- 2 beeps - do the firmware emergency update
- 3 beeps - do the normal firmware update
- 4 beeps - do the emergency reload - reset configuration to default and start emergency update
- After the action is selected it is processed and the network reader is rebooted after that

It is possible to enter emergency button menu by holding the button for more than 5 seconds when Terminal Ultralight firmware has booted and the terminal is in default "Place card" state.

Every single YSQ Xerox Network Card Reader contains unique serial number that must be registered in the YSoft SafeQ.

3.1 SERVICE FIRMWARE

Service firmware is the most important part of the network reader firmware. Right after powerup it will check the emergency button if any action is required. Then it will check the normal firmware for integrity. If the normal firmware is not valid then the emergency firmware will connect to server in emergency mode and download the firmware. If the normal firmware integrity is ok, then it is started.

3.2 NETWORK READER FIRMWARE

Network reader firmware is the main part of the firmware. It initializes network, autodetects readers and sends the cardnumber to the server when card is placed. By default the firmware starts UDP locator server which will help detecting available readers on the local network. Also the TCP configuration server is started.

4 XEROX NETWORK CARD READER BEEP CODE SEQUENCES

This chapter provides list of beep code sequences as well as their meanings.

In the following text, the „-“ denotes long beep and „.“ denotes short beep.

--- Connection to server failed.

...- Hardware configuration damaged, cannot continue in booting.

-..- Maximum number of update attempts reached but no valid firmware detected.

.-.- Update of firmware failed.

--.- Software configuration cannot be saved. Probably faulty onboard eeprom.

-.-- Maximum number of update attempts reached, resuming normal boot.

.--- Firmware damaged.

---- Network init failed.

.-- or **-...** No reader connected and reader required for correct functionality.

.-.. Update of firmware failed. Error in server response, SafeQ server is probably not configured correctly.

--.. Update of firmware failed. Cannot connect to SafeQ server.

5 RELATIONSHIP WITH OTHER DOCUMENTS

This section describes how this guide is related to other documentation:

Nr.	Document	Version	Author
1.			
2.			
3.			
4.			
5.			
6.			
7.			

6 VERSION HISTORY

Document author/owner: YSoft s.r.o.

Version	Date	Change	Status	Author
0.1	06/2009r	Initial version	Draft	PNE