YSOFT SAFEQ®

making the MFDs think™

Network Card Reader

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1 FCC STATEMENTS

§ 15.21 Information to user

The user's manual or instruction manual for an intentional or unintentional radiator shall caution the user that changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. In cases where the manual is provided only in a form other than paper, such as on a computer disk or over the Internet, the information required by this section may be included in the manual in that alternative form, provided the user can reasonably be expected to have the capability to access information in that form.

§ 15.105 Information to the user

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.

2 NETWORK CARD READER OVERVIEW

The YSoft SafeQ ® Ethernet Reader is based on YSoft SafeQ® Terminal UltraLight. YSoft SafeQ® Ethernet Reader provides compact, fast and simple user interface for authorization to printer. It has no display available; therefore user interaction is limited to status leds. User authentication (on Ethernet Reader) is possible only with card.

There are two types of Network Card Reader:

- with embedded card reader (on the left)
- with external card reader connected with RS-232 cable connected to serial port in Network Card Reader (on the right)

💡 **NOTE:** Following documentation is related to both types of Network Card Readers, therefore you might encounter minor differences when using Network Card reader with external card reader.

2.1 SYSTEM OVERVIEW

The purpose of Ethernet Reader is to handle user authentication and authorization to the device using card.
User can use also the PIN authorization (using the MFD integrated panel).

Only selected card readers are supported by Ethernet Reader.
The Ethernet 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.

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

2.2 ETHERNET READER SPECIFICATION

Parameter	Value
Identification	Using a card reader
Network	2-port 10/100 Mbit switch (auto MDI/MDIX)
Processor	Freescale Coldfire v2
Memory	64kB RAM, 512kB Flash
Electric power supply input	12V DC
Maximum current input	1.0A
Working temperature	+5°C to +35°C
Storage temperature	0°C to +50°C
Working air humidity	20% to 85% without condensation
Storage air humidity	8% to 85% without condensation
Resistance to magnetic field	no added resistance

3 TERMINAL'S CONFIGURATION

Ethernet Reader requires TCP/IP connection to the YSoft SafeQ server. Ethernet Reader has own IP and MAC address.

For the proper network configuration you can use:

- SafeQ Terminal Configuration utility (terminal config) or
- Configuration utility for hardware terminals (termtool)

There is a default network configuration used for Ethernet 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
- SERVERUPD=192.168.0.254:4096

The SERVERIP corresponds to the IP address and port of the YSoft SafeQ® Terminal Server. The IP and port are used for card authentication.

The SERVERUDP corresponds to the SafeQ server and serves for firmware updates.

4 SAFEQ SERVER CONFIGURATION

After the Ethernet Reader is properly configured, it must be connected to the YSoft SafeQ®.
Assume that the YSoft SafeQ® server and YSoft SafeQ® Terminal Server are already installed and running.

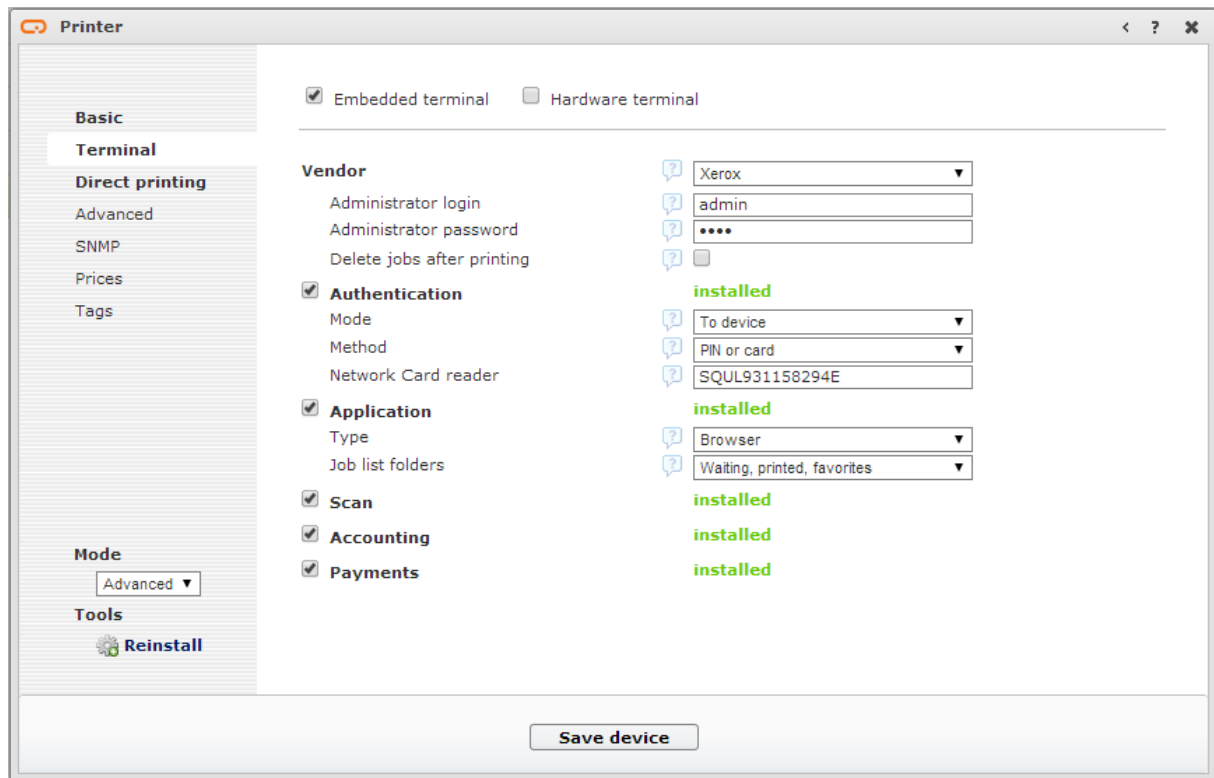| 1	Log in to the SafeQ Web administration with sufficient rights to manage devices.
2	Go to **Devices > Printers** selection and click the **edit icon** next to the device or **double click** on the device.
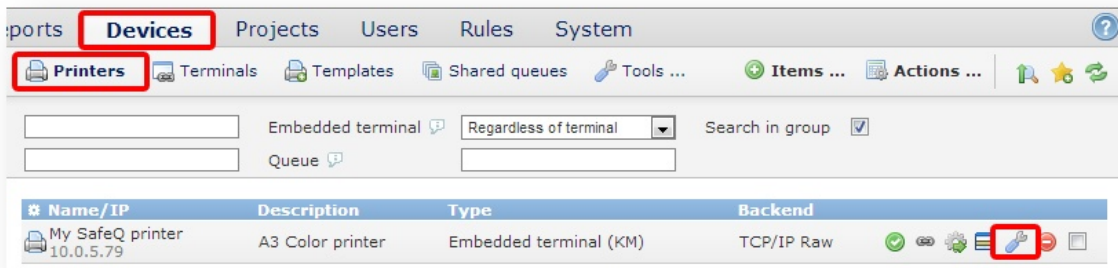
3 Go to **Terminal** tab and insert **Network Card reader** serial number. This serial number equals to serial number written in SafeQ Terminal Configuration util (first column).

Then press **Reinstall** button to apply new settings.

💡 **NOTE:** If you want to add Network Card reader serial number, one of the authentication method with card must be selected.

4 Since the installation is successfully finished, the Ethernet reader is successfully configured.

5   ETHERNET READER SERVICE PROCEDURES

5.1   SERVICE PROCEDURES

For more info about all service procedures, please visit: Performing service procedures of Terminal UltraLight and Network Card Reader

5.2   SERVICE FIRMWARE

Service firmware is the most important part of the reader firmware. Right after power-up 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.

5.3   READER FIRMWARE

Ethernet Reader firmware is the main part of the firmware. It initializes network, autodetects readers and sends the card number 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.