



making the MFDs think™

YSoft SafeQ® Client for Linux

Installation and usage Guide

Version 1.4

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1 INTRODUCTION

1.1 PURPOSE OF DOCUMENT

This documentation provides essential information on installation and usage of YSoft SafeQ® Client for linux platform.

1.2 GOALS AND OBJECTIVES

YSoft SafeQ® Client for Linux is a CUPS extension designed to take advantage of advanced SafeQ print features and provide further benefits to using SafeQ Server print and accounting system. Its purpose is to submit your print jobs to the SafeQ Server (CUPS backend), while collecting further information provided by operating system or user input upon print. Linux version of SafeQ Client supports at the moment only authentication mode=4

- **Advanced authentication:** Login and password dialog box

1.3 COMPATIBILITY AND SYSTEM REQUIREMENTS

Compatibility with following **YSoft SafeQ** editions is guaranteed:

- YSoft SafeQ PCAS 3.1.5.15 and newer
- YSoft SafeQ PCAS 3.5 Instant Edition

System Requirements for YSoft SafeQ® Client for Linux:

- Linux with gtk2.0, dbus, CUPS, Xwindows
- Python 2.5
 - python2.5 package
 - python2.5-minimal package
 - python-dbus package
 - python-gobject package
 - python-gtk2 package

1.4 TERMS AND ABBREVIATIONS

MFD

Multi-Functional Device

Client for Linux

YSoft SafeQ® Client for Linux

2 INSTALLATION

YSoft SafeQ Client for Linux comes as an all-in-one installation script archive – e.g. *sqclient_linux-1.0.tar*. The installation script checks for the necessary requirements without which it will refuse to install.

Installation files location:

- <SafeQ install CD>\ISUPPORT\SafeQ Client or
- partners' portal

2.1 INSTALLATION PROCEDURE

1. become root
2. unpack installation archive *sqclient_linux-1.0.tar* to obtain *install.sh*: `tar -xf sqclient_linux-1.0.tar`
3. make the *install.sh* executable: `chmod +x install.sh`
4. Install the client: `./install.sh`

```

Desktop: install.sh
File Edit View Scrollback Bookmarks Settings Help
Before installation you have to agree the license terms

STANDARD LICENSE TERMS AND CONDITIONS
YSOFT, s.r.o.

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--More--
Desktop: install.sh
    
```

Illustration 1 – Standard license terms and conditions

5. read the license and if you agree with it, reply yes to license agreement (see Illustration 2)

```

Desktop: install.sh
File Edit View Scrollback Bookmarks Settings Help

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Y Soft, s.r.o.

Effective date of this version of the License terms and conditions: 1st July 2006
Issue date of this version of the License terms and conditions: 1st July 2006

Do you agree [y/n]?
y
    
```

Illustration 2 - Accept license agreement

6. watch the installation process (see Illustration 3):
7. perform configuration as directed by the installer script (see section 2.3 for the details):

```

Desktop: install.sh
File Edit View Scrollback Bookmarks Settings Help

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Do you agree [y/n]?
y
OK, lets continue.
Checking for required python modules.
Checking for... string ... OK
Checking for... gtk ... OK
Checking for... gobject ... OK
Checking for... dbus ... OK
Checking for... os ... OK
Checking for... socket ... OK
Checking for... configparser ... OK
All required python packages ok
Unpacking files
Installation done
-----
CONFIGURATION:
Don't forget to set up SafeQ Client configuration file: /etc/sqclient.conf

Printer which have to use SafeQ Client must have destination URL:
sqport://server_ip/printer_queue

LOGS:
There are two log files, one for backend and one for gui.
To get backend logs just simply create file /var/log/cups/sqclient_backend.log
(this is defaultly created for you)
Gui logs are configured via main configuration file.

FIRST TO DO:
To get SafeQ port functional you have to reboot your machine
(or reload Dbus service, and restart X session)
-----
(C) Ysoft Ltd, 2008

Reload service D-Bus daemonShutting down D-Bus daemon           done
Starting D-Bus daemon                                           done
Linux-2d5h:~/Desktop #
    
```

Illustration 3 - Installation in progress

CONFIGURATION:

Don't forget to set up SafeQ Client configuration file: **/etc/sqclient.conf**

Printer which have to use SafeQ Client must have destination URL:

sqport://server_ip/printer_queue

LOGS:

There are two log files, one for backend and one for gui.

To get backend logs just simply create file

/var/log/cups/sqclient_backend.log

(this is defaultly created for you)

Gui logs are configured via main configuration file.

FIRST TO DO:

To get SafeQ port functional you have to reboot your machine (or reload Dbus service, and restart X session)

2.2 INSTALLED FILES

As described above, SafeQ Client for Linux consists of two main parts and configuration files that work together.

- **CUPS backend (SafeQ Port)**
 - o /usr/lib/cups/backend/sqport
 - o /usr/lib/cups/backend/sqport.pyc
 - o /var/log/cups/sqclient_backend.log
 - o /etc/logrotate.d/sqport

- **SafeQ Client (SafeQ Port GUI) - X server application**
 - o /usr/local/bin/sqport_gui
 - o /usr/local/bin/sqport_gui.pyc
 - o /usr/share/applications/sqport.desktop
 - o /usr/share/autostart/sqport.desktop
 - o /etc/xdg/autostart/sqport.desktop
 - o /usr/local/share/pixmaps/sqport/ysoft_logo.png
 - o /usr/local/share/pixmaps/sqport/ysoft_logo.ico
 - o /usr/local/share/pixmaps/sqport/ysoft_logo.gif
 - o ~/.sqclient/sqclient.log

- **main configuration files**
 - o /etc/sqclient.conf
 - o /etc/dbus-1/system.d/sqport.conf

2.3 POST INSTALLATION INSTRUCTION

a) Edit and configure `/etc/sqclient.conf` file for correct SafeQ Client operation:

```
#####
# This is main SafeQ Client for linux configuration file
# Example - Description
#####
# ServerIP = 10.0.0.1 - IP address of SafeQ server
# ServerPort = 4097 - Port number of SafeQ server
# Retry = 5 - How many times ask user
# Logs = 1 - 0=do not log activity 1=log activity
# Log_file = ~/.sqclient/sqclient.log - File where to store logs - YOU MUST CREATE IT BEFORE
ENABLING LOGGING
#
# To enable backend log just simply create file /var/log/cups/sqclient_backend.log
#####

[Main]
ServerIP = 10.0.0.1
ServerPort = 4097
Retry = 5
Logs = 0
Log_file = ~/.sqclient/sqclient.log
```

ServerIP =	IP address of the SafeQ Server, on which the SafeQ Secure Port (TCP 4097) has been enabled (on the web interface in System Settings -> System Settings -> Print System Settings -> SafeQ Secure Port ---> Yes)
ServerPort = 4097	default value; modify only if you changed this port on your SafeQ Server
Retry =	number of retries for authentication before giving up
Logs =	like described above – logging enabled (1) or disabled (0)
Log file =	location of the log file (if Logs = 1). Create an empty file before turning on logging to enable log writing. The GUI part runs under logged on user account, so this account has to have write privileges to that location.

b) Restart your computer (OS) for new SafeQ Client to start up or reload the DBUS service and restart the X server.

c) Configure the printers to use SafeQ Client CUPS backend (SQ Port)

Set up a printer queue in the CUPS web interface (the address is usually <http://localhost:631>) or modify an existing one (Modify Printer button) to set the backend URI (Device URI) in this format:

sqport://IP_of_SafeQ_Server/queue_name

e.g. `sqport://10.0.0.1/secure`

where “sqport” indicates that the SafeQ Client CUPS backend will be used for delivering the print job. sqport basically encapsulates the LPD protocol (adding SafeQ authentication), so the rest of the URI scheme is the same as in case of lpd://

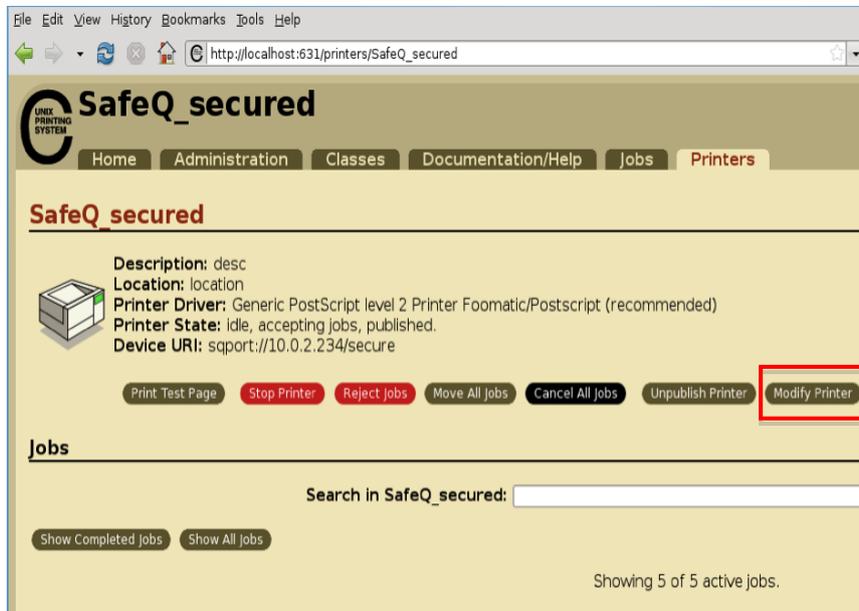


Illustration 4 - Modify Printer

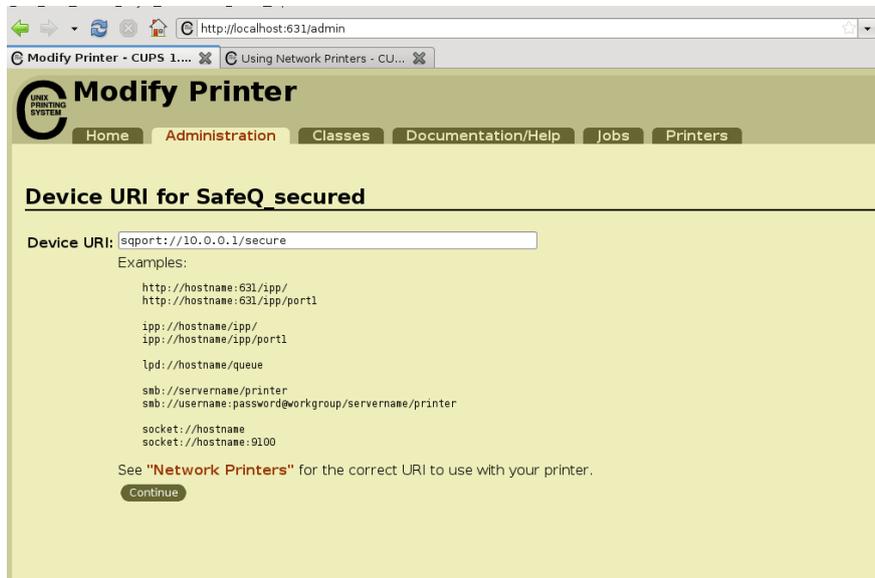


Illustration 5 – Device URI for SafeQ secured

3 SAFEQ CLIENT USAGE

To print using SafeQ Client just hit File -> Print or anything similar to produce a print job (see Illustration 6):

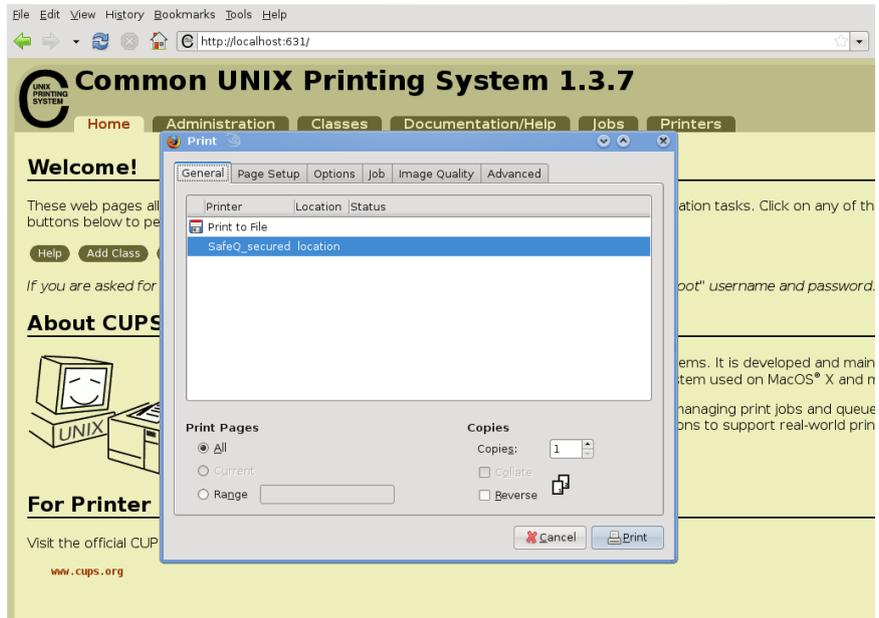


Illustration 6 - Printing

Note that the authentication dialog would pop-up in your X session (see Illustration 7):

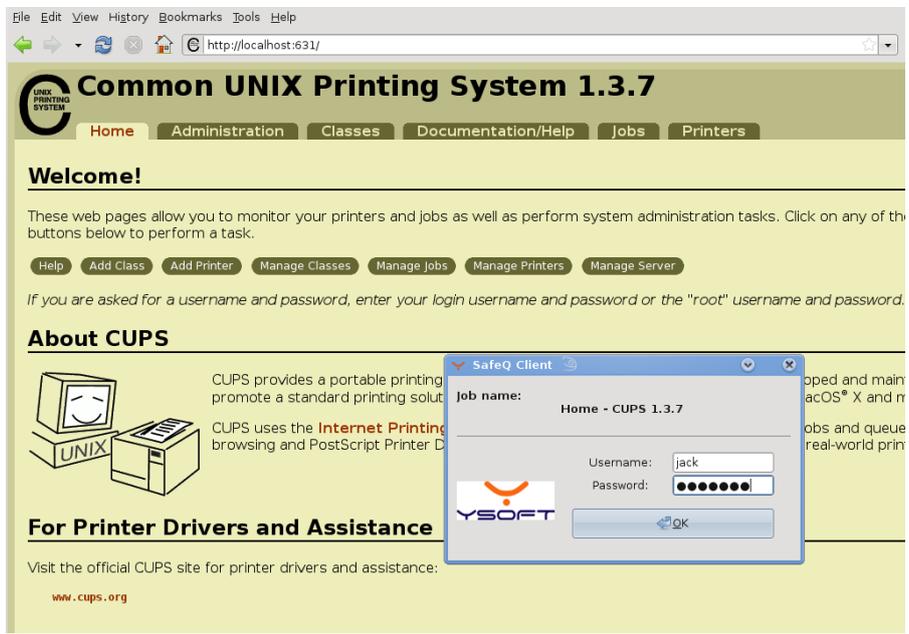


Illustration 7 - Authentication dialog

Only after successful authentication the print job is delivered to the SafeQ Server, under the credentials of the authenticated user (see Illustration 8):

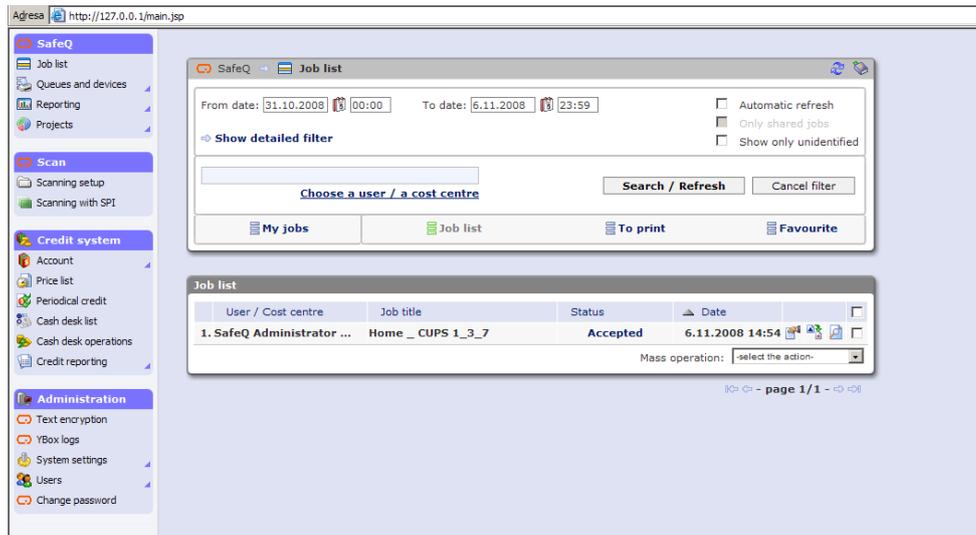


Illustration 8 - The print job is successfully delivered to the SafeQ Server

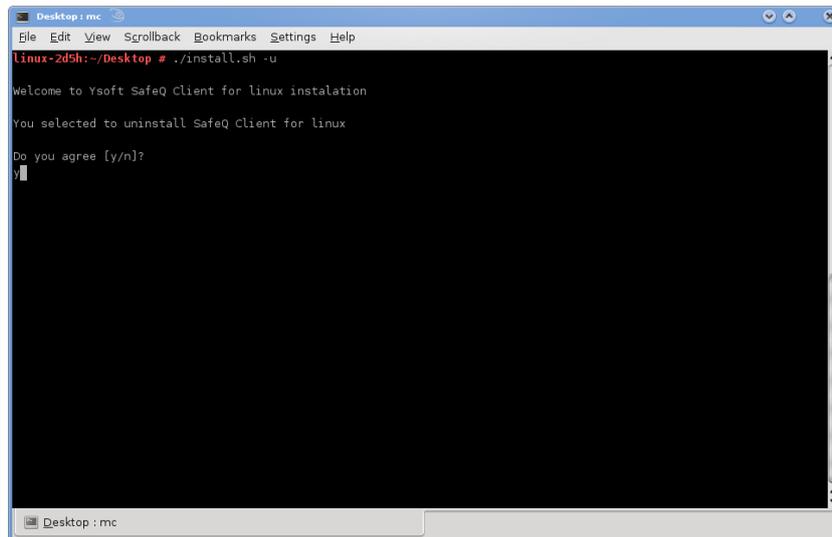
If the authentication is not successful, the print job does not leave CUPS (“backend failure”). The print job stays in the CUPS printer queue in cancelled state, for user to decide on the fate of this print job (i.e. restart, delete, etc).

4 SAFEQ CLIENT UNINSTALL

Uninstall of SafeQ Client is performed by the same installer file, but executed with an “uninstall” parameter.

You need **root privileges**, then execute following command:

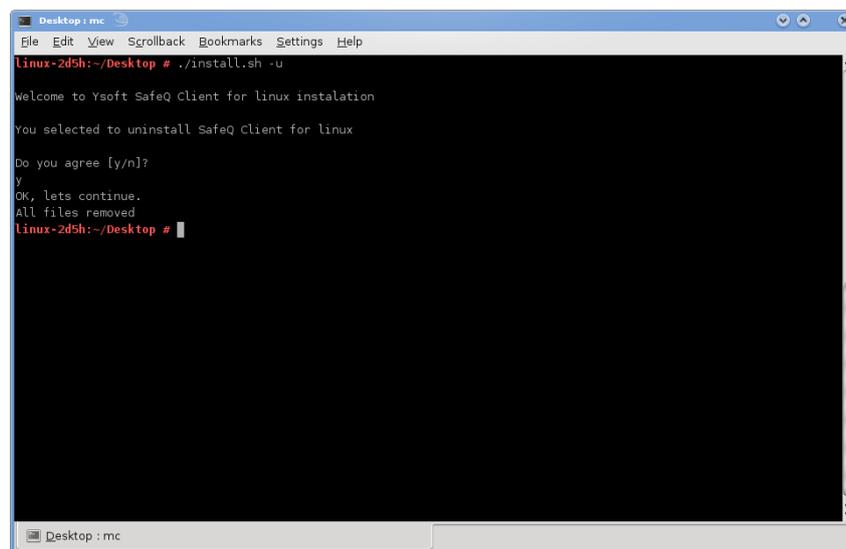
./install.sh -u or alternatively **./install.sh --uninstall**



```
Desktop : mc
File Edit View Scrollback Bookmarks Settings Help
Linux-2d5h:~/Desktop # ./install.sh -u
Welcome to Ysoft SafeQ Client for linux instalation
You selected to uninstall SafeQ Client for linux
Do you agree [y/n]?
y
```

Illustration 9 - SafeQ Client uninstall

After confirming by “y”, all files listed in section 2.2 are uninstalled (see Illustration 10).



```
Desktop : mc
File Edit View Scrollback Bookmarks Settings Help
Linux-2d5h:~/Desktop # ./install.sh -u
Welcome to Ysoft SafeQ Client for linux instalation
You selected to uninstall SafeQ Client for linux
Do you agree [y/n]?
y
OK, lets continue.
All files removed
Linux-2d5h:~/Desktop #
```

Illustration 10 - SafeQ Client is successfully uninstalled

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: Juraj Olejka <juraj.olejka@ysoft.com>

Version	Date	Change	Status	Author
1.0	11/2008	Initial version of document	Draft	JOL
1.2	11/2008	Document Update	Draft	PNE
1.2	11/2008	Update after Review	Draft	JMU
1.3	11/2008	Finalization	Accepted	PNE
1.4	10/2009	Compatibility and System Requirements added	Final	PNE