



OPERATOR MANUAL



mobile printing solution

Version 1.0

Stand Jul-16



This documentation refers to the development status of Jul-16. The texts and images were assembled with greatest care. Yet there can be minor discrepancies in program sequences or displayed texts that might occur as this product advances

We will appreciate suggestions for improvement or error reports.

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1 Introduction

Thank you for purchasing **MOPS** the mobile printing solution. **MOPS** is an advanced document management & accounting solution that allows users to print from their client PCs, Laptops, Smartphone, Tablets or via email in easy-to use and highly secure way.



Driver print

Users can print from within their applications on workstations as usual to the shared printers on MOPS-Server.

Web print

Users can upload documents to MOPS Server for printing via a web portal.

Email-print

Users can send documents to MOPS Server for printing by sending an email with the documents attached to one or multiple email address especially configured for that purpose. MOPS is periodically retrieving mails from these accounts processing them to the desired print queues.

Mobile print

Users can send documents to MOPS-Server from Smartphones or Tablets using the MOPS-App. MOPS-App is available for iOS and Android devices.

Depending on the configuration of the queue linked to the email account, print jobs sent to MOPS will be printed immediately (in case of a direct queue) or stored on MOPS Server until the job owner is authenticating himself at the printer (virtual queue). User Authentication can be performed by ID cards swiped to a NetCardReader (networked card reader) or the MOPS-App.



1.1 Symbols in this manual

In this manual, some important items are described with the symbols shown below. Be sure to read these items before changing any configuration.



Indicates information to which you should pay attention

Warning:

Indicates a situation where modification of the settings may have severe impact on correct operation.

2 Virtual and direct queues

MOPS is designed to manage, track and route print jobs from the users clients (PCs, mobile devices etc.) to a printer of your choice. Thanks to its advanced design, MOPS does not need to install any additional port or similar to take control of the Windows printing system / print queues. Therefore MOPS knows two different types of queues:

Direct queue

A **direct queue** is a shared Windows print queue for a dedicated printer. The print job is generated on the user client or sent by email / upload to the share hosted on the MOPS server. MOPS will process the documents to a print job and immediately release it to the printer.

Virtual queue

A virtual queue is a shared Windows print queue that is NOT linked to a physical printer. Print jobs that are sent to a virtual queue will be spooled on the MOPS server until they are requested for printout at any printer (**print2me**) or deleted (by user/admin intervention or due to a rule).

To actively release print jobs that are spooled on MOPS server a user authentication at the printer is required. **MOPS** offers two different ways of authentication:

Networked Card Readers

are used to offer print2me/PullPrinting capabilities for direct print queues. Therefore print jobs are held in MOPS virtual queues. To release all print jobs of a user he simply swipes his card at the reader associated with the printer. MOPS will automatically send all jobs of that user to the printer's queue.

MOPS-App / Print Release (iOS & Android)

Instead of a networked card reader spooled print jobs can be released using MOPS-APP (mobile print release app). Users authenticate themselves to the server via the app. After selecting the printer (via printer list or QR code scan) the job list is shown on the mobile device. Jobs can individually be requested for printout.



3 System Requirements

- Microsoft Windows (32 and 64-bit)
- Microsoft .NET 3.5 (or newer)
- Web browser supporting Java script recommended: Firefox, Chrome, IE10
- printers using PCL or Postscript printer drivers. GDL printers are not supported.
- 1 GB of Memory (2 or higher recommended)
- 500 MB of Hard Disk plus additional free space for logs and print spool files. Depending the average storing time, size and amount of spool files 100GB to 500GB are recommended.



4 Installing MOPS

Before installing MOPS make sure your server host is supported, operational and the event viewer does not show any critical errors.

MOPS can take control / accounting of all printers locally installed on your print server. So it is recommended to install and configure all printers and their appropriate drivers before installing MOPS.

4.1 Pull printing / print2me

In case you intend to setup a pull printing environment at least one central (virtual) queue is required, where the users are printing to and where the print jobs are spooled until they will be released 'on demand' by the print job owner.

This virtual queue is a standard Windows queue that will be 'converted' by MOPS. So it is recommended to add a new printer to your server that will be used as virtual queue by MOPS.



Attention:

Jobs kept in a virtual queue will be routed to different target queues/devices. So keep in mind to assign a compatible printer driver to this queue.

4.2 Installing the software

To install MOPS run the Setup.exe program and follow the instructions.

Make sure the maintenance of your system is matching the version you are installing / updating to. Click Next



To continue accept the terms of the license agreement and click Next.

2	MOPS Setup Wiza	rd - License	x			
	License Agreement Please review the license terr	is before installing MOPS.				
	END USER LICENSE	AGREEMENT	^			
This End-User License Agreement contract (the "Contract") is a legal contract, BETWEEN Control Systems GmbH & Co. KG, with its registered office at Robert-Bosch-Str. 9, 78048 Villagen- Schwemingen, Germany,						
You must accept the agree agreement and click Next	ement to instal MOPS. Rease click t to continue. the License Agreement	he check box below to accept t	he terms of			
MOPS v1.0.0 test		Next >	Cancel			



_ 🗆 🗙 MOPS Setup Wizard - Settings Accept or modify the ports required by Application Settings 111273 MOPS. Enter required application settings. Make sure the ports are available and Server IP address 192.168.1.225 ۷ not blocked by a firewall or other Operator password applications. Repeat password 11080 Web (http) Management port number (11080) All required ports will be opened in Windows firewall. < Back Next > Cancel MOPS v1.0.0 test _ 0 X MOPS Setup Wizard - Location Select the destination folder for your **Choose Install Location** MOPS installation. 111273 Choose the folder in which to instal MOPS. Click Install. Setup will instal MOPS in the following folder. To install in a different folder, click Browse and select another folder. Click Next to continue Destination Folder C:\Program Files\WOPS Srowse.... Space required: 148,20 MB Space available: 29,06 GB < Back Instal Cancel MOPS v1.0.0 test - 0 X Setup will now unpack the files to your 2 MOPS Setup Wizard - Install system and install and run the MOPS 11072 Installing services. Please wait while MOPS is being installed. Installation in progress... create start menu shortcut: MOPS Administration create start menu shortcut: MOPS Services create start meru shortcut: Uninstaler create desktop shortcut: Uninstaler save settings for server address: 192.168.1.225 save settings for http port: 11080 save settings for OpenPlatformPort port: 11081 start DataManager service installation: C:/Windows/Wicrosoft.NET/Framework/v4.0.30319/Installutil.exe *C:/Program Files/MOPS/bin DataManager.exe* < Back Cancel MOPS v1.0.0 test - - × MOPS Setup Wizard - Complete Done! You successfully installed MOPS on your server. Completing the MOPS Setup Wizard 111223 NOPS has been installed on your computer. Click Finish to close this wizard. Run MOPS Administration Click Finish to finalize the installation. Finish Cancel MOPS v1.0.0 test





5 1st start of MOPS management

You can run MOPS management from any client computer in your network. Enter the URL: <u>http://MOPS-Server-IP:11080</u>



Port 11080 is the default value for the application web server. It can be changed in the management general settings.

mobile printing solution	Version: 1.0.0 tes	t
	Benutzername: Operator	
	Anmelden	
		"

The default value for the operator password is ' ' [blank] .

It is strongly recommended to change/enter a secure password!

Change to -> SETTINGS -> General -> Application and click to the [change password] link.

MANAGEMENT Server Administrator user name: "Operator" [Change password] Departments Domains Application Language DEVICES Userportal Output for the part of the part o	W222				Logout
MANAGEMENT User list Server Administrator user name: "Operator" [Change password] Departments Domains Application Language English DEVICES Userportal Oucleus Userportal	mobile printing solution				Version: 1.0.0 test
NetCardReader Mobile print Custom formats PJL user name has priority Don't record document names Don't record user names	MANAGEMENT User list Departments Domains DEVICES Queues NetCardReader Mobile print REPORT Reports SETTINGS General Dashboard Schedules Reader profiles	Server Slication Userportal Custom formats SMTP / E-mail License information	Administrator user name: "Operator" Language Send notifications by e-mail P3L user name has priority Don't record document names Don't record user names Websession timeout Log level	[Change password] English • 30 minutes •	Version: 1.0.0 test



6 Configure TCPConv

MOPS supports PullPrinting by means of a networked card reader (NetCardReader).

A NetCardReader typically consist of a USB to Ethernet adapter (TCPConv) and a card reader supporting the specific card technology in use.

TPConv is a serial device server providing two Ethernet plugs connected to an internal TCP switch. This allows attaching a networked or USB reader to a printer or multifunctional even if only one Ethernet connection is available.



The device is transparent in regard of the communication to the printer. The card reader will keep it's own IP address and port.

The Configuration of TCPConf is performed with the **TCConfig tool** provided with the device server.

- to get the device server operational plug in the 5V power supply
- connect the network cable to the RJ connector
- Execute the Configuration tool (there is nothing to install)

Device Type Firmware MAC Address IP Address Name					
	MAL Address	IP Address	Name	Search	
V1.08	00-1E-C0-86-88-FB	192.168.1.145	DEFAULTNAME		
				Configuration	
				Update Firmware	
				Change Name/Password	
				Restart	
				Test Connection	
				RS232 Server USB Server	
				RS232 USB Client Client	
	V1.08	V1.08 00-1E-C0-86-88-FB	V1.08 00-1E-C0-86-88-FB 192.168.1.145	V1.08 00-1E-C0-86-88-FB 192.168.1.145 DEFAULTNAME	

- Click to "Search"
- Select the TCPConv device of your choice and click to "Configuration"
- Enter the login credentials.
 - Name: admin

Password: by default this is blank



• Enter the appropriate IP settings for that device.

Configuration		
Network RS23	2 USB	7
	5 - N	
	Device Name	
	Name: DEFAULTNAME	
1	IP Settings	
	Use DHCP	
	Address: 192 . 168 . 1 . 145	
	Network Mask: 255 . 255 . 255 . 0	
	Gateway: 192 . 168 . 1 . 254	
L		
-		
	OK Cancel	



Make sure to use a static IP. Don't use DHCP.

• Enter the USB settings.

Configuration	X
Network RS232 USB Communication Parameters	TCP Server
Baudrate: 9600 -	Local Port: 7778
Databits:	TCP Client
Parity:	192 . 168 . 1 . 5
Stopbits:	Remote Port: 11083
1 -	Connect, if data is available
	Connect on any character
USB Vendor ID:	Connect on char: Send connect char
(4 hex digits)	Disconnect on char: 3
USB Product ID: (4 hex digits)	Send disconnect char
	Disconnect timeout: 10 Seconds
	OK Cancel

Remote IP Address: make sure to enter the **MOPS Server IP-Address** here. By default port 11083 will be used.

- Click to OK to confirm the settings and to upload the configuration to the device server
- Click to "Restart". This will restart the device running the new configuration



7 MOPS reference

This chapter describes the sequence of menus, functions, parameters and it's dependencies.

7.1 MANAGEMENT

The user menu contains all data and settings related to users. The MOPS database can hold user data imported from the local domain (Active Directory) as well as 'internal' users (users that do not have an AD-account)

7.1.1 User list

The user list table shows all users (domain & internal) stored in the MOPS database.

		Logout
mobile printing solution		Version: 1.0.0 test
MANAGEMENT User list	ADD SELECT FILTER: OFF MANAGE MODIFY [2]	
Departments Domains	Q. Search user Dorothy Williams (dw)	≡[1]
DEVICES	Dorothy Williams	
Queues	Peter Clark Login name: dw	
NetCardReader	Password: set/modify]	
Mobile print	Card IDs: [+]	
REPORT		
Reports	Advanced Settings	
General	Email address: dw@domain.org \$	
Dashboard	[+] [-]	
Schedules	Department: Dept. B	
Reader profiles		
		1
	[«] [<] [>]	
	Page: 1 Y	
		-

The List shows the users Username and Login name.

[1] On the right you see the user details sections to modify the

- User's Authentication settings
- Card IDs
- Email address
- department

[2] Above the list you find the options to

- Add internal users
- Select users
- Setting filters for the user list
- Manage user accounts
- Modify user accounts



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7.1.1.1 ADD (internal user)

Click to Add to adding a new internal user. Login name, Username and password are mandatory.

If available, select a department the user is belonging to and enter his/her email address.

i

The user's email address is required for sending notifications to the user and to identify the user when sending documents via email.

		*
Anmeldename		
Anzeigename	*	
	(Vor- und Nachname)	
Passwort	*	
Passwort bestätigen	*	
Abteilung E-Mail Adresse	•	
[Abbrechen	hinzufügen	ī

7.1.1.2 SELECT (users)

Using this option will help you to select/unselect multiple users.

[1] checking [v] will move the user to the **selected** users box [2]

Clicking to x will unselect the user and remove him from the selected user box



7.1.1.3 FILTER

The filter option allows setting a filter to the list of users.

D SELECT	FILTER: ON	MANAGE MOD	DIFY	
Configure list filte	r		ж	1
Filter all users a	ccording the following cri	teria:		F
Login type	Internal users only	Domain	Ŧ	L
User status	•	Department	•	L
Card IDs	without Card IDs only	Accounting mode	¥	L
			[reset]	Þ
		[Cancel]	filter	¢

If a filter is active (set) this is indicated by a highlighted **FILTER:ON** in the function bar.



7.1.1.4 MANAGE

Use the manage function to disable/enable or delete a single or a number of selected users.

ADD	SELECT	FILT	TER: OFF	Disable selected users	
Q Se	sarch user	•	Selected us	Enable selected users	
C	Dorothy Williams		× Peter C	Delete selected users	
Ø	Peter Clark		× Dorothy	Williams	

Before the execution of a management function you are requested to confirm this action.

)	SELECT	FILTER: OFF	MANAGE	MODIFY
Search	i user	 Selected us 	ers:	
Do	rothy Williams	× Peter C	lark	_
Pet	Delete selec	ted users		×
	You have	selected 2 users. A	Are you sure to	delete them?
		[Can	cel]	delete

7.1.1.5 MODIFY

The modify function allows a couple of modifications to the accounts of the selected users.

Change accounting mode	Selected users:	arch user 🔻	Q , 50
	× Peter Clark	Dorothy Williams	Ø
	× Dorothy Williams	Peter Clark pc	Ø

Change department

Assign a department to the selected user/s.

Change department	×
Change department for 2 user	
change department for 2 daen	
Department name Dept. B	•
[Cancel] and	alv



7.1.1.6 User details / Authentication

To view or modify the user details just click to the name of the desired user.



[1] Login name: This needs to be entered when logging in with username and password Password: This needs to be entered when logging in with username and password.

Domain user's passwords are always authenticated against the domain controller

- [2] use this link to disable/enable the user account.
- [3] Card IDs: If the users are allowed to login by card the card IDs can be entered here. Users may have multiple card IDs.
- [4] Email addresses: here you can enter one or more email-addresses for this user.
 - Multiple Email-addresses may be useful for Email-to-print when sending jobs from different accounts.
- [5] Department: select a department from the list the user is belonging to
- [6] Activity logging: select if the print jobs of this users shall be logged or not



7.1.2 Departments

Departments are organizational units. Each user may belong to only one department. Usually the association of users to departments is done in Active Directory.

When synchronizing the domain MOPS automatically imports all departments and the association of users.



- 1. List of departments
- 2. List of users belonging to the selected department
- 3. press ADD to manually add a department
- 4. press [+] to manually add users to the selected department



7.1.3 Domain

MOPS supports the synchronization of users from a Windows domain (Active directory). By default the domain is auto detected according the membership of the MOPS server.

11 2 25		Logout
mobile printing solution		Version: 1.0.0 test
MANAGEMENT User list Departments Devices Queues NetCardReader Mobile print REPORT Reports SETTINGS General Dashboard Schedules Reader profiles	ADD REMOVE MODIFY USER IMPORT firma.intra Image: Comparison of the second	C D in (anymore)

To allow MOPS to synchronize the user database an administrative user must be defined. Click [MODIFY] to enter/change the user credentials.

ADD F	REMOVE MODIFY USER IMPORT	
firma.intra Hostname:	Edit domain	×
User im Attribute Default i	Hostname: Hc1.firma.intra * [reset] User name: [reset] Password: [reset]	a e d
	[Cancel] Ok	

Synchronization will be performed immediately by clicking to [USER IMPORT] Users can also be synchronized automatically. Please refer to the chapter **Schedules**.

	DEMONS.		
ADD	REMOVE	MODIFY	USER IMPORT



7.1.3.1 Domains – User import

Here the synchronization options are configured.

firma.intra Hostname: dc1.firma.intra		
User import Attribute names Default user	Ignore disabled AD user accounts Replace internal users Delete unknown users - else they get deactivated 4 * "Unknown user" is a user (domain type) existing in the database but not in	the domain (anymore)

Ignore disabled AD accounts	If enabled, accounts that are disabled in the domain will not be imported to the MOPS database.
Replace internal users	If enabled, internal users will be replaces by the domain users in case of identical user names (Login name / samAccountName)
Delete unknown users	Domain users that are present in the MOPS database will be removed if the corresponding account in Active Directory does not exist anymore.

The database fields in MOPS are retrieved from specific attributes in AD. By default the attribute names are set to common values. Here you can change/ add the attribute names holding the data for the specific database fields.

firma.intra			
Hostname: dc1.firma.intra			
User import	Display name:	displayName	
Attribute names	Email address:	mail	
Default user	Department:	department	
	Card ID:	pager	

The default user settings allow to activate/deactivate an account after import and to enable or disable accounting.

firma.intra Hostname: dc1.firma.intra		
User import Attribute names	Activated 💽	
Default user	Accounting Log	T



7.2 DEVICES

The devices menu contains all data and settings related to queues, NetCardReaders and the settings for mobile printing and mobile release.

7.2.1 Queues

MOPS is designed to control queues in terms of accounting and security. Having the most control on print jobs can be achieved in two ways:

- *Pull printing*: print release after user authentication at the printer. Jobs are held in a virtual queue
- **Direct printing:** print to printers shared by the MOPS server. Printout is performed immediately

This icon indicates a **virtual queue** in MOPS



7.2.1.1 Adding queues

MOPS can take control of the existing queues of your print server. It is not necessary to create new queues within MOPS. If you like to add queues to your server you can do this 'as usual' via Windows printer management.

To add queues to the MOPS queue list click to [+] at the bottom of the list of queues. Select the queues you want to add to the list, so MOPS can take control.

Before confirming your selection choose the type of queue they shall be.

Click [add] to confirm.

Add queues	×
Select the queues to be added from the list	:
print2me *	
Tosh102	
[Select all] [Cancel selection]	
use as direct queue	
use as virtual queue	
[Cancel] add	



7.2.1.2 Direct queue

A direct queue is used to control a 'standard' Windows print queue. The queue is shared to the users. When printing to this queue

MOPS is pausing the job and checking the availability of the printer. If OK the job will be released to the printer.

If the job can't decide whethe move it to a vir release. If enabled the l send an email been deleted c	be printed you can r to delete the job or tual queue for a late Notify user option will in case of the job has or moved.	Print2me	Direct queue SNMP Accounting Enabled: IP address: auto-detect [change] [show SNMP values] Non-executable print jobs Delete non-executable print jobs:	_
	Non-executable print jobs	×	Notify user:	I
	Move non-executable print jobs	to a virtual queue		1
	Target queue print2me	•		
	[Cancel]	save		

To receive an email alert, the users email address must be available in active directory or in MOPS database for internal users and the <u>SMTP/Email-settings</u> must be set correctly.

7.2.1.3 SNMP accounting

To achieve an accurate accounting of printed pages MOPS can check the counters via SNMP from the device's counter MIB.

If SNMP accounting is enabled MOPS automatically determines the IP address of the printer. If, for any reason, the IP address is not available a warning is shown.

IP address could not be detected auto manually and enable SNMP again.	omatically. Please enter it
	ок

You can now enter the IP address manually by clicking to [change]. Now SNMP accounting can be enabled.

By pressing **[show SNMP values]** you can check the current counters read from the device MIB database.

1
_

In case the values do not match the real counters of the printer the desired device may not be known by MOPS at current. Therefore contact <u>support@control-systems.de</u> to integrate the printer.

Type Model	FS-2020D KYOCERA MITA PRINTING SYSTEM	
Counter BW	88654	
Counter Color Total	88654	
BW		
Status	Running[2] Idle[3]	
Device is ready	4.	
	[Cancel] OK	



7.2.1.4 Virtual queue

Virtual queues in MOPS are used to perform 'pull printing' or 'secure print release'. Being a regular (shared) Windows queue, users can print to it as usual. But instead of forwarding the job to the destination printer MOPS moves the jobs to an internal spooler and keeps the jobs until they are

- released by a user, or
- deleted due to a rule, by the user himself or by the administrator

print2me (2 Jobs)	Virtual queue Auto-delete jobs that have not bee	n printed after 3 days			
4 Tosh102	SELECT REFRESH: ON	FILTER: OFF MO	DIFY	'	
	tmptmp.tmp.TXT Unbenannt - Editor	pc Administrator	1 21.06 1 21.06	.2016 16:18:39	^

The **Auto-delete** option will remove jobs that have not been released after the time defined by the administrator.

The virtual queue view shows all jobs that are currently spooled. Clicking to the job's row will show it's details.

		*
Document name	Report - 2013	
Job ID	DAS00002	
User	Dorothy Williams (dwilliams)	
Paper-size	A4	
Pages	1	
Color job	yes	
Duplex	yes	
File size	4974 bytes	
Sent from '\\DEV8_SSO' on 28.10.2013 at 16:26:44		
	ОК	

The **REFRESH** option will update the list every 10 seconds if enabled.

Use **FILTER** to only show jobs of one or multiple user/s.

		Logout
mobile printing solution		Version: 1.0.0 test
MANAGEMENT User list Departments	cssupportvm22.firma.intra (127.0.0.1) Port: 11031 [change]	
Domains DEVICES Queues NetCardBeader	Virtual queue (2 Jobs) Image: Tosh102 Virtual queue Auto-delete jobs that have not been printed after 3 days Image: Tosh102 SELECT REFRESH: ON FILTER: OFF MODIFY	
Mobile print REPORT Reports	Name ⊕ User ⊨ ☑ tmptmp.tmp.TXT pc ☑ Unbenannt - Editor Administrator	18:39 15:38
SETTINGS General	Delete principas	

If you have selected one or multiple print job/s, the MODIFY option gets available. You can now

- move the selected jobs to another virtual queue
- change the user (job owner) for the selected print jobs
- delete the selected print jobs



7.2.2 print2me configuration

This setup is used to perform secure print release and/or pull printing to any printer Print release is performed either by network card reader or by mobile devices with the MOPS mobile App installed.

On the MOPS print server

- Create a standard queue for each printer
- Create a standard queue to be used as virtual queue
- Assign a driver to this virtual queue that is compatible to all printers
- Share the virtual queue so client PCs can use it

In MOPS management

- Add above queues to the list
- Create a NetCardReader or/and a mobile release identifier for each printer queue
- Assign the virtual queue(s) to the NetCardReader / Identifier
- Select the target queue for the NetCardReader / Identifier

Characteristics

- print release after user authentication
- quota management

Make sure the driver selected for the virtual queue is compatible to all output devices linked to it.



7.2.3 NetCardReader

MOPS supports the usage of networked card readers (NetCardReader) to release print jobs from a virtual queue to a **direct queue**.

(II C 2=		Lozout
mobile printing solution		Version: 1.0.0 test
MANAGEMENT User list Departments Domains DEVICES	ADD REMOVE 192.168.1.201 Description: [change] 192.168.1.202 Card reader profile: default	I
Queues NetCardReader Mobile print REPORT Reports	Virtual queues: print2me	*
SETTINGS General Dashboard Schedules Reader profiles	[change] Target queue: Tosh102	

A NetCardReader has no physical connection to the printer it is attached to. Therefore they need to be 'connected' logically. (see <u>Configure TCPConv</u>)

Click to **[ADD]** to add a new NetCardReader. Enter it's IP address and a description (e.g. the printer name it is attached to).

Add new NetCard	Reader 🗶	
IP: Description:	192.168.1.203	
[Cancel]	Add	

Card reader profile: Select a card reader profile if necessary.

Virtual queues:

Add one (or multiple) virtual queue to check for jobs of the user swiping his card.

Target queue:

Select a direct queue the jobs shall be sent to.



Important

Make sure the target device is compatible to the driver applied to the virtual queues.



7.2.4 Mobile print

MOPS allows users to send documents for printing via email from any (mobile) device. Most common office file formats, images and PDF are supported.

An advanced print release App (iOS & Android) is available for print release via the user's mobile phone or tablet.

7.2.4.1 Mobile print release

Print jobs held in a virtual queue can be released to any **direct queue** by using the MOPS mobile App.

Similar to the NetCardReaders a device identifier or a QR-code are used to logically link the printer so MOPS knows at which device the user currently is in front of.



Click to **[ADD]** to add a new Device identification. Enter it's IP address and a description (e.g. the printer name it is attached to).

	entification 🗙
Name:	
[Cancel]	Add

Virtual queues:

Add one (or multiple) virtual queue to check for jobs of the user is selecting this device identifier.

Target queue:

Select a direct queue or a Toshiba direct queue the jobs shall be sent to.



Attention

Make sure the target device is compatible to the driver selected for the virtual queues.



Use the UTILITY menu to generate a HTML or PDF document containing the QR-codes generated by

MOPS. These labels can be attached to the appropriate printer to easily be identified by the MOPS app.







ADD REMOVE	
	Generate HTML
Mobile release Mail p	Generate PDF
Device identification:	Name:

7.2.4.2 E-Mail printing

E-mail printing is very convenient way to send documents for printing as almost every device with an internet or WLAN connection is capable to send out emails.

Therefore MOPS can constantly check one or more email accounts of different type (**IMAP, POP3 or Exchange**).

11 2 25				Logout
mobile printing solution				Version: 1.0.0 test
MANAGEMENT User list Departments Domains DEVICES Queues NetCardReader Mobile print REPORT Reports SETTINGS General Dashboard Schedules Reader profiles	ADD REMOVE Mobile release Mail printing print@me	print@me [change] Enabled Protocol User Password URL Domain name (FQDN) [Text] Print to queue Min. size for images Max. mail size Validation token Additionally print mail text	Exchange IMAP POP3 Exchange Exchange inttps://cssbs:9999/ews/exchange.asmx csvs.local print2me [change] 5 KB 20 MB Image: Second Sec	
	L			

MOPS separates the attachments and processes them into a print job. All common file formats are supported.

PDF	PDF
Words:	DOC, DOCX, XML, RTF, HTML, XHTML, MHTML, ODT, XPS, SWF, TXT, EPUB
Cells:	XLS, XLSX, XLSM, XLSB, ODS, CSV
Slides:	PPT, POT, PPS, PPTX, POTX, PPSX, ODP, PPTM
Images:	GIF, JPG, JPEG, PNG, TIFF, TIF, BMP, EMF, EXIF, ICO, ICON, WMF



MOPS accepts only emails from known senders. So the sender's email address must be identical to one of the email addresses stored in the user database.

If a sender address is unknown the email will not be processed and deleted.

Click to ADD to add a new email account to be monitored by MOPS.

Enter a name for this account and d select the account type (IMAP, POP3 or Exchange).



print@me	print@me [change] Enabled Protocol User Password Hostname Port Use SSL	D IMAP V
	Print to queue Min. size for images Max. mail size Validation token Additionally print mail text	print2me [chang+] 5 KB 20 MB 7

Depending the account type you need to enter the account credentials:

IMAP/POP3

User	Enter the username for this email account			
Password	Enter the password to login to the account			
Hostname	Enter the hostname or IP address of the email server			
Port	Port number of the server (the default values for IMAP and POP3			
	usually work fine)			
Use SSL	Enable to connect via secure SSL connection			

The following settings determine the processing and routing of the mails.

Print to queue	This is the queue the processed document will be sent to. By default
	the (first) virtual queue is pre-selected
Min. size for images	This value avoids print out of small images like logos or icons
Max. mail size	As processing of jobs needs some resources the size of emails can be



	limited.
Validation token	This is a security feature to avoid SPAM. If you enter any string here all
	emails' subject must begin with this string.
Additionally print text	If enabled not only the attachment will be processed but also the email
	(body) itself.

Changing the output queue from a virtual queue to a direct queue will lead to an immediate printout of the documents.

Exchange

The settings for an exchange account are different from the above.

erint∉me	print@me [change]	
	Enabled	Ð
	Protocol	Exchange *
	User	print
	Password	•••••
	URL	https://cssbs:9999/ews/exchange.asmx
	Domain name (FQDN)	csvs.local
	[Test]	

User	Enter the username for this email account
Password	Enter the password to login to the account
URL	Enter the correct URL for the web access of your Exchange server
Domain	Enter the name of your exchange's domain



To determine the correct **URL for the Exchange Web Service** (EWS) of your server you may logon to your exchange server and enter below power-shell command.

Get-WebServicesVirtualDirectory |Select name, *url* | fl



7.3 REPORT

MOPS provides a numerous amount of standard reports. By simply selecting the desired report and it's parameters the Operator has quick access to all transaction data stored in the MOPS database.

7.3.1 Reports

This menu contains the powerful built in report generator. MOPS offers a row of predefined report templates for user-, department- and printer-based reports **[1]**.



[2] The ADD – REMOVE – COPY options allow to manage customized Reports.

ld report template	Summary Copy report template X
Enter a name for the new template	Details by user - ss by user - d Template name
Detailed	by departrr [Cancel] save
[Cancel] add	by color usage = summary Create nown

You can ADD a new template and configure it's settings or COPY the current 'active' template with all it's settings into a customized report template.



[3] Filter

When you have selected the template you can specify the time period for the report, specific users, Departments, printers etc. to filter the data for the report.

You can also filter on paper size or on color usage.

User	Template	
Department Printer/device	This quarter • From 01.04.2016 To	
Format Color usage	22.06.2016	
		_
		_

[4] Grouped by / Sort order

According the selected template data can be grouped and the sort field and order can be selected. Click to 1th to select the sort order ascending or descending.

[5] Create now:

Confirm the template you have selected by clicking to one if the [.html][.pdf] or [.csv] buttons. The report will be generated according your selection, filters, etc.

Grouped by Department and Use Period from 01.10.2013 to 31.10.2013. C	r name. Treated on 31.10.2	2013.							
Department	User name	Device	Job type	Document name	Total pages	Black & white	Color pages	Job details	Recording time
Department: 'Financial Accounting	g and Auditing' -	Dorothy Williams							
Financial Accounting and Auditing	Dorothy Williams	192.168.1.102	Сору		1	1	0	1xA4;	24.10.2013 16:30:52
Financial Accounting and Auditing	Dorothy Williams	192.168.1.102	Сору		3	3	0	3xA4;	24.10.2013 16:43:52
					4	4	0		
Department: 'Marketing' - Peter C	lark								
Marketing	Peter Clark	192.168.1.102	Сору		5	5	0	5xA4;	24.10.2013 16:30:52
					5	5	0		
					9	9	0		



Reports can also be exported to a PDF file by clicking to [.pdf] or to a comma separated file by clicking to [.csv].



7.4 SETTINGS

In the settings section you have access to all global configuration settings in MOPS.

7.4.1 General

Here you find all configurations related to the application itself.

				Logout
mobile printing solution				Version: 1.0.0 test
MANAGEMENT User list Departments Domains DEVICES Queues NetCardReader Mobile print REPORT Reports SETTINGS General Dashboard Schedules Reader profiles	Server Application Userportal Custom formats SMTP / E-mail License information	Server IP-address Web (http) port [11080] DataManager port [11030] Mobile service port [11082] Card server port [11083] Database [Backup database] [Restore database]	192.168.1.225 11080 11030 11082 () 11083 ()	[change] [change] [change] [change] [change] [change]

7.4.1.1 Server

MOPS auto detects the server IP address. In case you server has multiple network adaptors you can change it's 'outside' IP address by clicking to [change].

In case you need to change the default ports for MOPS Web access or DataManager you have access to these by clicking to [change].

The Database settings allow to perform a Backup and Restore of the MOPS Database,

[Backup database]

Will create a backup archive. By default the filename is MOPS_TIMESTAMP. You can modify the filename before executing the backup.

Clicking to **OK** will create 3 files: filename.archive & filename_dm.reg & filename_pm.reg in **c:\Program Files\MOPS\db\backup**

Please sel	ect a name for the database	backup.	
Filename:	mops_2016-06-22-13-02		
	[Cancel]	Ok	1



[Restore database]



Before restoring a backup make sure that the files required are located in c:\Program Files\MOPS\db\backup\

Select the backup to be restored and click to OK.

MOPS will now replace the current database by the backup.



The Directory service settings are required to setup the Toshiba directory service settings in TopAccess.



Attention

Keep in mind to update the device registration settings via TopAccess in case of you have made any modifications here.



7.4.1.2 Application

MANAGEMENT User list Departments Domains				Version 1.0.0 test
MANAGEMENT User list Departments Domains				version: 1.0.0 test
Domains Ap	Server	Administrator user name: "Operator"	[Change password]	
	pplication	Language	English T	
Queues NetCardReader Mobile print REPORT Reports SETTINGS General Dashboard Schedules Reader profiles	Userportal Custom formats SMTP / E-mail License information	Send notifications by e-mail PJL user name has priority Don't record document names Don't record user names Websession timeout Log level	O O	

The application tab allows changing some basic configuration.

'Operator' password

Click to [Change password] to change the password for the user 'Operator'. Enter the current and the new password.

Language

Select the language from the pull-down.

Send notifications by e-mail

If enabled user notifications are sent via e-mail to the users.

PJL user name has priority

This will force MOPS to check the print job's PJL header to extract the username to map the job to the correct user account. This may be helpful if the printer is mapped under a different username or in SAP environments.

Don't record document names

If enabled the document names will not be recorded in the transaction database.

Don't record usernames

If enabled the usernames will not be recorded in the transaction database.

Web session timeout

The operator will be auto logged out after this time of inactivity.

Log level

Here you can define the level of details stored in the MOPS log file.



7.4.1.3 User Portal

MOPS provides an enhanced user portal. This allows users to maintain their account or upload documents.

Here you have access to the settings that are related to the MOPS user portal.

					Logout
mobile printing solution					Version: 1.0.0 test
MANAGEMENT User list Departments Domains DEVICES Queues NetCardReader Mobile print REPORT Reports SETTINGS General Dashboard Schedules Reader profiles	Server Application Userportal Custom formats SMTP / E-mail License information	Use User portal Connection Port [11070] Use SSL Session timeout Allow file upload Upload queues: Self assignment Allow self-registration Allow email self assignmen	Ill070 30 minutes T print2me Lexmark X736de P005	[change] [Download certificate] [+] [-	?

Use User portal

This will enable/disable the general availability of the portal to the users

7.4.1.3.1 Connection

Port

Defines the port number to access the portal. By default the port number is 11070 To select another port number click to [change] and enter a port number that is available on your computer.

Use SSL

For security reasons the communication can be encrypted by using SSL. To avoid a SSL warning on the client PCs a certificate can be installed. Right-Click to [Download certificate] to download the certificate. You can now add it to the trusted root certificates on all client PCs (e.g. via group policy).

Session Timeout

This defines the time after a user session is close automatically when there is no activity.



7.4.1.3.2 Self assignment

Allow self-registration

If enabled users can self register an internal account to MOPS. An appropriate link will be shown on the User Portal login page.

Benutzomario:	1		
Passwort			
		[Kanto erstelles]	Annaklas
			Version: 1.0.0 test

Allow E-Mail self assignment

If enabled the users may add additional E-Mails to their account. This will allow the user to send print jobs by from other mail accounts.

Accounting-Mode

Here you can define the accounting mode fur users that have self registered to MOPS.

seir assignment	
Allow self-registration	
Allow email self assignment	
Accounting	None -
	Log
Braintree	Balance Ountas

7.4.1.4 Custom formats

MOPS allows to customize the date & time and formats to your specific requirements.

		Logout
mobile printing solution	Version: 1.0	0.0 test
MANAGEMENT User list Departments Domains DEVICES Queues NetCardReader Mobile print REPORT Reports SETTINGS General Dashboard	Server Date/Time Pattern Preview Template Application Date dd.MM.yyyy 22.06.2016 dd.MM.yyyy T Userportal Userportal I3:31:03 HH:mm:ss (24h) T SHTP / E-mail License information I I I).0 test
Reader profiles		



7.4.1.5 SMTP / E-mail

MOPS ca send out notifications to users via email. Enter the **Hostname/IP-address** and **port** of your SMTP server.

In case SMTP authentication is required, enter the credentials of an account that is allowed to send emails via this server.

MANAGEMENT Server SMTP settings User list Departments Monains DEVICES Queues SMTP ort: NetCardReader SMTP authentication SMTP authentication			Locat
MANAGEMENT Server SMTP settings Departments Domains Application Hostname / IP address: 192.168.1.4 DEVICES Queues Userportal SSL D NetCardReader SMTP authentication [change credentials]	mobile printing solution		Version: 1.0.0 test
Mobile print Custom formats E-mail settings REPORT SMTP / E-mail From address: no-reply@e-mops.local SETTINGS License information Signature: Sent by MOPS Dashboard Schedules Reader profiles If the user doesn't have an e-mail address, it will be created from login name and this domain. If the user doesn't have an e-mail address, it will be created from login name and this domain. If the user doesn't have an e-mail address, it will be created from login name and this domain.	MANAGEMENT User list Departments Domains DEVICES Queues NetCardReader Mobile print REPORT Reports SETTINGS General Dashboard Schedules Reader profiles	SMTP settings Hostname / IP address: SMTP port: SSL SMTP authentication E-mail settings From address: Subject: Signature: default e-mail address domain: If the user doesn't have an e-mail	192.168.1.4 25 Image: Constraints Image: Constraint

Use the E-mail settings to enter a From address: a Subject: an a signature.

The **default E-mail address domain** will be used if the user has no e-mail address assigned. MOPS will then try to send notifications to **'username'@'default_E-mail_address_domain'**

[test the SMTP and e-mail settings]

Enter the sender and recipient and press Send test e-mail. MOPS embedded will try to send a test email.

Test the SMTP and e-ma	ail settings	×
Recipient address	me@domain.com	
Example text		
This is a test e-	mail.	
		,
	[Cancel]	send

Check the in-box of the recipient to make sure, settings are correct.



7.4.1.6 License Information



Under the license tab you will find the current license status of your MOPS server.

[1] License Status

License type	MOPS
Current version	MOPS version that is currently installed
Current date	Current system date of your server
Installation date	Date when MOPS has been installed the first time on this server
Status	License status - this can be \ensuremath{TRIAL} , $\ensuremath{licensed}$ or $\ensuremath{DEMO.}$ In case of
	TRIAL the remaining number of trial days will be shown
Registration key	Current registration key in use of the MOPS license
Total printer licenses	Number of supported printers (direct queues)
Assigned / available	Number licenses in use and available
License valid until	Shows the end-of-license date.



[3] [new registration key]

Use this link to enter a registration key. Entering a registration key will apply a new license to your system or update your current license - e.g. to add additional printer licenses.

Please enter new registry key		×
Registration key: Z53-F81-VGW		
[License offline]	License	

Enter the registration key and press License button.

As the registration key needs to be verified against the license server it is recommended that your MOPS server has **internet connection - at least for the duration of the registration process**.

Else you need to perform the offline licensing process by clicking to the [license offline] link.

		×
Download the Server-ID file generated by your MOPS server by clicking to the link' [Download the server-ID file].	To perform the offline licensing please download the server-ID file and send it to your reseller. You will then receive a license file.	
THEN send the server-ID file MOPS.token T'OGETHER with the registration key you already obtained to your reseller.	Download the server-ID file	

You will then receive a .license file.

Select this file by clicking to Browse [1]

To confirm the licensing process click OK.

Upload license file	
To enable the license, select the license file here. Then press OK to confirm and upload the file to the server:	
[Cancel] OK	



7.4.2 Dashboard

The MOPS Dashboard is the central point of information.

7.4.2.1 Event Log

The Event Log shows the current status of activities by showing a list of messages.

	Lor	out
mobile printing solution	Version: 1.0.0	test
MANAGEMENT User list Departments Domains DEVICES Queues NetCardReader Mobile print REPORT Reports SETTINGS General Dashboard Schedules Reader profiles	Event Log Info Varning Error C Kefresh On remove all logs Auto-delete old event logs after 4 weeks V	

Use the buttons on the top of the list to filter the list by message types [info], [warning] or [error].

If [Refresh:On] is active, the list will be auto-updated by new events.

[Clear log] will clear the current list.

i

The folder **\Program Files\MOPS\log**\ contains daily log files "**MOPS_DATE.log**" that might be requested by the support in case of an issue.



7.4.3 Schedules

A lot of tasks In MOPS can be performed automatically. MOPS provides a powerful schedule tool for defining and planning the execution of these tasks.

		Logout
mobile printing solution	Version: 1	.0.0 test
MANAGEMENT User list Departments		[2]
Domains DEVICES Queues NetCardReader Mobile print REPORT Reports SETTINGS General Dashboard Schedutes Reader profiles	Drucker-Report Discret report Sync-User Description: [change] Activated: Image: Comparison of the second secon	[3]
	File type	

[1] Task list

The task list can hold an unlimited number of scheduled tasks. Click to ADD to create a new task or click to **DELETE** to remove an existing task from the list.

When adding a new task you need to enter a task name and the type of the task. It is also recommended to enter a short description.

Create new scheduler task					
Enter a name and choose the type for the task					
Task name	Report *				
Description					
Task type	Report creation				
		_			
	[Cancel] create				

[2] Schedule

The schedule section defines when a task is executed. Select the date and time for the next (fist) execution. Then select the repetition options.

[3] Task details

This section describes the details of the scheduled task.



7.4.3.1 Synchronization

This will automatically synchronize the MOPS user database and the domain.

You can select if new users shall be added and/or what data shall be updated if they have changed in the domain.

Task type: "Syne	chronization"	
Domain:		[show domain settings]
Add new user	c	Ð
Synchronize use	r's display name 🛛 🌗	
Synchronize use	r's e-mail address (
Synchronize use	r's home directory	
Synchronize use	r's department	
Synchronize use	r's card ID	

7.4.3.2 Report creation

This task will automatically create a report and send it as an attachment via e-mail.

Here you can select the type of the report that shall be scheduled. Select the sorting order and the file type.

Task type: "Report creat	ion"	
Send report to all users	D (3)	
Recipient e-mail address		[show details]
Report:	User - summary	 [show report]
File type	●.pdf □.csv	

If you like to automatically receive reports like "last month device summary" or "Ytd total of department X" it is recommended to create a custom report first and have this scheduled here.

7.4.3.3 Database backup

This task will automatically create a backup of the MOPS database and registry settings.

The number of backup files defines how many backups will be stored. If the maximum number of backups is reached, the oldest backup will be replaced by the newest one.

The backups will be stored in C:\Program Files\MOPS\db\backup\schedules\

Task type: "Database back Number of backup files:	up creation" 05 ▼
Hint:	
The number of backup files backup folder. Once the nun replaced by the newest back	indicates how many database backups will be kept in the ober of max, backups is reached the oldest backup will be sup file.
Scheduled database backup	s are stored in the directory:
C:\Program Files\MOPS\	db\backup\schedules\
For restoring a backup pleas 'Restore database'.	se go to 'SETTINGS' -> 'General' -> 'Server' and select



7.4.4 Reader Profiles

M255						Lozout
mobile printing solution						Version: 1.0.0 test
MANAGEMENT User list Departments Domains DEVICES Queues NetCardReader Mobile print REPORT Reports SETTINGS General Dashboard Schedules Reader profiles	ADD	REMOVE	Skip at front Skip at end Characters to use Revert byte-by-byte Convert Format Default profile for new de	to UPPER V	554ac35f 554ac35f 554ac35f 554ac35f 5fc34a55 5fc34a55 5Fc34A55	

Card reader profiles are used to modify the string read by a card reader.

This can be required if the UIDs of your cards are already stored in active directory. Depending how the IDs are read by the reader the IDs might need to be converted or reversed so they match.

To add a new profile click to [ADD].

You can enter a test string to directly check the impact of the current settings to the string.

You can use the *Test string* field to insert data and check if the conversion is working properly according the data that are required.

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