# White Paper

// TCP and UDP Ports of uniFLOW

Version 3.7

10-Dec-2015





NTware

# Versioning

Document Versioning	Version	Date	Author(s)	Reviewer(s)	
versioning	2.0	24-Sep-2013	Sebastian Husnil	K Thomas Lemmer, André Meß	
	2.1	22-Nov-2013	Sebastian Husnil Thomas Lemmer	Inomas Lemmer	
	2.2	16-Dec-2013	Thomas Lemmer	Thomas Lemmer, Paul Sluzek	
	2.3	17-Mar-2014	Thomas Lemmer	Thomas Lemmer	
	2.4	09-May-2014	Claudia Kleinekemper	Thomas Lemmer	
	2.5	23-Sep-2014	André Meß, Thomas Lemmer	Thomas Wilkens, Thomas Lemmer	
	2.6	23-Sep-2014	Thomas Lemmer	Martin Steinkamp, Matthias Frye	
	3.0	08-Dec-2014	Sebastian Husnil	C Thomas Lemmer, Thomas Wilkens	
	3.1	26-Jan-2015	Sebastian Husnil	K Thomas Lemmer	
	3.2	04-May-2015	Thomas Lemmer	Thomas Lemmer, Thomas Wilkens	
	3.3	28-May-2015	Claudia Kleinekemper	Thomas Lemmer	
	3.4	21-Sep-2015	Thomas Lemmer	Thomas Lemmer	
	3.5	09-Oct-2015	Sebastian Husnil	K Thomas Lemmer	
	3.6	30-Oct-2015	Sebastian Husnil	K Thomas Lemmer	
	3.7	10-Dec-2015	Sebastian Husnil	K Thomas Lemmer	
Document Name	TCP and U	DP Ports of uniFLO	SW		
Knowledgebase	МОМКВ-9	9 ( <u>http://its.nt-v</u>	vare.net/brows	е/МОМКВ-99)	
File Name	White Pap	er - TCP and UDP	Ports of uniFLOW	'.pdf	
Technologies Concerned	microMIN	D, SQL Server, Sca	n Processing Serv	CPCA, EAI, Internet Gateway, LDAP, MEAP, MIND, er, SMTP server, uniFLOW App for iOS/Android, LOW Port, uniFLOW SmartClient	
Short Summary	Overview of TCP/UDP ports used by uniFLOW, the Remote Print Server, the uniFLOW Client for Windows and Mac, the Internet Gateway, the uniFLOW Internet Gateway Printer Driver, the uniFLOW Port and other general communication ports for the operating system and Canon devices.			uniFLOW Internet Gateway Printer Driver, the	
Document	Version	Topic(s)		Changes	
Changes	2.0	All topics		Imported to Author-IT, simplified layout.	
	2.1	uniFLOW SPP Third Party Applets, Phone Apps for Mobile Job Release (see " <u>uniFLOW</u> <u>App for</u> <u>iOS/Android/Windows</u> " on page <u>11</u> )		Added ports for EAI clients and phone apps.	

2.1	Network Ports of the uniFLOW Windows, Mac and Web Client	Corrected UDP port 53125.
2.1	Network Ports of the uniFLOW Server / Remote Print Server (see " <u>uniFLOW Server /</u> <u>Remote Print Server</u> " on page <u>1</u> )	Corrected UDP port 53161.
2.2	uniFLOW SPP Third Party Applets	Updated chapter.
2.3	Network Ports of the uniFLOW Windows, Mac and Web Client	Updated chapter.
2.4	uniFLOW Embedded Applets for non-Canon devices	Updated terminology.
2.5	Network Ports of the uniFLOW Server / Remote Print Server (see " <u>uniFLOW Server /</u> <u>Remote Print Server</u> " on page <u>1</u> ), Network Ports of the uniFLOW Windows, Mac and Web Client, uniFLOW Embedded Applets for non-Canon devices	Updated document for uniFLOW V5.3.
2.6	Network Ports of the uniFLOW Server / Remote Print Server (see " <u>uniFLOW Server /</u> <u>Remote Print Server</u> " on page <u>1</u> )	Updated Scan Processing Server ports.
3.0	All topics	Complete overhaul.
3.1	MEAP (on page $\overline{2}$ ) All topics	Added CRQM information. Improved layout and formattings.
3.2	LDAP (on page <u>6</u> )	Added SLDAP port.
3.3	uniFLOW SmartClient (on page <u>12</u> )	Updated ports.
3.4	ICARUS Server for Web (on page 13)	Added new chapter for uniFLOW V5.4.
3.5	uniFLOW Release Station (on page <u>5</u> )	Added 8002 port.
3.6	uniFLOW Print Service for Google Cloud Print (on page <u>13</u> )	Added chapter.
3.7	uniFLOW Embedded Applet for Hewlett-Packard (on page <u>4</u> )	Added ports for the uniFLOW Embedded Applet fo Hewlett-Packard V1.1.

### Disclaimer

All rights reserved. No parts of this work may be reproduced in any form or by any means - graphic, electronic, or mechanical, including photocopying, recording, taping, or information storage and retrieval systems - without the prior written permission of NT-WARE Systemprogrammierungs-GmbH (hereinafter also referred to as NT-ware).

Company and product names mentioned herein are registered or unregistered trademarks of their respective companies. Mention of third-party products is for information purposes only and constitutes neither an endorsement nor a recommendation. NT-ware assumes no responsibility with regard to the performance or use of these products. Also, NT-ware makes no claim to these trademarks. Any use of trademarks, logo, service marks, trade names, and product names is prohibited without the written permission of the respective owners.

Adlib, Express and Express Server are either registered trademarks or trademarks of Adlib Publishing Systems Inc.; Adobe<sup>®</sup>, Adobe<sup>®</sup> Reader<sup>®</sup>, Acrobat<sup>®</sup>, Distiller<sup>®</sup>, PostScript<sup>®</sup> and products of the CREATIVE SUITE(S) are either registered trademarks or trademarks of Adobe Systems Incorporated in the United States and/or other countries; Android is a trademark of Google Inc.; Apple<sup>®</sup>, the Apple<sup>®</sup> logo, Mac<sup>®</sup>, Mac OS®, Macintosh®, iPhone®, iPad® and AirPrint® are trademarks of Apple Inc. registered in the U.S. and other countries; Box of Box Inc.; Blackboard Transact<sup>™</sup> of Blackboard Inc.; CANON, imageRUNNER, imageRUNNER ADVANCE, MEAP, CPCA, AMS, iW AMS, iW Desktop, iSend, iW SAM are trademarks or registered trademarks of Canon Inc.; CardSmith® is a trademark of CardSmith LLC; CBORD CS Gold® of the CBORD Group Inc.; Crystal Reports and other Business Objects products and services mentioned herein as well as their respective logos are trademarks or registered trademarks of Business Objects Software Ltd. Business Objects is an SAP company; Dropbox of Dropbox Inc.; eCopy™, eCopy ShareScan<sup>®</sup> and eCopy ScanStation™ are marks or trademarks of Nuance Communications, Inc.; Evernote® of Evernote Corporation; FileNet® of IBM Corporation; Foxit<sup>®</sup>SDK and Foxit<sup>®</sup> Reader of Foxit Corporation; Google Docs of Google Inc.; Google Cloud Print<sup>™</sup> web printing service is a trademark of Google Inc.; Helix<sup>™</sup> Production Workflow is a trademark of NT-WARE Systemprogrammierungs-GmbH; HP, HEWLETT-PACKARD, PCL and LASERJET are registered trademarks that belong to Hewlett-Packard Development Company; KONICA MINOLTA is a registered trademark of KONICA MINOLTA Inc.; iOS<sup>®</sup> of Cisco Technology Inc.; iDRS<sup>™</sup> SDK and IRISConnect<sup>™</sup> are unregistered trademarks of I.R.I.S. Group S.A.; JAWS pdf courier<sup>™</sup> are trademarks of Global Graphics SA.; Microsoft<sup>®</sup>, Windows<sup>®</sup>, Windows Server<sup>®</sup>, Internet Explorer<sup>®</sup>, Internet Information Services, Microsoft<sup>®</sup> Word, Microsoft® Excel, Microsoft SharePoint®, Microsoft SharePoint® Online, OneDrive®, One Drive® for Business, SQL Server®, Active Directory® are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries of Microsoft Corporation; Neevia Document Converter Pro<sup>™</sup> of Neevia Technology; NetWare<sup>®</sup>, Novell<sup>®</sup>, Novell eDirectory<sup>™</sup> of Novell Inc. are registered/unregistered trademarks of Novell Inc. in the United States and other countries; MobileIron® of Mobile Iron Inc., Océ, Océ PlotWave®, Océ ColorWave® and PRISMA are trademarks or registered trademarks of Océ Holding B.V., OpenOffice.org<sup>™</sup> of Oracle Corporation; PAS<sup>™</sup> is a trademark of Equitrac Corp.; PosterJet is copyrighted and an internationally registered trademark of Eisfeld Datentechnik GmbH & Co. KG; RedTitan EscapeE of RedTitan Limited; NETAPHOR<sup>®</sup>, SiteAudit<sup>™</sup> are trademarks of NETAPHOR SOFTWARE Inc.; SAMSUNG is a trademark of SAMSUNG in the United States or other countries; Therefore<sup>™</sup>, Therefore<sup>™</sup> Online of Therefore; UNIX<sup>®</sup> is a registered trademark of The Open Group; uniFLOW®, uniFLOW Serverless Secure Printing®, Helix Production Workflow®, MIND®, microMIND®, and MiCard<sup>®</sup> are registered trademarks of NT-WARE Systemprogrammierungs-GmbH; pcProx<sup>®</sup>, AIR ID<sup>®</sup> are registered trademarks of RFIdeas Inc.Readers; CASI-RUSCO® is a registered trademark of ID Card Group; Radio Key<sup>®</sup> is a registered trademark of Secura Key; GProx<sup>™</sup> II is an unregistered trademark of Guardall; HID<sup>®</sup> ProxHID is a registered trademark of HID Global Corporation; Indala<sup>®</sup> is a registered trademark of Motorola; ioProx<sup>™</sup> is an unregistered trademark of Kantech; Xerox, Xerox and Design, as well as Fuji Xerox and Design are registered trademarks or trademarks of Xerox Corporation in Japan and/or other countries.

All other trademarks, trade names, product names, service marks are property of their respective owners and are hereby acknowledged.

While every precaution has been taken in the preparation of this document, NT-ware assumes no responsibility for errors or omissions, or for damages resulting from the use of information contained in this document or from the use of programs and source code that may accompany it. NT-ware does not assume any responsibility or liability for any malfunctions or loss of data caused by the combination of at least one NT-ware product and the used operation system and/or third-party products. In no event shall NT-ware be liable for any loss of profit or any other commercial damage caused or alleged to have been caused directly or indirectly by this document.

In addition, this manual provides links to the sites of affiliated or independent companies and certain other businesses. NT-ware is not responsible for examining or evaluating, and NT-ware does not warrant the offerings of, any of these businesses or individuals or the content of their websites. NT-ware does not assume any responsibility or liability for the actions, product, and content of all these and any other third parties. You should carefully review their privacy statements and other conditions of use.

Thursday, December 10, 2015, Bad Iburg (Germany)

#### **Important Note**

Serious problems might occur if you modify the registry of your Windows operating system incorrectly. These problems might require that you reinstall the operating system. We strongly recommend to always back up the registry of your Windows operating system before applying changes to it, just in case you do something wrong. NT-ware does not assume any responsibility or liability for any impact on the operating system after changing the registry. You understand and accept that you use this information and modify the registry of your Windows operating system at your own risk.

#### **Copyright and Contact**

NT-WARE Systemprogrammierungs-GmbH Niedersachsenstraße 6 49186 Bad Iburg Germany

#### www.nt-ware.com

Should you come across any relevant errors or have any suggestions please contact <u>documentation@nt-ware.com</u> or use the *Send feedback here* button of the uniFLOW Online Help.

©1998-2015 NT-WARE Systemprogrammierungs-GmbH.

# **Symbols**

#### **Text Styles**

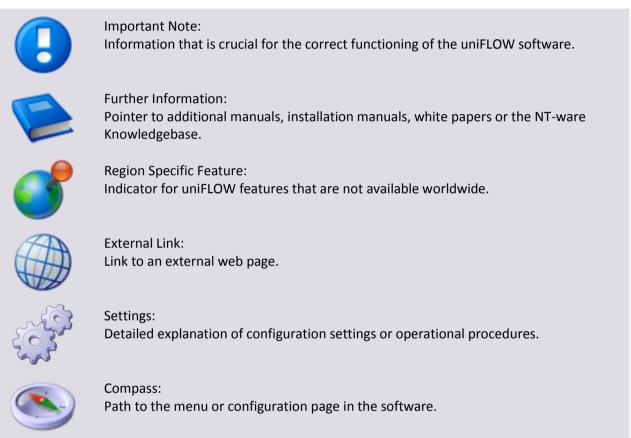
This style is used for text that is displayed on screen.

This style is used for text the user has to type in.

This style is used for hyperlinks to web pages, internal links to other pages in this manual.

This style is used for code examples: XML code, variables or regular expressions.

#### Pictograms



#### **Screenshots and Diagrams**

This manual contains screenshots of the software, diagrams explaining relations and pictures of products. Even though all visuals are up-to-date at the time of writing, they are subject to change.

#### Send Feedback

Should you come across any relevant errors or have any suggestions please contact <u>documentation@nt-ware.com</u> or use the *Send feedback here* button of the uniFLOW Online Help.

### Contents

1	Legend1
2	uniFLOW Server / Remote Print Server1
2.1	Budget Requests2
2.2	CMFP2
2.3	Counter Stats / Status Control2
2.4	СРСА3
2.5	CRQM
2.6	eCopy SSOP3
2.7	Embedded Applet Interface (EAI)3
2.7.1	uniFLOW Embedded Applet for Hewlett-Packard4
2.7.2	uniFLOW Embedded Applet for Konica Minolta4
2.7.3	uniFLOW Embedded Applet for Samsung5
2.7.4	uniFLOW Embedded Applet for Xerox5
2.7.5	uniFLOW Release Station5
2.8	Internet Gateway / Web Submission6
2.9	IPC PayCon6
2.10	LDAP6
2.11	MEAP7
2.12	microMIND8
2.13	Microsoft SQL Server8
2.14	MIND9
2.15	Network Printing (Receiving Print Jobs)9
2.16	Network Printing (Sending Print Jobs)10
2.17	Scan Processing Server10
2.18	SMTP Server
2.19	uniFLOW App for iOS/Android/Windows11
2.20	uniFLOW Client for Windows/Mac/Web11
2.21	uniFLOW Port12
2.22	uniFLOW SmartClient
2.23	uniFLOW Print Service for Google Cloud Print13
2.24	ICARUS Server for Web13
3	Links

# 1 Legend

#### **Network Directions**

Direction	Description
Network → uniFLOW	Incoming network traffic (Network to uniFLOW/RPS).
uniFLOW → Network	Outgoing network traffic (uniFLOW to Network).
uniFLOW ↔ Network	Incoming and outgoing network traffic.

Ports printed in **bold** are required by uniFLOW at all times. All other ports are only required, if the corresponding service is used.

2

# uniFLOW Server / Remote Print Server

The following ports can be used by uniFLOW and/or the Remote Print Server, **not all** are necessary!

Whether these ports are required **depends** on the requirements of the customer.

Port	Direction	Protocol	Description	uniFLOW	RPS
80	uniFLOW ↔ Network	НТТР	Web services of uniFLOW. Almost the whole communication from uniFLOW uses this port. RPS: Usage depending on configuration.	✓	~
137 - 139	uniFLOW ↔ Network	ТСР	Net Send messages	~	~
443	uniFLOW ↔ Network	HTTPS	Web services of uniFLOW. Almost the whole communication from uniFLOW uses this port.	✓ (>=V5.2)	<b>(</b> >=V5.2)
8000	uniFLOW ↔ Network	HTTP Alternate	The embedded uniFLOW/RPS web server may run on this port. RPS: Usage depending on configuration.	✓ (<=V5.2)	<ul><li>✓</li><li>(&lt;=V5.2)</li></ul>

#### **General Use**

Port	Direction	Protocol	Description	uniFLOW	RPS
8443	uniFLOW ↔ Network	HTTPS Alternate	The embedded uniFLOW/RPS web server runs by default on this port. RPS: Usage depending on configuration.	✓ (>=V5.3)	✓ (>=V5.3)
8080	uniFLOW ↔ Network	HTTPS Alternate	Can be used for the uniFLOW web services. RPS: Usage depending on configuration.	~	~
53125	Network → uniFLOW	UDP	The uniFLOW server is listening on this port for requests from clients.	~	~

# 2.1 Budget Requests

Port	Direction	Protocol	Description	uniFLOW	RPS
52525	uniFLOW ↔ Network	ТСР	uniFLOW listens on this port for budget requests.	✓ (>=V5.2)	x

2.2 CMFP

Port	Direction	Protocol	Description	uniFLOW	RPS
53216	uniFLOW ↔ Network	UDP	Communication with the uniFLOW server. The uniFLOW server detects all CMFP applets in the network with this port.	✓ (>=V5.0)	✓ (>=V5.0)

# 2.3 Counter Stats / Status Control

Port	Direction	Protocol	Description	uniFLOW	RPS
161	uniFLOW ↔ Network	SNMP UDP	Used for getting counter stats and the status control of some printers/copiers.	~	×
53161	uniFLOW ↔ Network	UDP	Used for getting counter stats and the status control of some printers/copiers via SNMP requests.	~	✓

### 2.4 CPCA

Port	Direction	Protocol	Description	uniFLOW	RPS
9007	uniFLOW ↔ Network	UDP/TCP	CPCA communication with the uniFLOW server.	~	~
47545 47546	uniFLOW ↔ Network	UDP/CPCA	Used only by Canon devices for status control or copy log read outs.	<b>~</b>	~

### 2.5 CRQM

Port	Direction	Protocol	Description	uniFLOW	RPS
8002	uniFLOW ↔ Network	ТСР	uniFLOW in a CRQM (Collective Release Queue Management) environment.	✓ (>=V5.1)	✓ (>=V5.1)

### 2.6 eCopy SSOP

Port	Direction	Protocol	Description	uniFLOW	RPS
9425	uniFLOW → eCopy SSOP	ТСР	Used only by eCopy SSOP Identification Service. Default setting, which can be changed.	✓	<b>~</b>

# 2.7 Embedded Applet Interface (EAI)

The following ports are required for the EAI clients to communicate with the uniFLOW server and the RPS.

### 2.7.1 uniFLOW Embedded Applet for Hewlett-Packard

Port	Direction	Protocol	Description
2516	uniFLOW ↔ Network	SSL	Communication port between the HP device and the HP Service IIS website.
2517	uniFLOW ↔ Network	SSL	SSL Communication port between the HP device and the HP Service IIS website.

#### uniFLOW Embedded Applet for Hewlett-Packard V1.0

#### uniFLOW Embedded Applet for Hewlett-Packard V1.1

Port	Direction	Protocol	Description
2566	uniFLOW ↔ Network	SSL	Communication port between the HP device and the HP Service IIS website.
2567	uniFLOW ↔ Network	SSL	SSL Communication port between the HP device and the HP Service IIS website.

### 2.7.2 uniFLOW Embedded Applet for Konica Minolta

#### uniFLOW Embedded Applet for Konica Minolta

Port	Direction	Protocol	Description
2526	uniFLOW ↔ Network	SSL	All communications between uniFLOW server, Konica Minolta client software and Konica Minolta device occur over port 2526.
50005	uniFLOW ↔ Network	SSL	Authentication messages (when the device lock is on) between Konica Minolta client software and Konica Minolta device occur over port 50005.

#### uniFLOW Embedded Applet for Konica Minolta (Native UI)

Port	Direction	Protocol	Description
2556	uniFLOW ↔ Network	SSL	All communications between uniFLOW server, Konica Minolta client software and Konica Minolta device occur over port 2556.
50010	uniFLOW $\leftrightarrow$	SSL	When the 'Secure Queue' application is in use, communication between the Konica Minolta client software

Port	Direction	Protocol	Description
	Network		and the Konica Minolta device.
50015	uniFLOW ↔ Network	SSL	Authentication messages (when the device lock is enabled) between the Konica Minolta client software and the Konica Minolta device.

### 2.7.3 uniFLOW Embedded Applet for Samsung

Port	Direction	Protocol	Description
80	uniFLOW ↔ Network	SSL	All communications between the uniFLOW server and the Samsung device occur over port 80.

### 2.7.4 uniFLOW Embedded Applet for Xerox

Port	Direction	Protocol	Description
2506	uniFLOW ↔ Network	SSL	All communications between uniFLOW server, Xerox client software and Xerox device occur over port 2506.
2507	uniFLOW ↔ Network	SSL	Authentication messages (when the device lock is on) between Xerox client software and Xerox device occur over port 2507.

### 2.7.5 uniFLOW Release Station

Port	Direction	Protocol	Description
8000	uniFLOW ↔ Network	ТСР	The uniFLOW Release Station uses TCP port 8000 for discovery and EAI communication with uniFLOW. Make sure this port is open in both directions if you have any connection problems.
8002	Network ↔ uniFLOW Release Station	ТСР	This port is necessary in order to access the uniFLOW Release Station configuration web page (http:// <uniflow_release_station>:8002/config.htm).</uniflow_release_station>

# 2.8 Internet Gateway / Web Submission

Only **one** of the following ports is needed for the use of the Internet Gateway / Web Submission web server.

This port may **vary** and depends on the configuration of the Internet Gateway / Web Submission web server and on the customer's network architecture.

Port	Direction	Protocol	Description	uniFLOW	RPS
80	uniFLOW ↔ Network	HTTP Alternates	Communication with the uniFLOW server. Status, Job Ticket, Web pop-ups,	~	~
8000	uniFLOW ↔ Network	HTTP Alternates	These and other ports can be used by the clients if configured by the administrator.	~	~
8080	uniFLOW ↔ Network	HTTP Alternates	These and other ports can be used by the clients if configured by the administrator.	~	~
443	uniFLOW ↔ Network	HTTPS Alternates	The uniFLOW server is listening on this port for requests from clients	~	~



The uniFLOW Internet Gateway printer driver supports the port which has been used for the communication between the uniFLOW server and the uniFLOW Internet Gateway web server.

# 2.9 IPC PayCon

Port	Direction	Protocol	Description	uniFLOW	RPS
1639	uniFLOW ↔ Network	PayCon	Used only for the communication between the server and an IPC PayCon device.	~	×

### 2.10 LDAP

Port	Direction	Protocol	Description	uniFLOW	RPS
389	uniFLOW → LDAP	LDAP	Importing user data from an existing LDAP or Active Directory server. This port is also used in special configuration with the MAC client.	✓	✓

Port	Direction	Protocol	Description	uniFLOW	RPS
			RPS: Used in case "Online LDAP Authentication" has been configured as "User Identification" in uniFLOW.		
636	uniFLOW → LDAP	SLDAP	Importing user data from an existing LDAP or Active Directory server via Secure LDAP. This port is also used in special configuration with the MAC client.	✓	~
			Please note that port 636 is typically used but may be different as this port is configurable.		
			RPS: Used in case "Online LDAP Authentication" has been configured as "User Identification" in uniFLOW.		

### 2.11 MEAP

Port	Direction	Protocol	Description	uniFLOW	RPS
445	MEAP → uniFLOW	ТСР	MEAP device will try to connect the uniFLOW Server via this port to check availability.	~	~
8000	uniFLOW ↔ Network	ТСР	Communication with uniFLOW MEAP applets (V2.x onwards).	~	~
8443	uniFLOW ↔ Network	ТСР	Communication with uniFLOW MEAP applets when using HTTPS (V2.x onwards).	~	~
19100	uniFLOW → MEAP	ТСР	Communication between the uniFLOW server, RPS and the uniFLOW SmartClient to Canon MEAP enabled devices including job data. This port is also required in CRQM environments to forward print jobs to Canon devices running MEAP V4.2 or higher (if the command line tool	(>=V5.3)	(>=V5.3)
53213	uniFLOW → MEAP	ТСР	OutputToMEAP.exe is used). Techsupport Log of uniFLOW MEAP Client.	✓	~
53213	uniFLOW ↔ Network	UDP	Communication with the uniFLOW server. The uniFLOW server detects all MEAP applets in the network with this port.	~	~
53214	uniFLOW →	ТСР	Techsupport Log of uniFLOW Login Manager.	✓	~

Port	Direction	Protocol	Description	uniFLOW	RPS
	MEAP				

# 2.12 microMIND

Port	Direction	Protocol	Description	uniFLOW	RPS
80	uniFLOW ↔ Network	TCP Firmware Data	Upload/update of the microMIND software.	<b>~</b>	<b>~</b>
53120	uniFLOW ↔ Network	UDP microMIND	Communication with the uniFLOW server. The uniFLOW server detects all microMINDs in a Network with this port.	~	~
53215	uniFLOW ↔ Network	TCP Telnet	Accessing and debugging a microMIND via Telnet.	~	~

# 2.13 Microsoft SQL Server

Port	Direction	Protocol	Description	uniFLOW	RPS
118	uniFLOW → SQL Server	SQL Services	Used only when an external SQL database server is used, but the port can vary. For detailed information always ask the customer.	~	x
1433	uniFLOW → SQL Server	Microsoft SQL Server	Used only when an external Microsoft SQL server is used, but the port can vary. For detailed information always ask the customer.	<b>~</b>	×
1434	uniFLOW → SQL Server	Microsoft SQL Monitor	Used only when an external Microsoft SQL server is used for the SQL monitoring.	~	×

### 2.14 MIND

Port	Direction	Protocol	Description	uniFLOW	RPS
20	uniFLOW → MIND	FTP Data	Upload/update of the MIND software.	~	~
21	uniFLOW → MIND	FTP Control	Upload/update of the MIND software.	~	~
23	uniFLOW → MIND	Telnet	Accessing and debugging a MIND via Telnet.	~	~
53120	uniFLOW ↔ Network	UDP MIND	Communication with the uniFLOW server. The uniFLOW server detects all MINDs in a network with this port.	~	✓

### 2.15 Network Printing (Receiving Print Jobs)

These ports for network printing **depend** on the configuration of the customer's network. This configuration has to be done by the customer. We add these ports **only** for the sake of completeness. This port range is for receiving print jobs from the network.

Port	Direction	Protocol	Description
80	Network → uniFLOW	НТТР	Communication with the uniFLOW server. Print data is sent to this port from the network.
139	Network → uniFLOW	SMB	Server Message Block protocol. For a connection of shared printers in a windows environment.
445	Network → uniFLOW	ТСР	Used for SMB file sharing and point and print
515	Network → uniFLOW	LPR (TCP)	Line Printer Remote protocol.
631	Network → uniFLOW	IPP	Internet printing protocol. For printing from the internet to a shared printer.

# 2.16 Network Printing (Sending Print Jobs)

These ports for network printing **depend** on the configuration of the customer's network. This configuration has to be done by the customer. We include these ports **only** for the sake of completeness. This port range is for sending print jobs to the network.

Port	Direction	Protocol	Description
139	uniFLOW → Network	SMB	Server Message Block protocol. For a connection of shared printers in a windows environment.
445	uniFLOW → Network	ТСР	Used for SMB file sharing and point and print.
515	uniFLOW → Network	LPR (TCP)	Line Printer Remote protocol.
9100	uniFLOW → Network	RAW	Printer PDL data stream. Sending raw printing information to the printer.

# 2.17 Scan Processing Server

Port	Direction	Protocol	Description	uniFLOW	RPS
8001	uniFLOW ↔ Network	ТСР	If the uniFLOW Scan Processing Server is used, this port is required for the MomSpaceSuit.exe service.	<b>(</b> >=V5.0)	<b>&gt;</b> =V5.0)
8444	uniFLOW ↔ Network	HTTPS	If the uniFLOW Scan Processing Server is used, this port is required for the MomSpaceSuit.exe service.	<b>~</b> (>=V5.3)	<b>&gt;</b> =V5.3)

### 2.18 SMTP Server

Port	Direction	Protocol	Description	uniFLOW	RPS
25	uniFLOW ↔ Network	SMTP	The RPS can act as an SMTP Server (incoming traffic). The RPS/uniFLOW can send Emails from the RPS/uniFLOW to users or administrators, such as Budget messages, Web Queue messages, etc. (outgoing traffic).	~	✓

Port	Direction	Protocol	Description	uniFLOW	RPS
110	uniFLOW → Network	POP3	Needed for the identification of a POP3 account for sending mails through the SMTP port. Port 25 needs to be open, too.	✓	✓

### 2.19 uniFLOW App for iOS/Android/Windows

The following ports are needed for the uniFLOW iOS/Android/Windows apps in order to communicate with the uniFLOW server, RPS or Internet Gateway.

Port	Direction	Protocol	Description	uniFLOW	RPS
80	uniFLOW ↔ Network	НТТР	Internet Gateway	-	-
631	uniFLOW ↔ Network	ТСР	uniFLOW Service for AirPrint	(>=V5.1)	×
8000	uniFLOW ↔ Network	НТТР	uniFLOW server, RPS	<b>(</b> >=V5.1)	<b>(</b> >=V5.1)
5353	uniFLOW ↔ Network	UDP	uniFLOW Service for AirPrint	✓ (>=V5.1)	×

# 2.20 uniFLOW Client for Windows/Mac/Web

Only **one** of the following ports is needed for using these clients.

This port may **vary** and depends on the configuration of the customer's network architecture.

Port	Direction	Protocol	Description	uniFLOW	RPS
80	uniFLOW → Client	НТТР	Communication with the uniFLOW server. Status, Job Ticket, Web pop-ups (Used port depends on the IIS configuration. However, this is the default port if IIS is running in HTTP mode)	✓	×
389	uniFLOW → Network	LDAP	Importing user data from an existing LDAP or Active Directory server. This port is also used in special configuration with the MAC client. RPS: Used in case "Online LDAP Authentication" has been configured	•	✓

Port	Direction	Protocol	Description	uniFLOW	RPS
			as "User Identification" in uniFLOW.		
443	uniFLOW → Client	HTTPS	Communication with the uniFLOW server. Status, Job Ticket, Web pop-ups (Used port depends on the IIS configuration. However, this is the default port if IIS is running in HTTPS mode)	•	x
8000	$\begin{array}{c} RPS \\ \rightarrow \\ Client \end{array}$	НТТР	Communication with the RPS. Status, Job Ticket, Web pop-ups	×	~
8000 8080	uniFLOW → Client	HTTP HTTPS Alternate	These and other ports can be used by the clients if configured by the administrator.	~	x
8443	$\begin{array}{c} RPS \\ \rightarrow \\ Client \end{array}$	HTTPS	Communication with the RPS. Status, Job Ticket, Web pop-ups (since uniFLOW V5.3)	×	~
53125	uniFLOW /RPS → Network	UDP	The uniFLOW server and RPS is listening on this port for requests from clients. If this connection fails a fallback to HTTP(S) based communication takes place.	~	~

# 2.21 uniFLOW Port

The uniFLOW Port driver supports **only one** port.

Port	Direction	Protocol	Description	uniFLOW	RPS
80	uniFLOW → Network	НТТР	Communication with the uniFLOW server. Print data is sent to this port to the server.	~	~

# 2.22 uniFLOW SmartClient

Port	Direction	Protocol	Description	uniFLOW	RPS
19100	uniFLOW SmartClient → Network	ТСР	Communication between the uniFLOW server, RPS and the uniFLOW SmartClient to Canon MEAP enabled devices including job data.	(>=V5.3)	✓ (>=V5.3)

Port	Direction	Protocol	Description	uniFLOW	RPS
8443	uniFLOW SmartClient ↔ Network	ТСР	Communication with uniFLOW / uniFLOW RPS and MEAP applets when using HTTPS	✓ (>=V5.3)	✓ (>=V5.3)

### 2.23 uniFLOW Print Service for Google Cloud Print

Port	Direction	Protocol	Description	uniFLOW	RPS
8001	uniFLOW ↔ Network	ТСР	Communication between the uniFLOW server to the network.	~	~
5222	uniFLOW ↔ Network	ТСР	XMPP traffic.	~	~
443	uniFLOW ↔ Network	HTTPS	The uniFLOW Print Service for Google Cloud Print will first check if port 5222 is open. In case it is blocked, the service will switch to port 443.	~	~

# 2.24 ICARUS Server for Web

Port	Direction	Protocol	Description	uniFLOW	RPS
8003	uniFLOW → ICARUS Server for Web	ТСР	Communication between uniFLOW and the ICARUS Server for Web over an unencrypted HTTP connection.	(>=V5.4)	✓ (>=V5.4)
8446	uniFLOW → ICARUS Server for Web	ТСР	Communication between uniFLOW and the ICARUS Server for Web over an encrypted HTTPS connection.	(>=V5.4)	✓ (>=V5.4)
8000	ICARUS Server for Web → uniFLOW	ТСР	Communication between the ICARUS Server for Web and uniFLOW over an unencrypted HTTPS connection.	(>=V5.4)	(>=V5.4)
8443	ICARUS Server for Web →	ТСР	Communication between the ICARUS Server for Web and uniFLOW over an encrypted HTTPS connection.	✓ (>=V5.4)	✓ (>=V5.4)

Port	Direction	Protocol	Description	uniFLOW	RPS
	uniFLOW				
8003	ICARUS Server Client → ICARUS Server for Web	ТСР	Communication between the ICARUS Server Client and the ICARUS Server for Web over an unencrypted HTTP connection.	(>=V5.4)	(>=V5.4)
8443	ICARUS Server Client → ICARUS Server for Web	ТСР	Communication between the ICARUS Server Client and the ICARUS Server for Web over an encrypted HTTPS connection.	(>=V5.4)	(>=V5.4)
8000	ICARUS Server Client → uniFLOW	ТСР	Communication between the ICARUS Server Client and uniFLOW over an unencrypted HTTP connection. ONLY for Canon imageFORMULA ScanFront series!	(>=V5.4)	(>=V5.4)
8443	ICARUS Server Client → ICARUS Server for Web	ТСР	Communication between the ICARUS Server Client and uniFLOW over an encrypted HTTPS connection. ONLY for Canon imageFORMULA ScanFront series!	(>=V5.4)	(>=V5.4)

### 3 Links

#### **Network Ports**

For further information on Network Ports please refer to the website of IANA (<u>http://www.iana.org/assignments/service-names-port-numbers/service-names-port-numbers.xhtml</u>), the Internet Assigned Number Authority.

#### **Printing Ports**

Microsoft's information about printing ports (Printer Connectivity Technical Overview (<u>http://www.microsoft.com/en-us/download/details.aspx?displaylang=en&id=9603</u>)).