White Paper

// uniFLOW and Therefore

Version 1.0

Jun. 6th, 2013

uniFLOW
Version 5.2

Versioning

Versioning	Version	Author(s)	Revision date	Reviewer(s)
	1.0	Sebastian Husnik	06/06/13	Thomas Lemmer
WP Name	uniFlow and Therefore™			
Knowledge Base	MOMKB-700 https://web.nt-ware.net/its/browse/MOMKB-700			
File Name	White Paper - uniFLOW and Therefore			
Technologies concerned	uniFLOW, Therefore™			
Short Summary	This White Paper describes the integration of Therefore for Scanning in uniFLOW.			

Document changes	Version	Changes
	1.0	Created

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 written permission of NT-ware Systemprogrammierung GmbH.

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 Software of Adlib Software; Adobe®, Adobe® Reader, Acrobat®, Distiller®, PostScript® and products of the CREATIVE SUITE(S) of Adobe Systems Incorporated; Apple®, the Apple® logo, Mac®, Mac OS®, Macintosh®, iPhone®, iPad® and AirPrint® of Apple Inc.; CANON, imageRUNNER, imageRUNNER ADVANCE, MEAP, CPCA, AMS, iW AMS, iW Desktop, iSend, iW SAM of Canon Inc.; Crystal Reports of Business Objects SA, as of July 1, 2008: BusinessObjects of SAP; eCopy™, eCopy ShareScan®, and eCopy ScanStation® of Nuance Communications, Inc.; Foxit Reader of Foxit Corporation; Google Docs of Google Inc.; Google Cloud Print is a trademark of Google Inc., Helix™ Production Workflow is a trademark of NT-ware Systemprogrammierung GmbH; Hewlett Packard, HP, LaserJet, and PCL of Hewlett-Packard Company; iOS® of Cisco Technology Inc.; I.R.I.S. Group s.a.; JAWS pdf courier™ are trademarks of Global Graphics SA.; Microsoft®, Windows®, Windows Vista®, Windows 7®, Internet Explorer®, Internet Information Server, Microsoft® Word, Microsoft® Excel, SQL Server® of Microsoft Corporation; Neevia Document Converter ProTM of Neevia Technology; NetWare, Novell®, Novell eDirectory® of Novell Inc.; OpenOffice.org™ of Oracle Corporation; PAS™ of Equitrac Corporation; PosterJet of Eisfeld Datentechnik GmbH & Co. KG; Red Titan EscapeE of Red Titan Limited; NETAPHOR®, SiteAudit™ are trademarks of NETAPHOR SOFTWARE Inc.; Therefore™ of Therefore; UNIX® of The Open Group; uniFLOW OM®, uniFLOW®, uniFLOW Serverless Secure Printing®, MIND®, microMIND®, and MiCard® are registered trademarks of NT-ware Systemprogrammierung GmbH; pcProx®, AIR ID® are registered trademarks of RFIdeas Inc.Readers; CASI-RUSCO® is registered trademark of ID Card Group; Radio Key® is registered trademark of Secura Key; GProx™ II is unregistered trademark of Guardall; HID® ProxHID is registered trademark of HID Global Corporation; Indala® is registered trademark of Motorola; ioProx™ is unregistered trademark of Kantech.

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 of 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.

PLEASE 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.

Donnerstag, 6. Juni 2013, Bad Iburg (Germany)

Symbols

Text Styles

Text that appears in this style is used for screen text that appears in the uniFLOW user interface and on user interface controls.

Text that appears in this style is used for User entries on screen, text that the user actually has to type in.

Text that appears in this style is used for hyperlinks to an external web page, or internal links to other pages of this manual.

```
Text that appears in this style is used for code examples: XML code, variables or regular expressions.
```

Pictograms

Important note: Information that is crucial for the correct functioning of the uniFLOW software.

External manual: Pointer to additional manuals for third party hardware or third party software.

Region Specific Feature: In case some features of uniFLOW are not universally available, this icon will indicate it.

Link to an external reference within the WWW.

Detailed explanation of configuration settings or operational procedures.

Screenshots, pictures and graphics

This manual contains screenshots of the software, graphics explaining relations and pictures of products. All visuals are up-to-date at the time of writing. However, please note, that these visuals are subject to change.

Copyright and Contact

©1998-2013 NT-ware Systemprogrammierung GmbH.

In case of errors or improvement suggestions please contact documentation@nt-ware.com.

Contents

1 uniFLOW & Therefore™ 1

1.1 Automatic Login to Therefore™ from uniFLOW 2

1.1.1 Settings to be done in uniFLOW for Therefore™ 2

1.1.2 Entering new Logon Data via the Login Manager on the MFP 5

1 uniFLOW & Therefore™

Integration of Therefore™ for Scanning

uniFLOW provides the possibility to create scan workflows. A user can use the MomClient MEAP Applet on an MFP to scan pages and process them with a certain workflow in uniFLOW. It is possible to archive these scans into a Therefore™ category by using the workflow elements ***Select Therefore™ Category*** and ***Send to Therefore™***.

The Chapter Scanning http://www.nt-ware.com/mom/5.2/HTML/EN/index.htm#14786.htm in the uniFLOW v5.2 User Manual explains how scanning in uniFLOW works and how this is set up.

There, you'll also find the sub-chapter Scan to SharePoint http://www.nt-ware.com/mom/5.2/HTML/EN/index.htm#14807.htm, which is similar to a Scan to Therefore™ workflow. The only difference here is that you have to exchange the respective SharePoint workflow element with the ***Select Therefore™ Category*** and the ***Send to Therefore™*** workflow element.

Requirements

- Install the Therefore™ XML Web Service on the Therefore™ Server.
- Install the Therefore™ Client on the uniFLOW Server and connect the Therefore™ client to the Therefore™ Server, i.e. configure the DCOM and the XML Web Service.

uniFLOW Login Manager and Therefore™

uniFLOW and Therefore™ have developed the following features to provide joint optimum services for MFP users:

Automatic Login to Therefore™ from uniFLOW (on page 2)

The single sign on mechanism available with:

- Therefore™ V6.2 SP 3 and
- uniFLOW V5.0 or higher and also for RPS

provides the facility of automatic login to Therefore™ after the user has been authenticated via the uniFLOW Login Manager. Users do not need to authenticate themselves twice, as was the case before: with uniFLOW, using their access control card for example, and then with Therefore™, entering their Windows Active Directory credentials, user name and password. Now users only have to identify themselves within uniFLOW, which automatically forwards their credentials to Therefore™.

The functionality of entering new credentials via the uniFLOW Login Manager "on demand" and thus to teach uniFLOW's new users' credentials is the same as for the eCopy ID Services integration. For further information, please refer to Entering new

Logon Data via the Login Manger on the MFP (see "Entering new Logon Data via the Login Manager on the MFP" on page 5).

Access to the Therefore™ repository using the Therefore™ MFP Connector

The Therefore™ MFP Connector for uniFLOW V5.0 and Therefore™ V6.2 SP 3 allows users to access the Therefore™ repository. Users can browse through the Therefore™ repository at the MFP and from there, print or delete scans.

1.1 Automatic Login to Therefore™ from uniFLOW

1.1.1 Settings to be done in uniFLOW for Therefore™

Preparation

For the integration of uniFLOW with the ThereforeTM MFP Connector you may have to manually register the file ***<Program Files>Common Files\NT-ware Shared\RSAEncrypt.dll*** depending on the installed Microsoft .NET Framework Version. To register this file, search for ***regasm.exe*** (for example: C:\windows\Microsoft.NET\Framework\v2.0.50727\regasm.exe).

Afterwards, open a command shell and register the RSAEncrypt.dll with the following command:

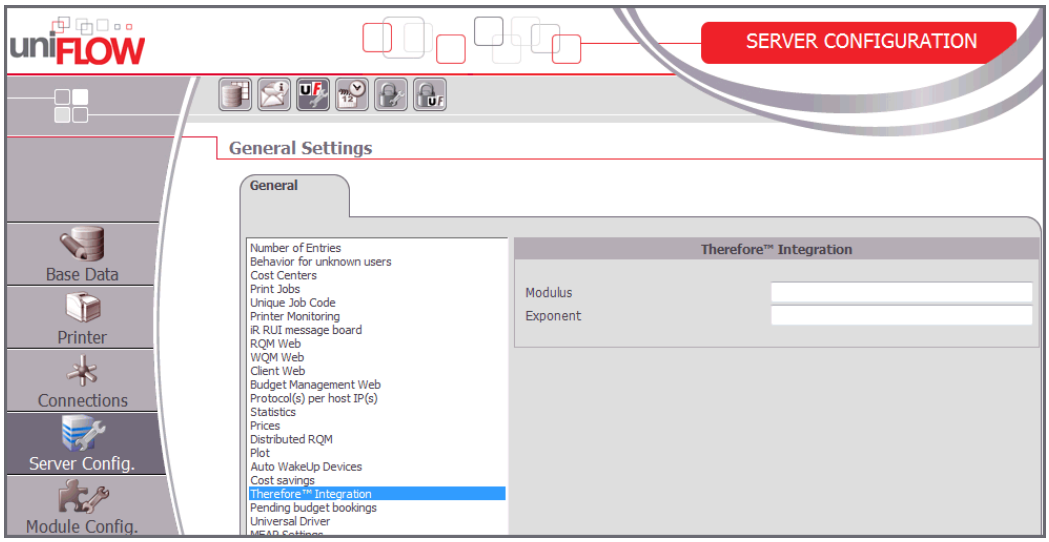
```
C:\Windows\Microsoft.NET\Framework\v2.0.50727\regasm.exe
"<Program Files>Common Files\NT-ware Shared\RSAEncrypt.dll"
```

Printer Configuration

In uniFLOW a printer has to be configured for the relevant identification system that will be used (optionally microMIND or MIND plus uniFLOW Login Manager Identification). If you are unsure about the configuration, first use the respective wizard (for example ***Secure Output Printer with uniFLOW Login Manager***) to create the printer and then edit it under Advanced printer configuration.

Password Encryption by RSA

After identification of the user at the device via the ***uniFLOW Login Manager***, uniFLOW forwards the password to the Therefore™ device RSA encrypted.
Under ***Server configuration/General Settings/General/Therefore™ Integration*** the components of the Encryption Key need to be configured.



- ***Modulus***
  This RSA Public Key is stored centralized as ASCII hexadecimal representation. For further information on this public key, please refer to the Therefore™ manual "MFP Connector" which comes with Therefore™ V 6.2 SP 3.
- ***Exponent***
  This RSA Public Key is stored centralized as ASCII hexadecimal representation. For further information on this public key, please refer to the Therefore™ manual "MFP Connector" which comes with Therefore™ V 6.2 SP 3.

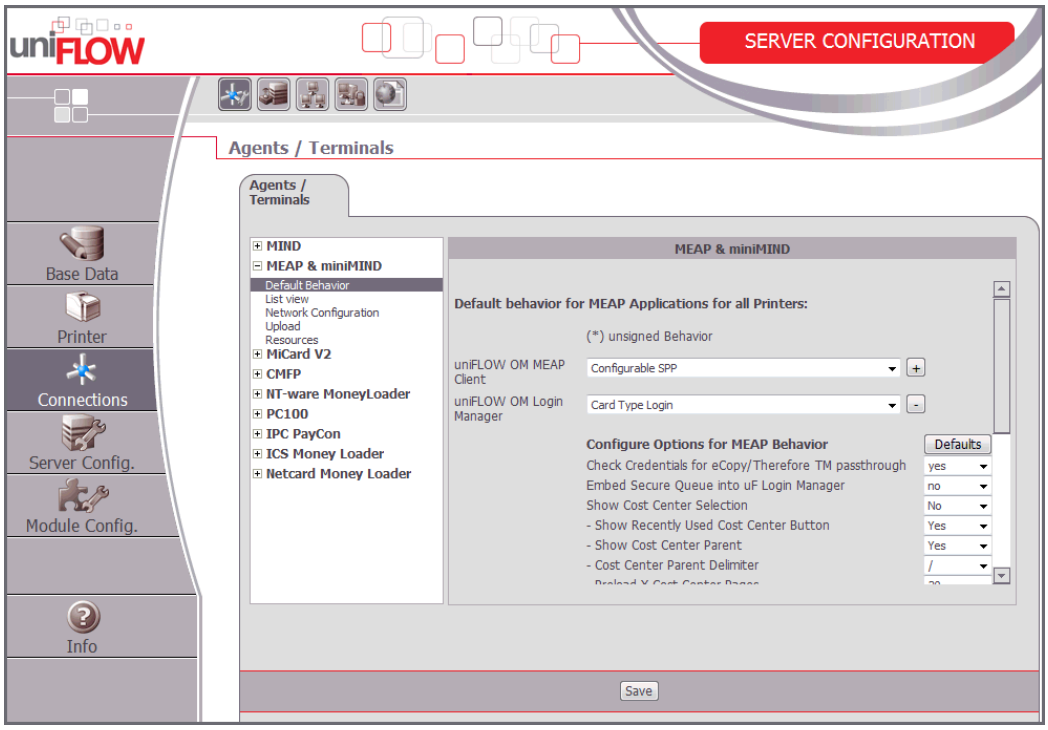
Configuration of the uniFLOW Login Manager

The uniFLOW Login Manager provides the following login types:

1. ***Card Type Login***
2. ***PIN-Code Type Login***
3. ***Username/Password Type Login***.

All three login types offer the select box ***Check Credentials for eCopy/Therefore™ passthrough***. If this has been selected, the user's credentials will be checked once the user tries to log on to the MFP, locked by the uniFLOW Login Manager. If the user's credentials have been successfully validated on the uniFLOW server, this information is passed through to eCopy/Therefore™. The user is then automatically logged on to eCopy/Therefore™.

The ***Card Type Login*** is shown below as an example.



For the rest of the configuration of the uniFLOW Login Manger and the used identification method please proceeed as described in uniFLOW Login Manager.

User Configuration

Other than uniFLOW, Therefore™ needs a ***Domain*** name for the user logon. In order to enable a simultaneous login to both uniFLOW and Therefore™, the domain name has to be available in uniFLOW as well.

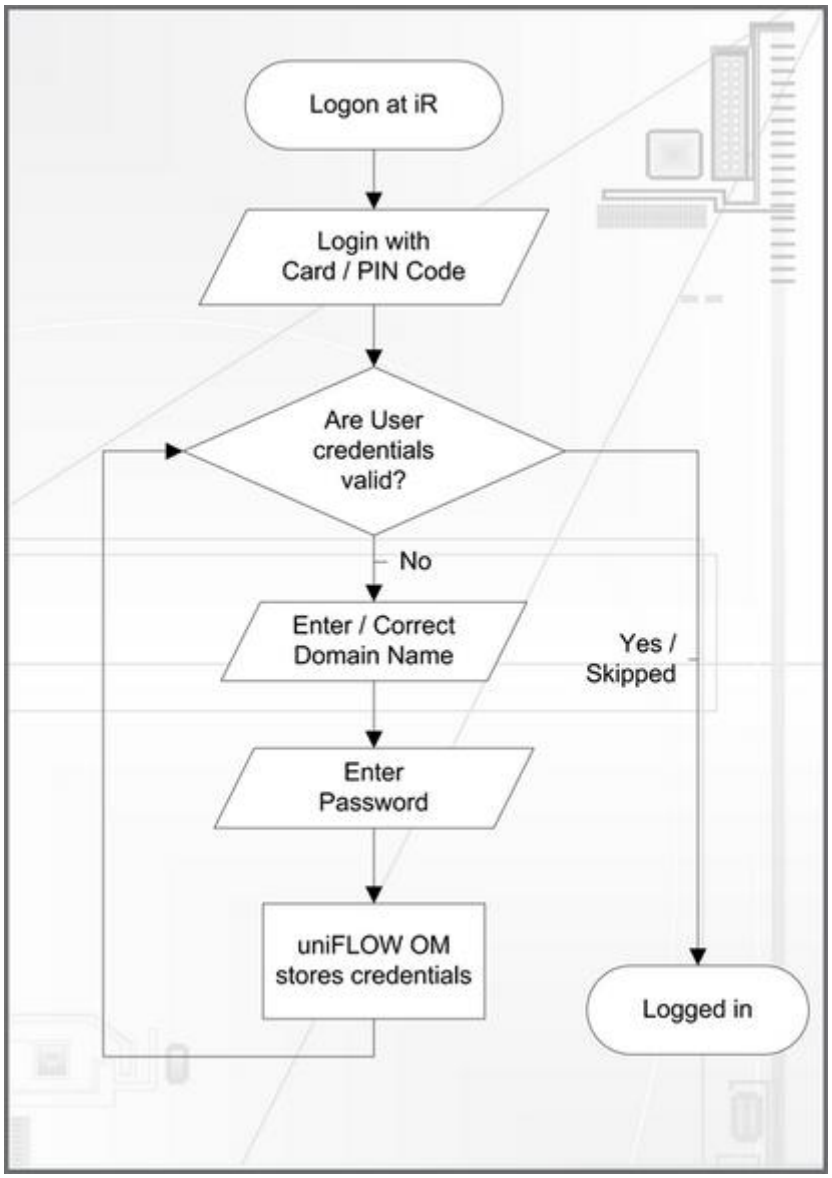
To achieve that, we have provided the ***Set Password*** window. For entering the domain name and password, please select the button ***Set User Password*** next to the Personal Folder entry field. Due to security reasons the password has to be entered by the users themselves. The domain name and the password entered in this pop-up window will be passed to Therefore™ after a successful logon. Thus, it is ensured, after a logon to uniFLOW, that all the necessary data for the logon are available on the Therefore™ device as well. Users are then authenticated within uniFLOW and Therefore™ at the same time. In case certain data is missing, e. g. the user password, the fields of the Therefore™ Login will, at the least, be pre-populated with the data which is already available.

In larger environments it would be quite time-consuming to enter the Domain name for every user separately.

Using Windows Active Directory the domain name of every user can be read out. For that reason we recommend having the users' domain names imported from the ***Active Directory via LDAP***. For more information concerning LDAP, please see User Configuration Possibilities in uniFLOW .

1.1.2 Entering new Logon Data via the Login Manager on the MFP

If there are many users it is quite laborious for every user to walk up to the Administrator and enter the ***Domain*** name and/or the ***Password***. To simplify the entering of new Login data, we have provided the possibility of entering the Login data via the uniFLOW Login Manager V2.0 or higher on the MFP as well. The advantage is obvious. No intervention of an administrator is necessary, users can enter their passwords "on demand".



1. Having logged on with card or PIN number it is checked whether the user has valid credentials (passwords) in uniFLOW in order to allow a Domain Logon.
2. Thereafter a screen for entering the logon details is displayed, where the user can enter data. If the domain name has been imported via LDAP the domain name will be pre-populated and only the password has to be entered. For security reasons it needs to be entered twice ***(Retype Password)***.

3. The entered data is checked. This may take a while. If the credentials are correct the logon process is completed and the user is logged on to the Therefore™ device.
4. If the credentials are not correct, the password entry form is redisplayed in which the logon data can be entered once again.

The users have to enter the logon data only once. The next time they identify themselves they will be logged on to the domain automatically.

This login is not mandatory. It can also be skipped by pressing ***Skip***, for example if a user only wants to copy.

When the uniFLOW Login Manager V2.0 or higher is configured to check for Therefore™ user credentials on demand, the uniFLOW Server processes the following steps to check if the credentials are valid:

1. If the computer, where the uniFLOW Server is installed on, is a member of the same domain as the user to check the credentials for, uniFLOW tries to temporarily logon the user to the local system.
2. If this fails or the uniFLOW Server is not a member of the domain, uniFLOW tries to discover the Domain Controller by the NetBIOS domain name given by the uniFLOW Login Manager V2.0 front-end. If a Domain Controller is found, uniFLOW tries to authenticate the user against this Domain Controller.
3. If this also fails, uniFLOW tries to authenticate the user against each LDAP connector configured in uniFLOW for user import.
4. If none of the above has worked, the user's credentials are expected to be invalid.