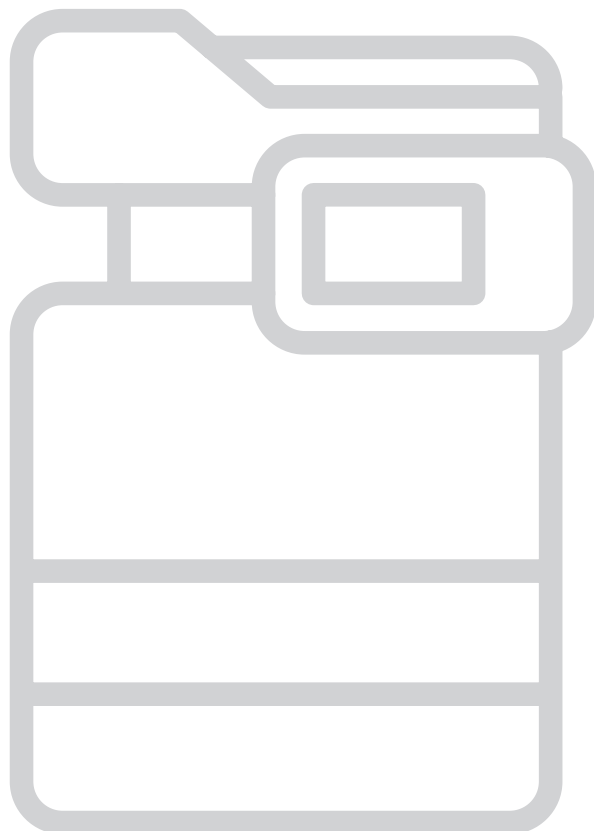


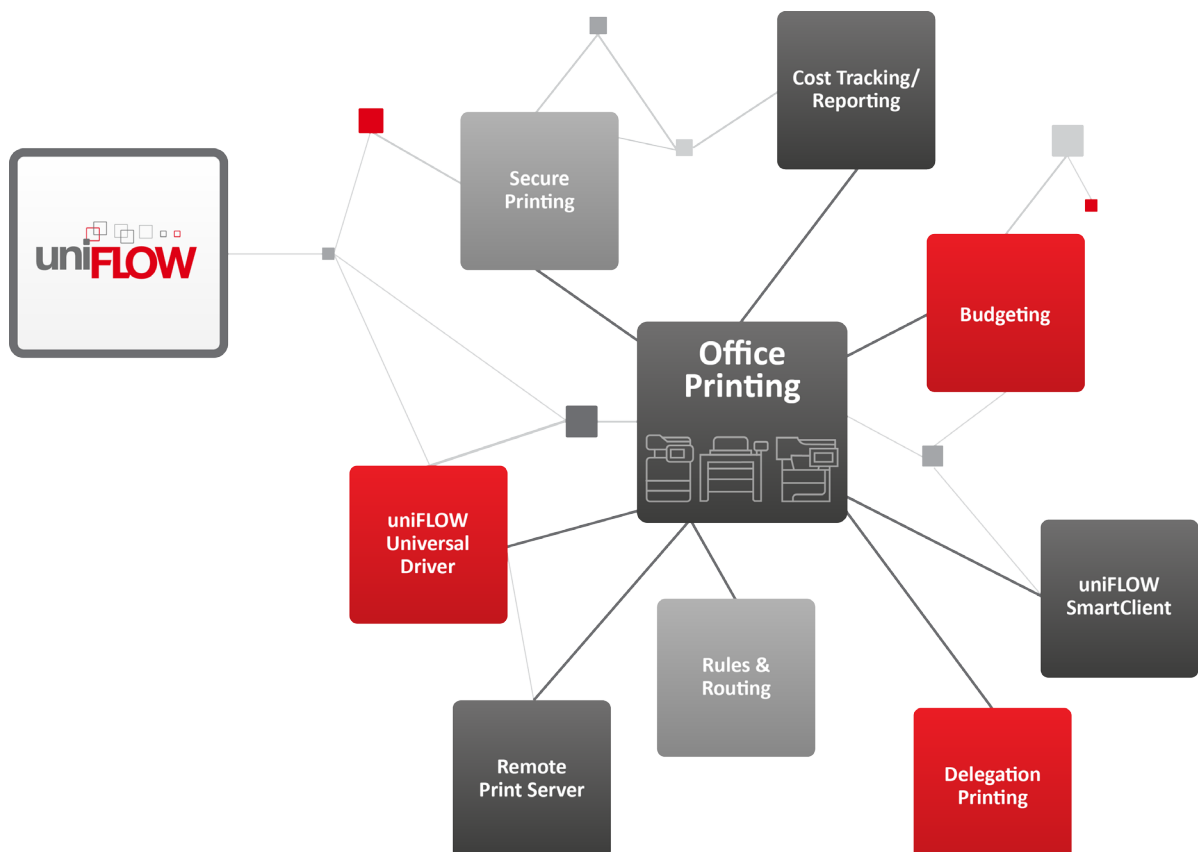
One Platform Solution

Office Printing



Improve Control and increase Efficiency

uniFLOW's secure printing functionality allows users to send sensitive documents to network printers from desktop and mobile devices. Documents will only be printed when the user is physically standing at the device. uniFLOW's unique features and technologies make it a powerful software application which maximizes security while increasing business productivity.





The uniFLOW Universal Driver

One driver for all – the uniFLOW Universal Driver's unique technology allows users to choose any network printer from which to release a job, regardless of model or manufacturer. The uniFLOW Universal Driver ensures correct output as requested which reduces user dissatisfaction with the printing process and saves costs by cutting waste.

Secure Printing with the uniFLOW Universal Driver

The uniFLOW Universal Driver guarantees correct print job outcome because printer specific control codes are only added to the spool file once the make and model of device which the job is being released to is known. This reproduces accurate information therefore the output is as expected by the user, regardless of model or manufacturer.

Access Control of Driver Properties

In uniFLOW, printing features can be restricted by Access Control Lists (ACLs). With the uniFLOW Universal Driver, individual driver options and driver settings displayed to the end user can be controlled by mapping the Active Directory® users/groups to uniFLOW ACLs. This means uniFLOW can offer personalized drivers for specific users/ user groups without having to create separate driver packages. As a result, IT administrators only have to maintain one single driver so, in environments where drivers require certification, just one driver package needs certification which saves valuable time and effort.

Built-in Encryption and Compression

Printing via the uniFLOW Universal Driver provides additional layers of security when transmitting print jobs across the network because it encrypts the data. While jobs are in transit they remain encrypted until they reach the device from where they can be securely released. In addition, the image quality that controls the size of the image transferred to the printing device can automatically be compressed, thus decreasing the amount of data transmitted via the network.

Easy Import of Manufacturer Printer Drivers

uniFLOW can import the manufacturer's specific printer drivers and map the codes to the options available to the user. This specific driver information is stored in a uniFLOW Device Information File (DIF). If a DIF file for a specific printer does not exist it can be created by running the DIF Creator wizard, though only by authorized technicians.

Seamless Integration into Citrix Environments

The uniFLOW Universal Driver can be used in a Citrix environment simply as a shared printer from the uniFLOW server. The connection can be made either directly on the Citrix client machine or on the Citrix XenApp® server. Accounting of print jobs will take place on the uniFLOW server as usual. Both the uniFLOW Universal PCLXL Driver v5.4 and the uniFLOW Universal PS Driver v5.4 are verified to be compatible with the Citrix XenApp platform.



uniFLOW Universal Driver Types

uniFLOW Universal Driver PostScript

The uniFLOW Universal Driver for PostScript enables printing in mixed environments and routing from PostScript to PCL5 printers. For secure printing, a thumbnail preview of the first page of the print job is available. This extra feature does require at least one Job Conversion Instance (JCI) to be available. The uniFLOW Universal Driver for PostScript utilizes genuine Adobe PostScript.

uniFLOW Universal Driver PCL6 (PCL/XL)

For PCL environments, the PCL6 (PCL/XL) driver can be used. This driver requires the data format for both input and output to be PCL. This driver does not require a JCI, resulting in faster and less expensive job processing.



Supporting multiple Vendors

It is inevitable that, at some point, every user will need to print a confidential document. uniFLOW's secure printing functionality allows all users to send their sensitive documents to network printers from their desktops or mobile devices and to have the job printed only when they are physically standing in front of the device.

Mobile and Desktop-based Printing

uniFLOW allows users to print securely wherever they are working so they can print from their desktop PCs, a host-based system such as SAP® or their mobile phone. Thanks to the uniFLOW multiple identity system, all their jobs will be held securely in users' personal print queue.



uniFLOW app
for iPhone®/ iPad®
for Windows Phone®
for Android™

Driverless
web upload

Email
printing

Internet
printer driver

Macintosh®

Google
Cloud Print™

Apple
AirPrint®

UNIX® /
Linux®

SAP® Host
Printing

Multiple Authentication Methods

Document security is maintained because users have to be physically standing next to the printer before any job is released. To prevent unauthorized use of devices, users are required to authenticate themselves at the device using a card login, username/password, PIN code, job code, anonymous login or a combination of the options.

Release to any Device

All print jobs are stored in a user's personal secure queue until they are ready to release them at the printer of their choice. This can be any networked printer within the customer environment. Embedded applets are available for various Canon devices, Océ Large Format Printers and selected devices from Konica Minolta, Xerox, Samsung and OKI. Users can select which of their print jobs to release from a list displayed directly on the device screen. For devices without an embedded platform, users can use devices connected via micro-MIND or the uniFLOW Release Station or they can use smartphones and tablets to release their jobs securely.

Integrated Cost Tracking and Accounting

All organizations need to understand how their printing budget is being spent in order to control costs and reduce waste. uniFLOW allows organizations to track, assess and charge back all printing, copying, scanning and faxing costs on any connected device so that costs can be allocated to departments or specific projects correctly.

Multi-Level Cost Centers

uniFLOW allows organizations to assign costs to a multi-level cost center to allow chargeback to the appropriate customer or project code. When sending a job to print, a pop-up screen can appear on the user's PC allowing them to select which cost center to charge the job to. A similar screen can be displayed on the multifunctional device (MFD) control panel.

The screenshot shows the uniFLOW user web interface. At the top, it says 'uniFLOW user web' and 'Booking.pdf'. Below this, there's a filter dropdown set to 'Name or Description: All' with a 'Clear filter' link. A table lists cost centers with columns 'Cost Center Name' and 'Description'. The table has three rows: 'Project 335689' with description 'Regional Customer Event ASIA', 'Project 335847' with description 'Strategic Development Alliance', and 'Development' with description 'New Projects'. Below the table, there's a yellow highlighted section for 'Human Resources', followed by 'Controlling' and a 'Comment' field. At the bottom, there's a pagination bar showing 'Page 1 of 1' and '1 - 7 of 7'. There are two buttons: 'Delete print job' (red) and 'Assign Cost Center' (green). A checkbox at the bottom left is labeled 'Print Job is not chargeable'.

Cost Center Name	Description
Project 335689	Regional Customer Event ASIA
Project 335847	Strategic Development Alliance
Development	New Projects

Track Cost Savings

uniFLOW allows organizations to monitor savings made through improved printing practices e.g. deleting secure print jobs that have not been printed. With this information, better printing rules can be established and a return on the original investment, based on using a managed printing system, can be realized.

Track the environmental Impact

By being able to accurately monitor usage and savings, uniFLOW can illustrate how many trees have been saved or how many grams of CO2 have been saved by not having printed some jobs. These reports can show how an organization has reduced its environmental impact.

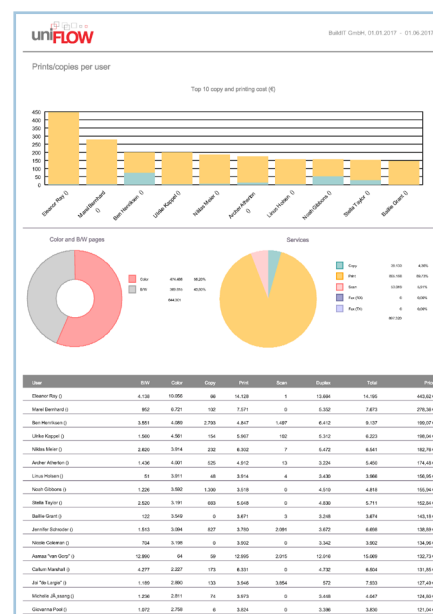


Scheduled Creation of Reports

uniFLOW includes over 60 different standard reports that can be generated on demand or at regular intervals. Reports can be emailed automatically to an appropriate person at a scheduled time e.g. monthly. In addition, businesses can also add their own custom reports by using the industry standard Crystal Reports program.

Export of reporting Data

uniFLOW collects an enormous amount of data regarding the printing habits within an organization. While this data can be accessed via the normal reporting engine, users often need to have this data exported into other formats. uniFLOW can export data in a number of different formats, including XML and CSV, for integration with back office accounting systems. To increase the ability to fine tune the report for later usage, users are able to create additional custom columns within the CSV export. These columns contain static text which is defined by the user.



Easy Integration with Business Intelligence Systems

uniFLOW provides the ability to access all data collected via the usual reporting engine including Print Intelligence Report. There is also often the need to be able to access the data directly from the SQL Server®. With uniFLOW, data from the SQL Server can be provided to business intelligence systems via pre-defined and optimized queries providing a live view. Example templates for business intelligence applications like Qlik Sense® and Microsoft Power BI™ are available.

Manage User Budgets via uniFLOW

To keep printing and copying costs under control budgets can be established for individual users, groups or cost centers. If the budget is exceeded, printing/copying can be stopped altogether, limited to black and white or users can be notified that their funds have run out.

Enforce User Budgets

With uniFLOW, administrators can simply monitor and enforce user budgets so that print and copy activity can be blocked when the user, group or cost center has no funds left. uniFLOW budgets can be authorized at different levels. However, if a user has budgeting enabled at user level and at cost center/group level, only one budget will be used; budgets are expended in the following order: cost center, group then user.

Recharge Balances

Balances can be recharged automatically at any time via internetbased credit card payment systems such as PayPal™ and WorldPay. Cashiers can also add funds manually to a user's account where a personal cash-based system is required.



Create intelligent Printing Rules

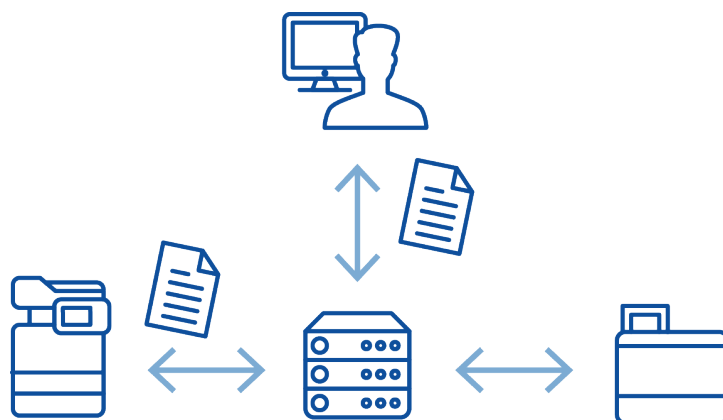
With uniFLOW, printing policies can easily be implemented to save money and improve the environmental performance. uniFLOW can redirect jobs appropriately so that only small print jobs are routed to laser printers whilst larger jobs are rerouted to the cheaper and faster multifunctional devices. Very large print tasks can even be rerouted to the central print room.

Route Print Jobs to another Device

The nearest printer may not be the most economical or appropriate for the job. uniFLOW can automatically redirect jobs to a different printer regardless of make or model, to a secure printer or - for large jobs - direct to the in-house print room. A record of all cost savings is stored in a database for later reporting.

Interactive Routing of Print Jobs

uniFLOW can apply rules automatically or prompt users to choose the most appropriate device. Routing prompts can, for example, show the user a list of different printers to route the job to together with the prices charged for each option.



Predefined Job Settings

With uniFLOW, administrators can also dictate how certain jobs must be printed e.g. emails always in black and white and large jobs double-sided. These rules can be enforced automatically or prompts displayed to users, together with the associated costs, for them to accept or not.

Flexible Rule Options

Administrators have a high degree of flexibility so printing rules can be applied to individual printers and user groups or even specific times of a day/day of the week.

Create Cost Awareness

Users are often unaware of actual printing costs. Displaying the associated costs for each print job will increase awareness and influences future print behavior.

The screenshot displays the uniFLOW user web interface. At the top, the header includes the uniFLOW logo, the text 'user web', and job details: 'PIR_Summary.rpt', 'Pages: 48', 'Color Pages: 0', and 'Price: 1.9200'. A sidebar on the left contains a menu icon and an information icon. The main content area is divided into three sections: 'Job Information', 'Printer Information', and 'User Information'. The 'Job Information' section lists: Job Name: PIR_Summary.rpt, Spool Time: 05/31/2017, 10:34:58 AM, Format: A4, Pages: 48, Color Pages: 0, Copies: 1, and Price: 1.9200. The 'Printer Information' section lists: Printer Name: Input. The 'User Information' section lists: User Name: Administrator and Machine Name (Client): MKTUNIFLOW2.

Job Information	
Job Name:	PIR_Summary.rpt
Spool Time:	05/31/2017, 10:34:58 AM
Format:	A4
Pages:	48
Color Pages:	0
Copies:	1
Price:	1.9200

Printer Information	
Printer Name:	Input

User Information	
User Name:	Administrator
Machine Name (Client):	MKTUNIFLOW2



Delegate Print Jobs to Users and Groups

In most instances a print workflow is “single-user” even though many working practices require print jobs to be delegated to other users or groups. This is a key requirement especially in the education sector. uniFLOW’s delegation printing allows a user (the delegator) to share all their print jobs with selected users or groups (delegatee).

Users stay in Control

Delegation printing is configurable on an administrator level and, more importantly, individual users can do this too. Users can configure their personal preferences in the uniFLOW User Web. This feature can be configured for each print queue, allowing users to choose whether a secure print job should be delegated or not.

Automatic Notifications create transparency

Automatic email notifications inform recipients if they have been added or removed as a delegatee creating full transparency. When a print job is released, an automatic email notification can be sent to the delegator.

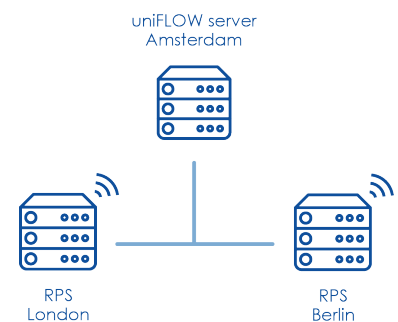
The screenshot displays two overlapping panels from the uniFLOW User Web interface. The background panel is titled 'ADD USER' and contains a yellow warning box stating: 'Note that the users will be able to see and release your print jobs! They also will receive a notification about this delegation.' Below this is a search bar and a list of users: Administrator, Ben Sumner (highlighted in yellow), Colby, Frank, Helen, Ivy, and Michael. At the bottom of this panel are 'Add and save' and 'Cancel' buttons. The foreground panel is titled 'PRINT JOB DELEGATION SETTINGS' and features a toggle switch for 'Enable print notification', which is currently turned on. Below the toggle, it says 'A notification is sent if a recipient prints one of your jobs.' At the bottom of this panel are 'Save' and 'Cancel' buttons. A footer bar at the very bottom shows 'Page 1 of 1' and '1 - 8 of 8'.

The uniFLOW Remote Print Server

To successfully manage print processes in remote locations it is often the case that only removing or restricting features will permit these offices to be integrated. The uniFLOW Remote Print Server (RPS) allows a large part of the functionality licensed on the main uniFLOW server to be installed on a second server within the organization.

Extension to the uniFLOW Server

The RPS is an extension to the uniFLOW Server itself and allows organizations to connect remote branch offices to uniFLOW providing key functionality such as secure printing, accounting, mobile printing, scanning and budgeting. The RPS cannot be installed on its own; it requires a regular connection to a central uniFLOW Server in order to upload accounting information and user credentials even if the server is not always online. All transmitted data is encrypted and compressed ensuring a secure integration of remote locations.



Collective Release Queue Management (CRQM)

When operating in a CRQM environment, users can collect each print job from any device that is connected to a print server in the collective as job information of any active job is available on every remote print server with only a short delay.

Failover Support

Organizations operating with an RPS can be sure that the majority of uniFLOW functions will be preserved at remote locations even if the connection to the central uniFLOW Server fails, guaranteeing a constant secure print environment.



The uniFLOW SmartClient

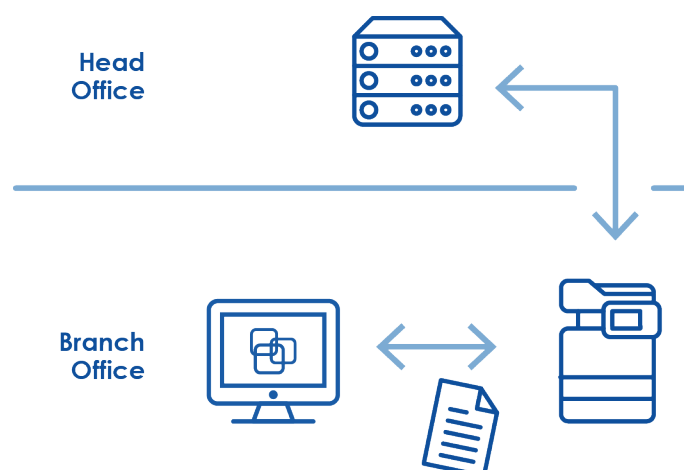
Print management of branch offices or remote locations has become a costly area. Printing can also soak up considerable bandwidth which may prevent key business applications running smoothly. The uniFLOW SmartClient allows organizations with a multi-site infrastructure to print securely and track costs without the need for local print servers in different locations.

Print Server Reduction

Maintaining a print server incurs high expenses and a heavy administrative burden on the IT administrator. With the uniFLOW SmartClient, organizations can employ standard uniFLOW features, such as secure printing and accounting in remote locations, without needing to invest in a dedicated print server on-site.

Reduced Network Traffic

When printing is managed by a print server, print data is firstly sent from the client PC to the print server then on to the destination printer i.e. the data has to travel the network twice. By integrating the uniFLOW SmartClient, print jobs are sent straight from PC to printer reducing network traffic by 50%.



Location aware

When moving to different locations, the uniFLOW SmartClient will automatically download the printing configuration for the current site. This means users only have to “file, print” to one print queue, regardless of where they are and what network printing resources are available. Users can still print securely, even when connection to the uniFLOW server is interrupted.

Flexible Design

Configuration of the setup can be adapted to fit specific customer requirements e.g.

- Secure print jobs can be stored on the client PC, the print server or the Canon imageRUNNER ADVANCE
 - Secure job information can be stored locally with the spool file or centrally on the server
 - User authentication can be completed on the uniFLOW SmartClient, the uniFLOW server or Canon imageRUNNER ADVANCE
-

Mix 'n Match

As some key uniFLOW features such as mobile printing, scanning and budgeting require a server, uniFLOW allows organizations to mix 'n match, running some locations with print servers and others with uniFLOW SmartClient only, or a combination of both at each site, providing great flexibility.





Immediate Benefits

Single Release Queue



All print jobs, regardless of how they are submitted to uniFLOW, appear in the user's personal secure print queue and can be released from any device, regardless of model or manufacturer i.e. users can print securely using any connected device.

Control and reduce Costs



Using the built-in reporting system, organizations can track and assess printing, copying, faxing and scanning usage, allowing internal costs to be charged back correctly and current usage audited. Routing of jobs result in immediate cost improvements and increased efficiency of processes.

Increase Document Security



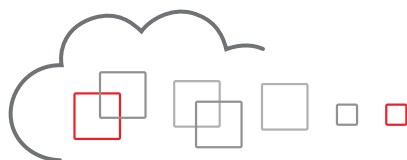
To prevent unauthorized use of the devices and to keep valuable and confidential information safe, uniFLOW requires users to identify themselves at a device. This, keeps confidential documents out of the wrong hands.

Help Save the Environment



uniFLOW can provide the analysis to help implement an environmental printing strategy, saving valuable trees and improving environmental performance.





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