



Mercury Suite: Global Printer Driver (GPD) V3.0 for Windows



■ Follow"2"Print



■ Cloud Printing



■ Serverless Printing



■ MPS Integration



■ Encryption



■ Forms

SAP Certified
Integration with SAP NetWeaver

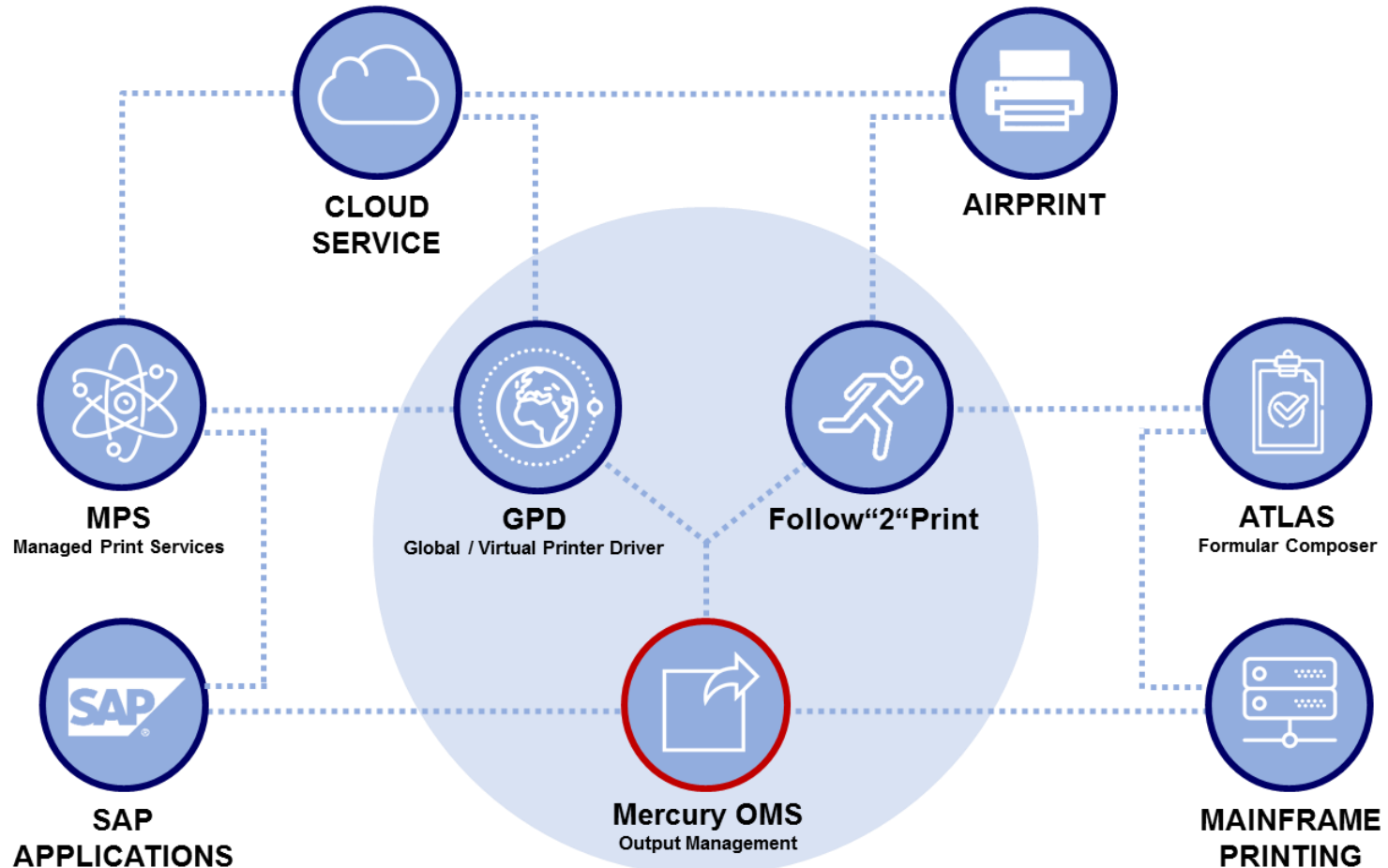
The „who is who“ of docuFORM

- Company founded in 1986 in Karlsruhe by employees of the Technical University of Karlsruhe - until today an independent company!
- First projects in cooperation with the Institute for Manufacturing Technology, TU Karlsruhe for companies such as Bosch and Daimler AG
- Acquisition of several specialist companies and their know-how
- Development orders for print controllers from Océ, Xerox, FujiXerox Japan, Heidelberger Druck, EFI
- Strategic reorientation to a pure software company in the field of printing solutions. Launch of the new core product **Mercury** in 2000.
- Acquisition of sales and trading partners – worldwide
- Unique selling points, thanks to a manufacturer-independent and independent solution: **Mercury** suite!
- 2015: Development of a manufacturer-independent, virtual printer driver (GPD).
- 2017: Europe-wide patenting of the Global Printer Driver (GPD).
- Today: Leading provider of DMS, OMS and MPS solutions.

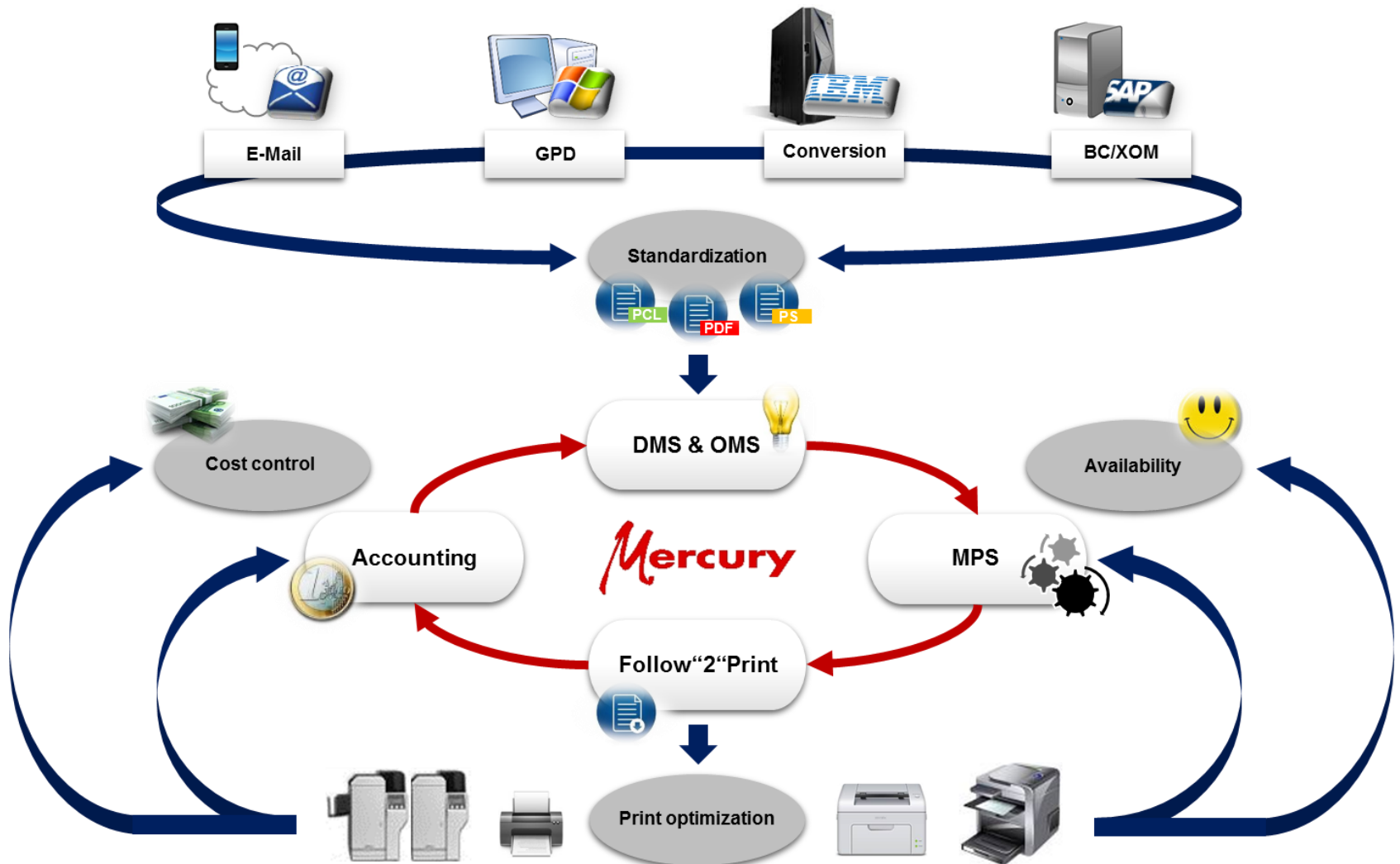
What is Mercury?

- Individual printing solutions and workflow through a modular system for medium-sized and large companies.
- Mercury sees itself as a vendor-independent and overarching solution. This provides the user with the highest level of investment protection.
- The Modular System Mercury covers the following topics:
 - Document Design & Management (ATLAS)
 - Interfaces to host systems and required data conversions
 - Certified SAP BC / XOM interface
 - Output Management & PDF Workflow
 - Comprehensive MPS solution
 - Accounting & Follow "2" Print (multi-vendor embedded apps)
 - Windows Global Printer Driver (GPD)
 - end'2'end encrypted printing
- This comprehensive workflow optimizes the processes at the user and simplifies support and maintenance concepts for the user.

All inclusive Document & Output Management System



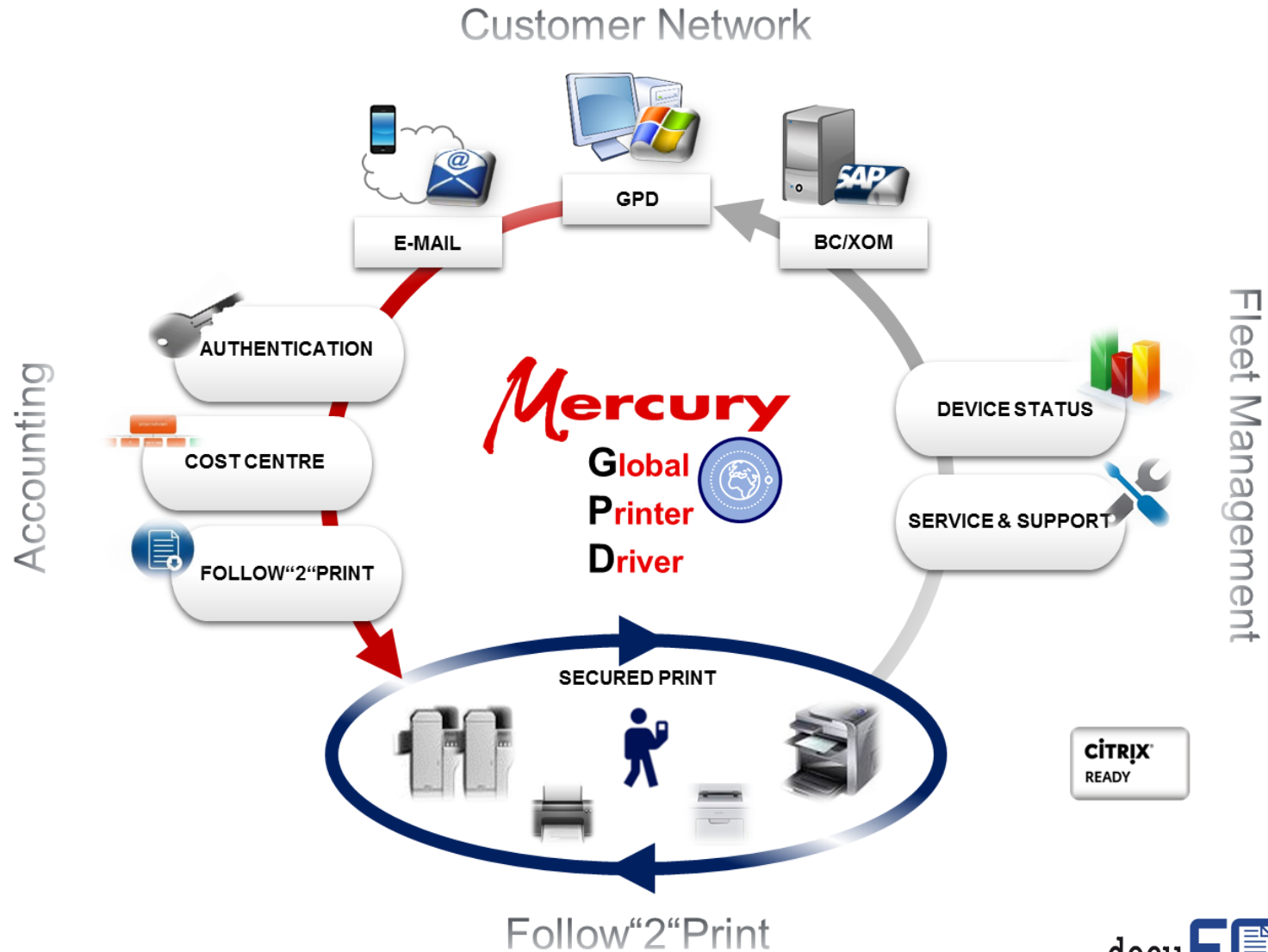
Comprehensive & modular Document & Output Management



What is the Global Printer Driver?

- A virtual printer driver for all Windows applications
- Manufacturer-independent printing solution with a uniform user interface
- Integration of
 - Follow "2" print and pin printing directly integrated
 - Secure printing with end-to-end encryption
 - Cloud Printing – AirPrint support
 - Form and overlay functionality
 - Integrated PDF generation and e-mail dispatching
 - Serverless Printing (cloud-based) Q4/2019
- Self-learning and maintenance-free system - this eliminates any administration and maintenance costs



System structure of the customer network



Key Features

- Uniform deployment of one "Global Printer Driver" via MSI
- The GPD accesses the device properties in the network in real time via SNMP
- Manufacturer-independent user interface that is the same for all device types
 - Pin printing realized directly in the GPD
 - Follow "2" Print integrated directly into the GPD
- Device search and configuration in the GPD directly by the user
 - according to device properties in real time
 - according to current locations
- Generation of a device-specific print data stream just directly before the respective printing process (thereby guaranteeing optimum printout!)
- Can be used for any Microsoft Windows application
- Self-learning and auto-configuring print workflow
- Integrated PDF generation and workflow

Key Highlights

- Elaborate administration of printer drivers is completely eliminated
- Microsoft print server can be completely omitted
- By auto-install and learn ability omitted:
 - any administration effort
 - Updates and upgrades of traditional printer drivers
 - Follow-up with reconfigurations in the device diversity
- Device properties and associated selection for printing are offered to the user in real time
- Optimum printing is guaranteed at any time, regardless of the device, and across all manufacturers
 -  optimal, fully integrated Follow "2" Print solution 
- Use of all device properties of all manufacturers at any time
- Optional integration of Mercury MPS and Cloud Server

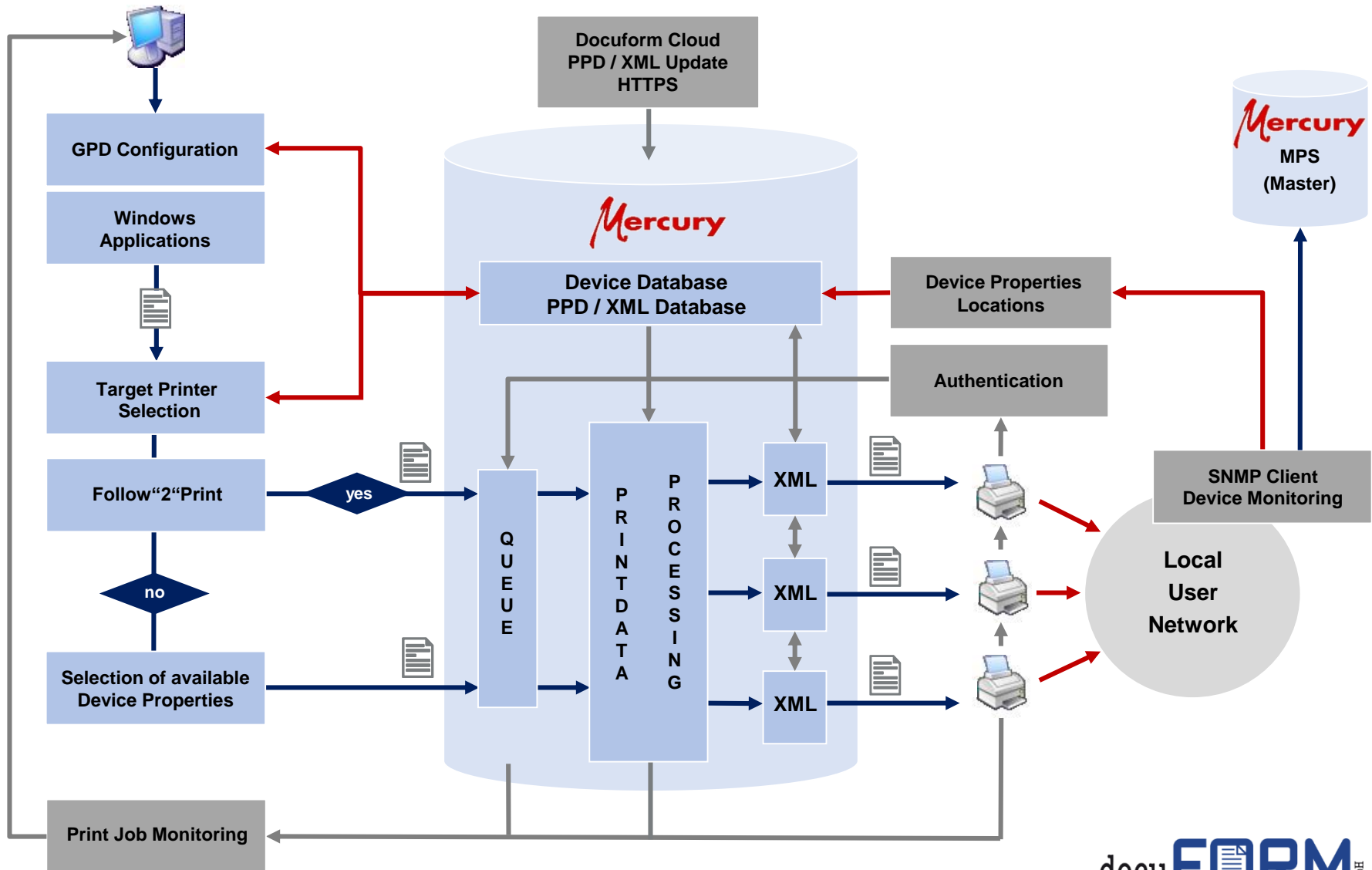
The Technology

- Central database with device-specific XML information
- XML information is obtained from the manufacturer PPD
- Device properties are managed in real-time via SNMP in the network
- At workplace, only a neutral Postscript file is generated
- Print data is generated on Mercury Server from PS- and XML files
- Print processing happens only shortly before the actual printing, thereby
 - always optimal printout
 - ideal for follow "2" print
- XML data is maintained and serviced centrally at docuFORM
- Automatic update of the XML file in the cloud
- Automatic update of the device properties by SNMP in the network

The Workflow

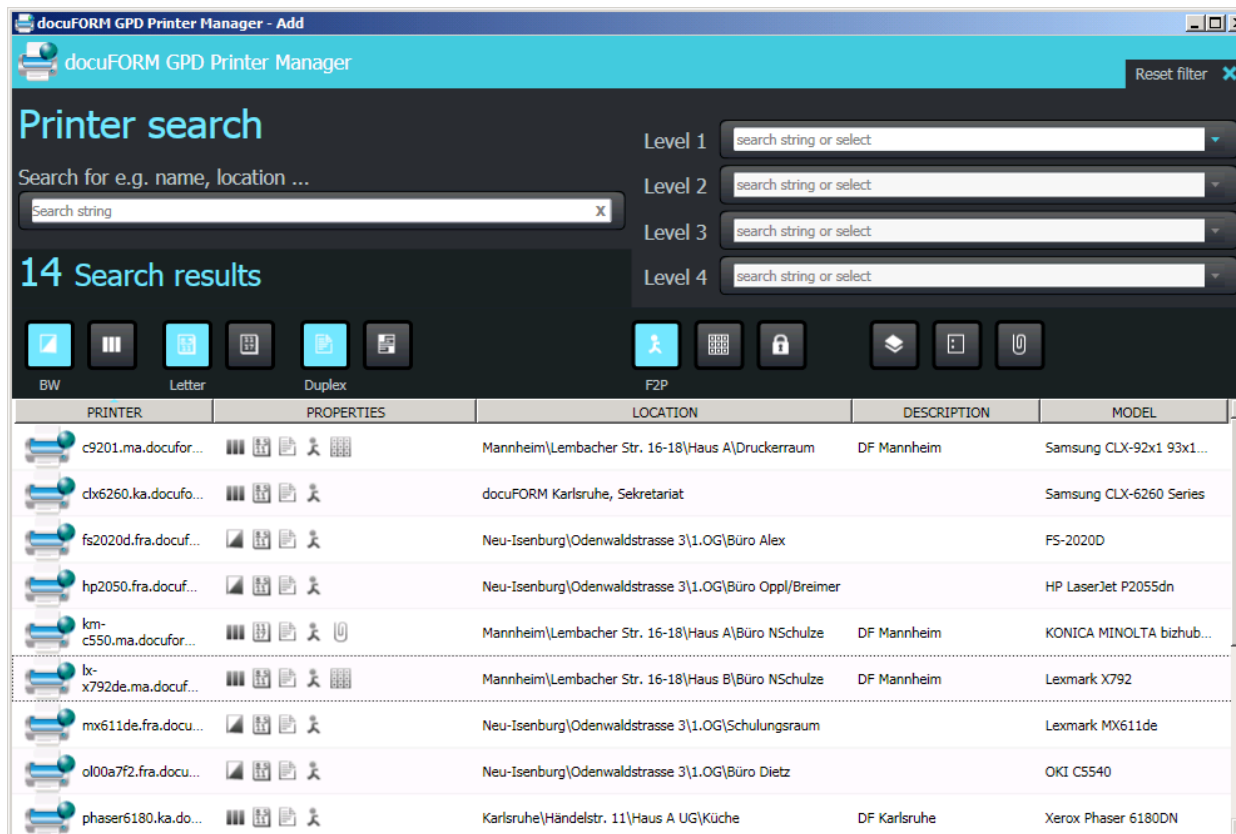
- At the workplace, the target device and print properties are selected
- The GPD generates a neutral postscript file at the workstation
- Target and print requests are "pinned" to the PS data stream
- Follow "2" Print or Pin Print option is selected
- Optional PDF generation is selected
- PS data with manufacturer information is passed to the Mercury
- Mercury checks the current port and device type
- The appropriate XML device file is requested from the database
- The printable data stream is created from the PS and XML file
- The output requests of the user are converted into control commands
- Printing always takes place with optimal device properties

Workflow – local network

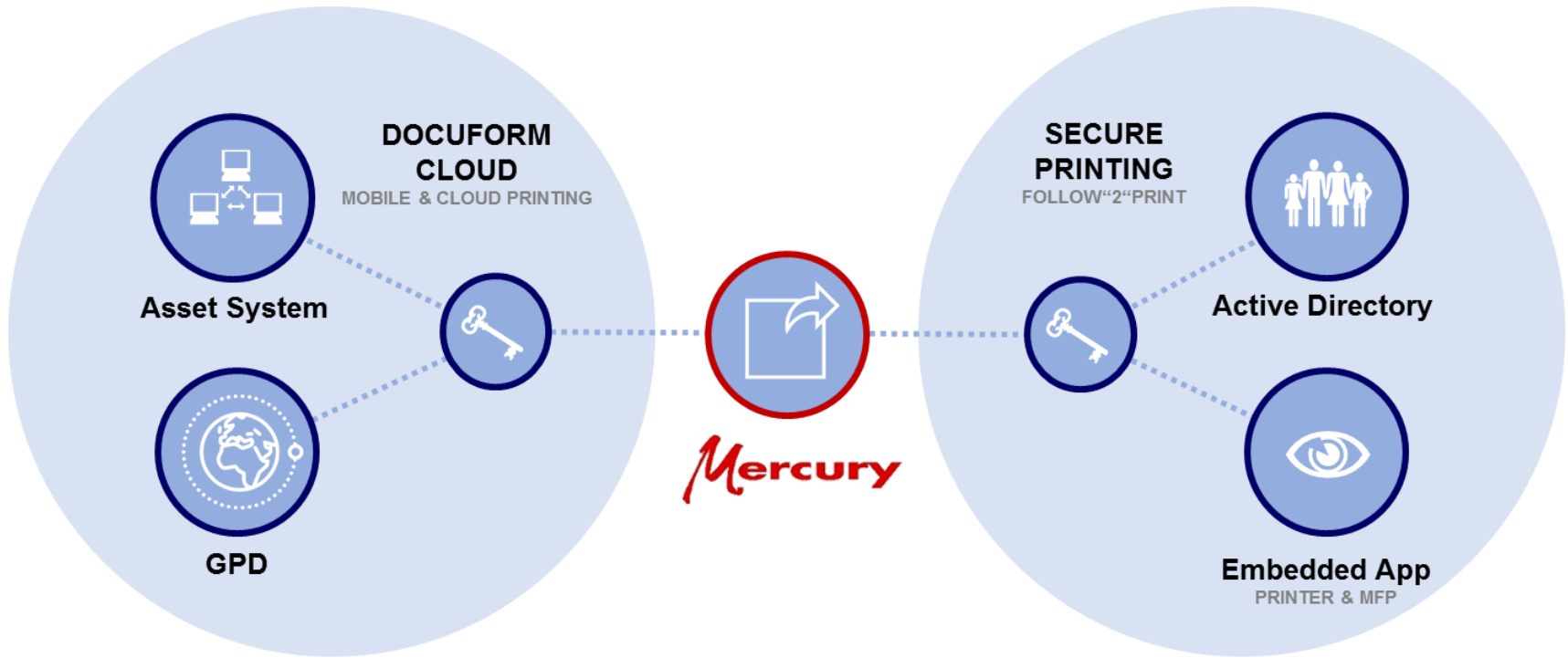


Functional procedure - GPD configuration

- The user selects his "favorite printer" in the GPD by selecting from the Mercury device database, which is always kept up to date via SNMP.



Mercury Suite & GPD – Data security in the network!



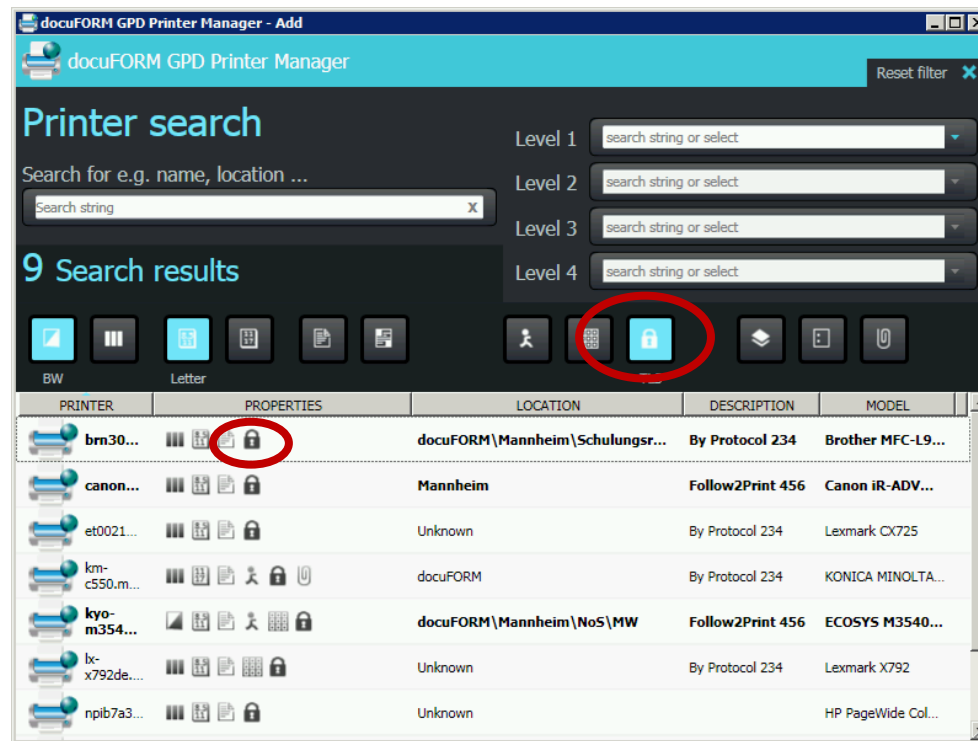
SAP Certified
Integration with SAP NetWeaver



ALL INCLUSIVE DOCUMENT & OUTPUT MANAGEMENT SYSTEM
END“2“END ENCRYPTION - AIRPRINT & EMBEDDED PRINTER APPS ACROSS ALL MANUFACTURER

Functional procedure - GPD configuration inclusive end'2'end encryption V3

- With the latest GPD version, it is possible to configure both, direct printing and Follow "2" print printing with end'2'end encryption. This option also applies to finding output devices through the GPD GUI.

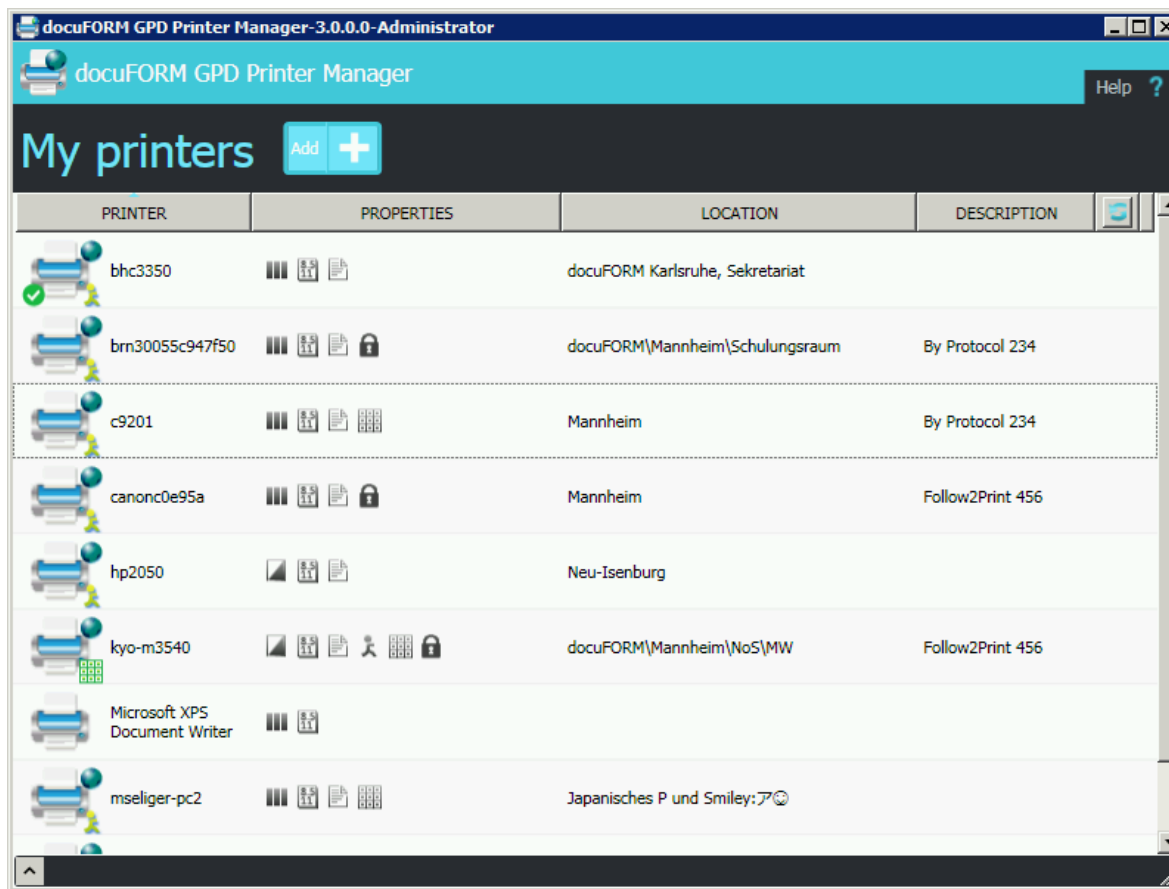


→ unique selling point

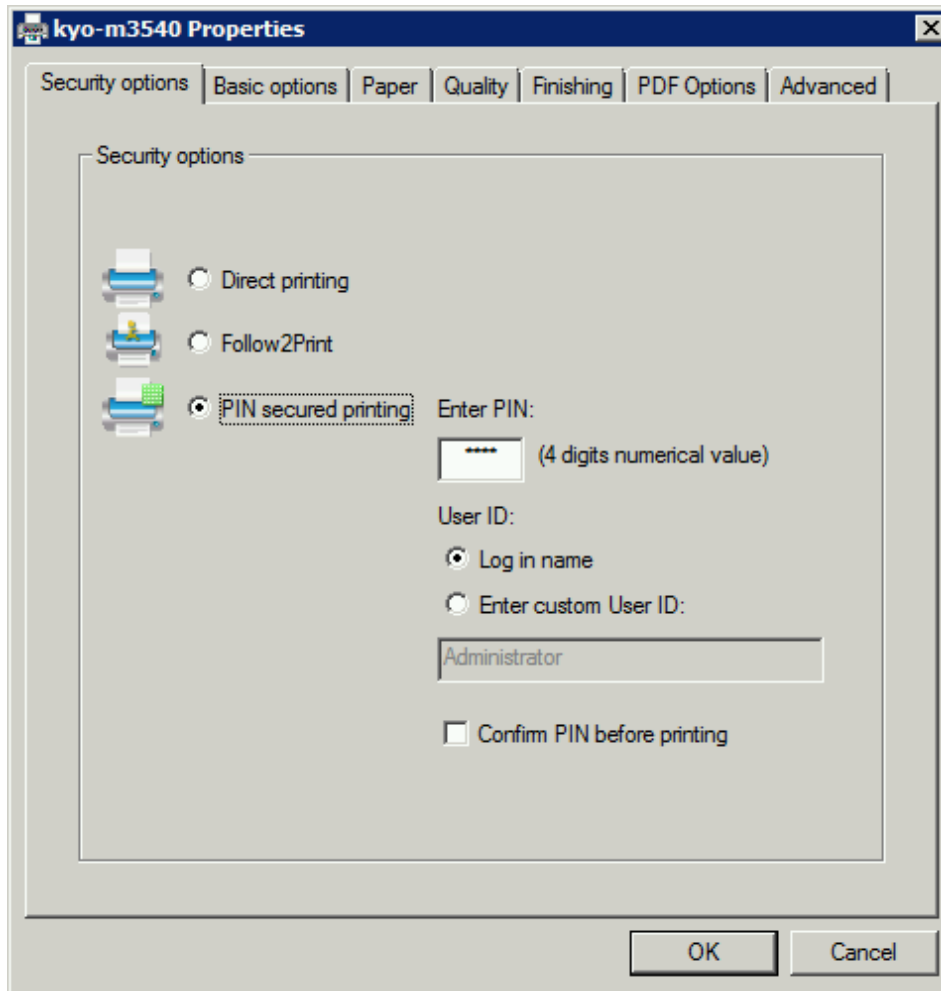


Functional procedure - GPD configuration

- The user can configure any number of virtual printers in the GPD according to desired properties.



Functional procedure - printing from the application



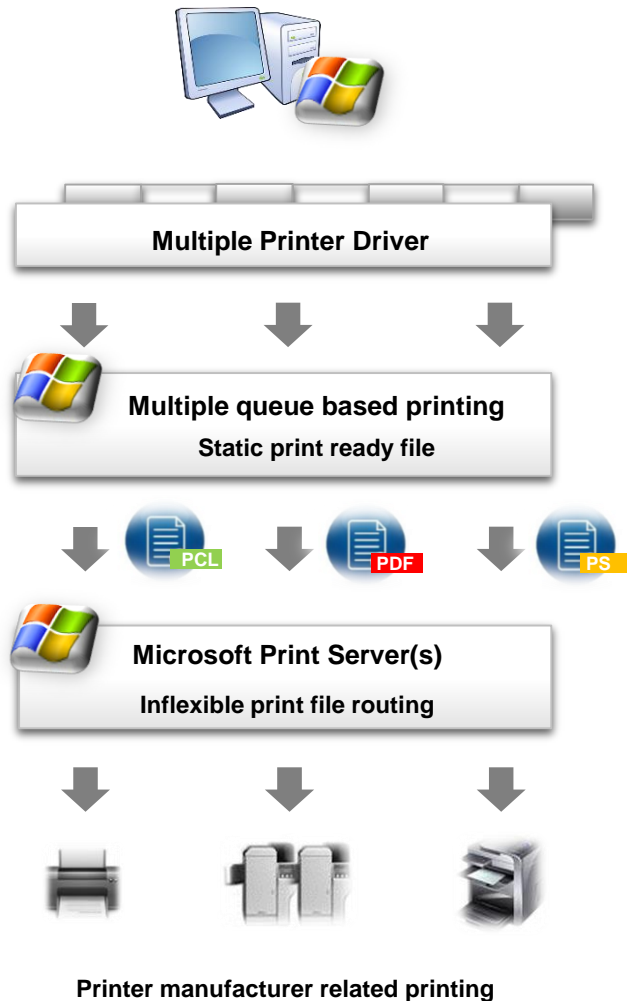
Directly integrated:

- Follow“2“Print
- Pin-printing
- Across manufacturers

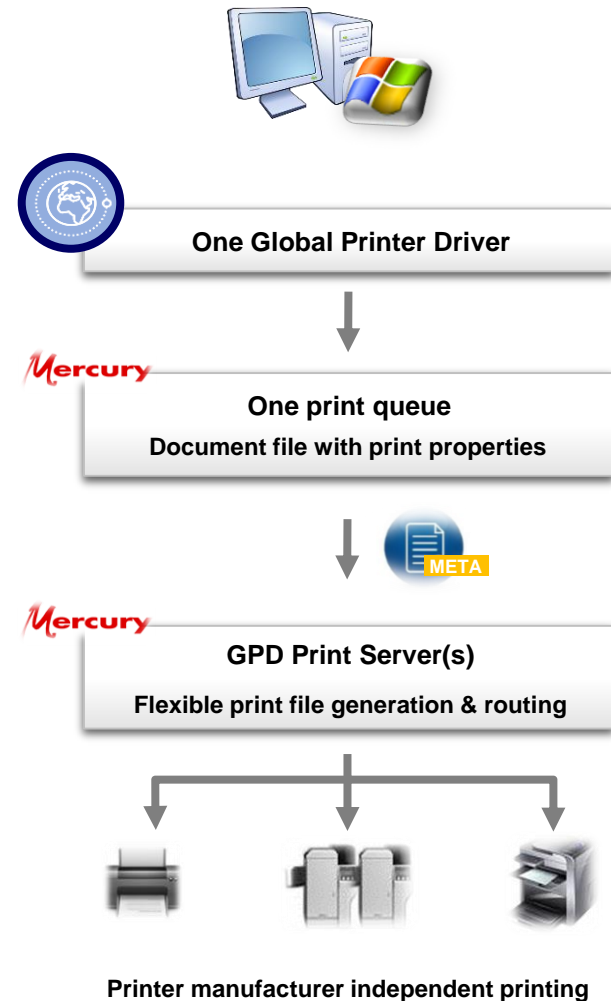
➔ unique selling point



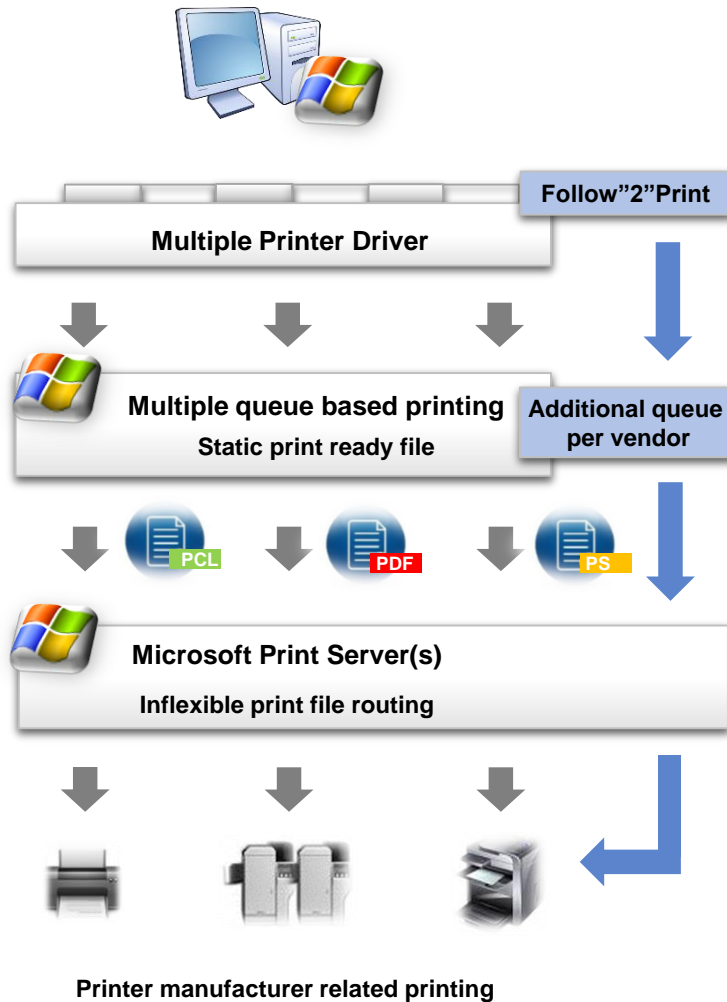
Windows Network Printing TODAY



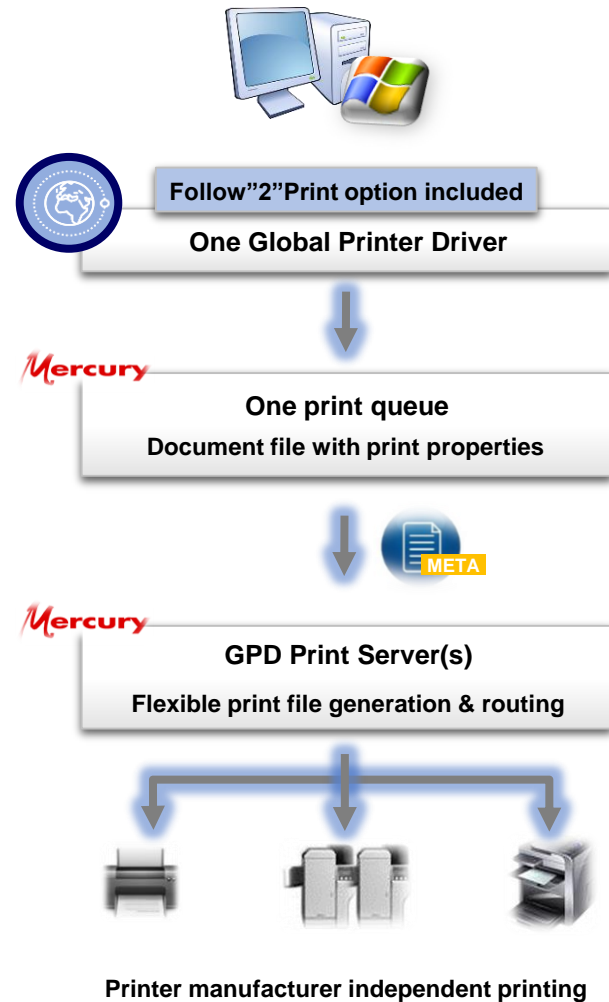
Windows Network Printing NEW



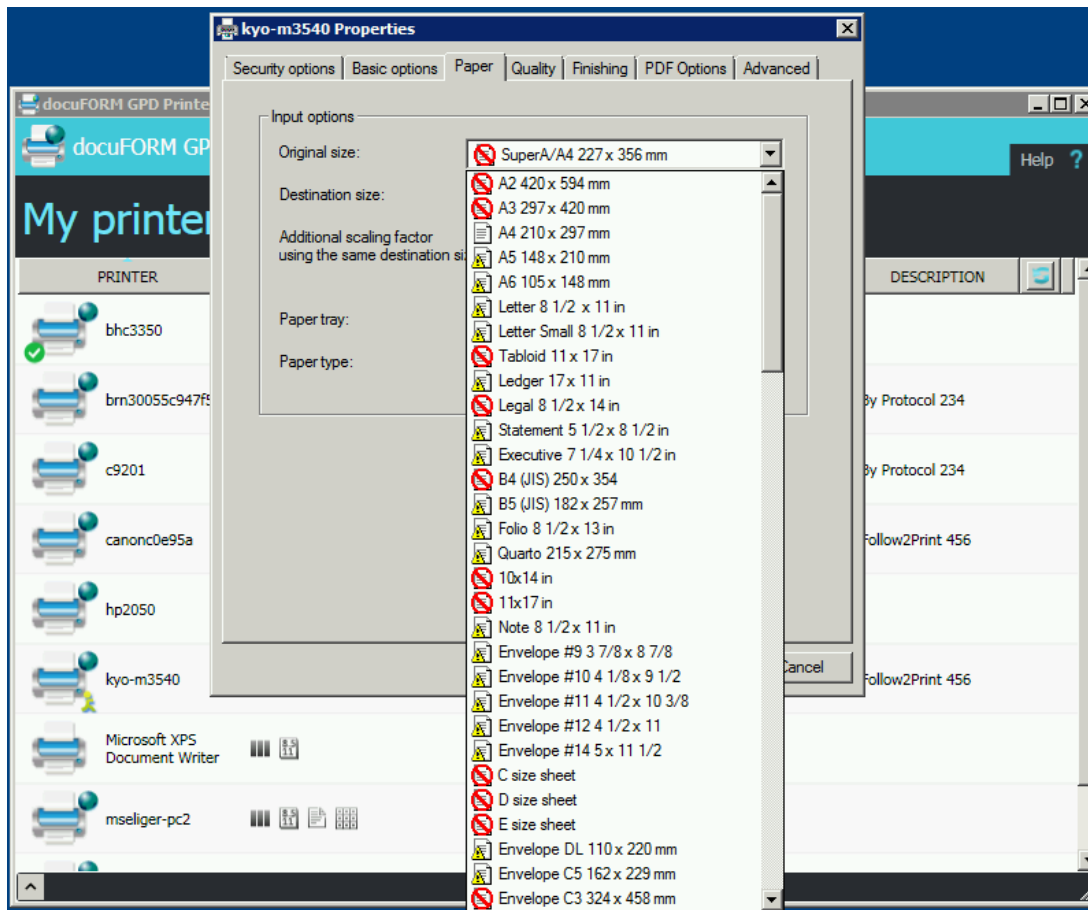
Windows Network Printing TODAY






Windows Network Printing NEW



Functional process - interactive paper / media recognition

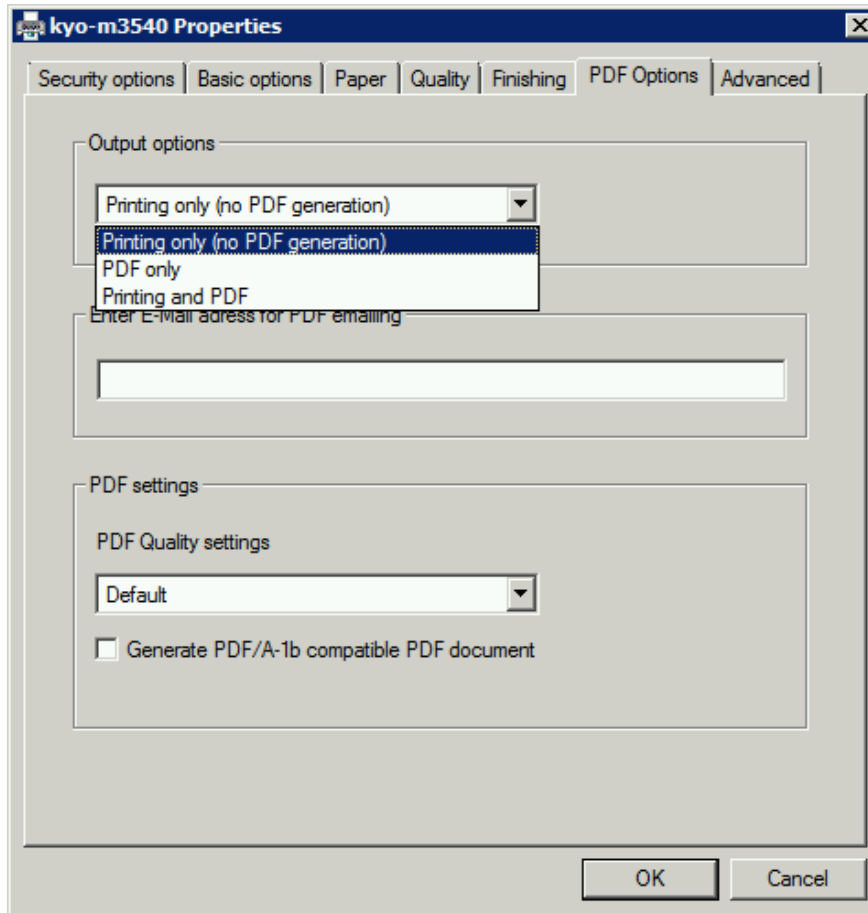


Paper selection list:

-  Paper size available
-  Paper size possible
-  Paper size not possible

➔ unique selling point 

Individual and fully integrated PDF generation and workflow



- Within the printer driver can be selected whether alternatively or additionally a PDF is to be created.
- The PDF can be sent as required via the e-mail function.
- Advantage: The use of an additional e-mail program is not applicable!

➔ unique selling point



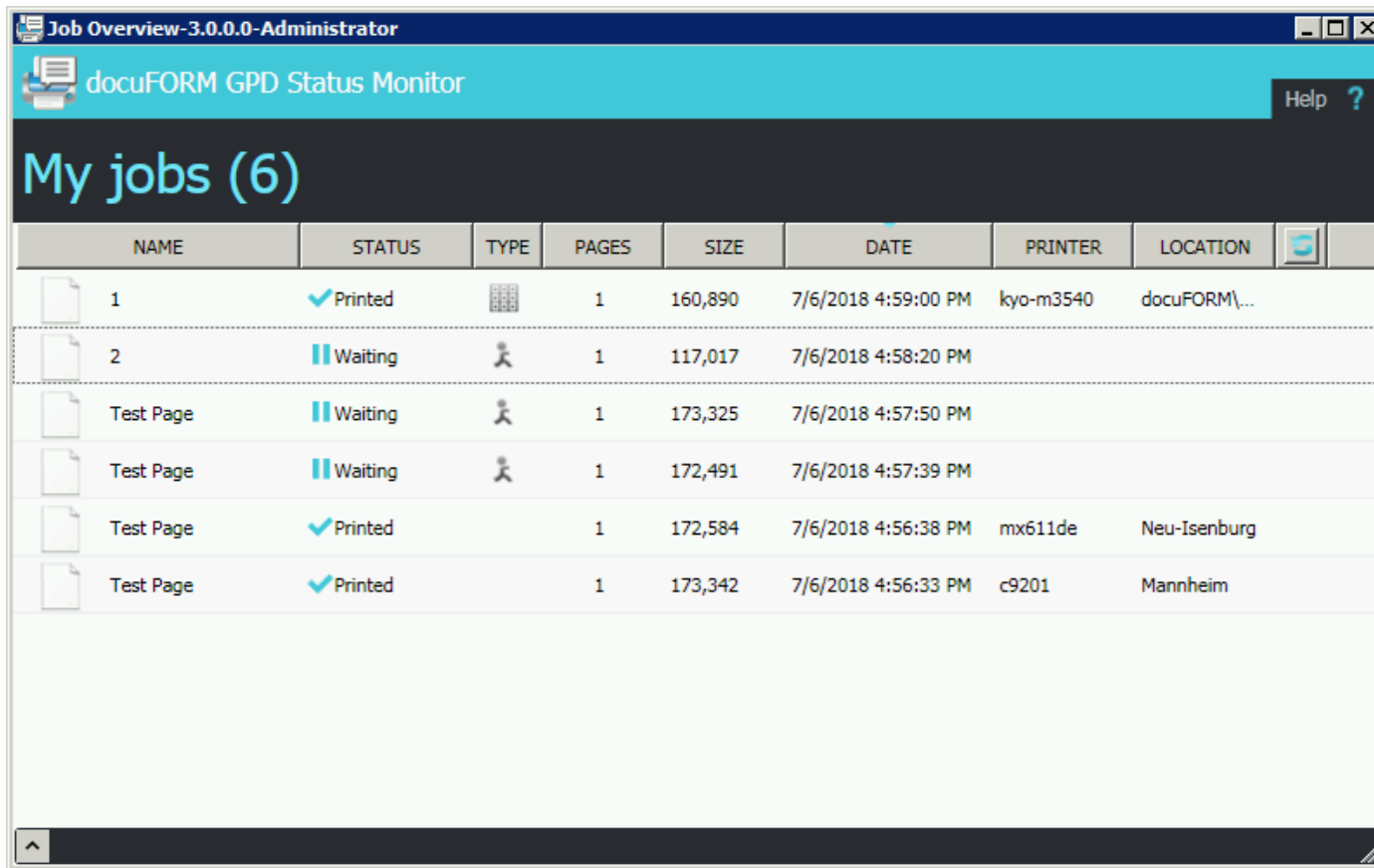
Add-on: Overview of personal output in a TrayApp

- The user sees his generated print output sorted by:
 - Follow“2“Print-queue
 - Print job processing
 - Already printed jobs
 - Device-specific for each device

- In addition, the user receives the following print job information:
 - Time / date
 - Size
 - Number of pages to be printed / already printed
 - Pin-printing yes / no
 - Printjob ID
 - Status
 - Name

Personal TrayApp of the user

- The TrayApp is personal and “roams” with the Microsoft user profile



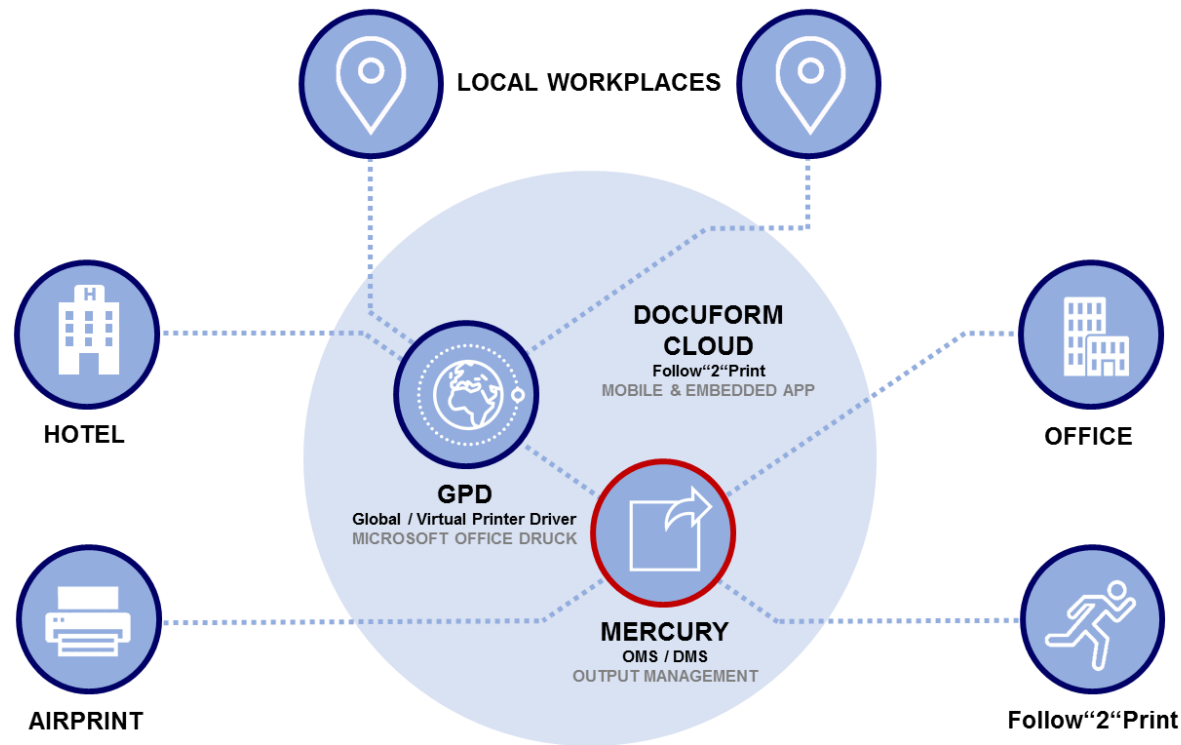
The screenshot shows the 'Job Overview-3.0.0.0-Administrator' window. The title bar includes 'docuFORM GPD Status Monitor' and a 'Help ?' button. The main heading is 'My jobs (6)'. Below this is a table with columns: NAME, STATUS, TYPE, PAGES, SIZE, DATE, PRINTER, and LOCATION. The table contains six rows of job data.

NAME	STATUS	TYPE	PAGES	SIZE	DATE	PRINTER	LOCATION
1	✓ Printed		1	160,890	7/6/2018 4:59:00 PM	kryo-m3540	docuFORM\...
2	Waiting		1	117,017	7/6/2018 4:58:20 PM		
Test Page	Waiting		1	173,325	7/6/2018 4:57:50 PM		
Test Page	Waiting		1	172,491	7/6/2018 4:57:39 PM		
Test Page	✓ Printed		1	172,584	7/6/2018 4:56:38 PM	mx611de	Neu-Isenburg
Test Page	✓ Printed		1	173,342	7/6/2018 4:56:33 PM	c9201	Mannheim

Serverless Printing (Cloud Printing) Q4/2019

- Print without a print server on site (any time & any place!)
- Control of print data via the docuFORM Cloud
- The print data does not leave the location for direct output
- Connection to external environments such as Office etc. possible
- Integration of the Follow "2" Print solution as part of the GPD workflow
- Automatic remote installation of the local GPD printer driver after automatic printer search
- Combination of the GPD serverless printing process with the global GPD workflow
- Reduction of costs by eliminating a print server on site
- Particularly suitable for network environments with low bandwidth, since the print data never leave the location
- Known simple operation without training

Serverless Printing (Cloud Printing) Q4/2019

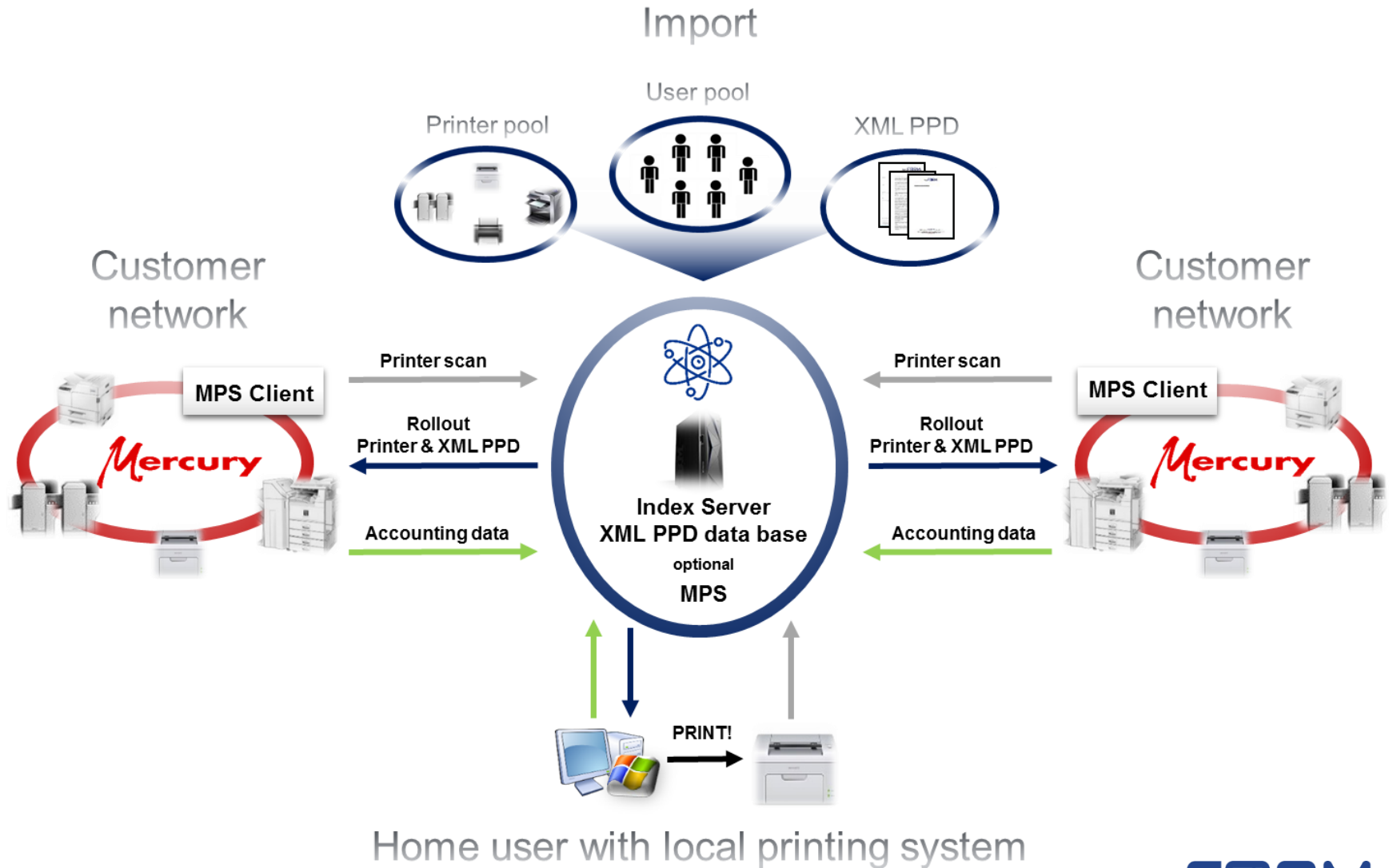


SAP Certified
Integration with SAP NetWeaver

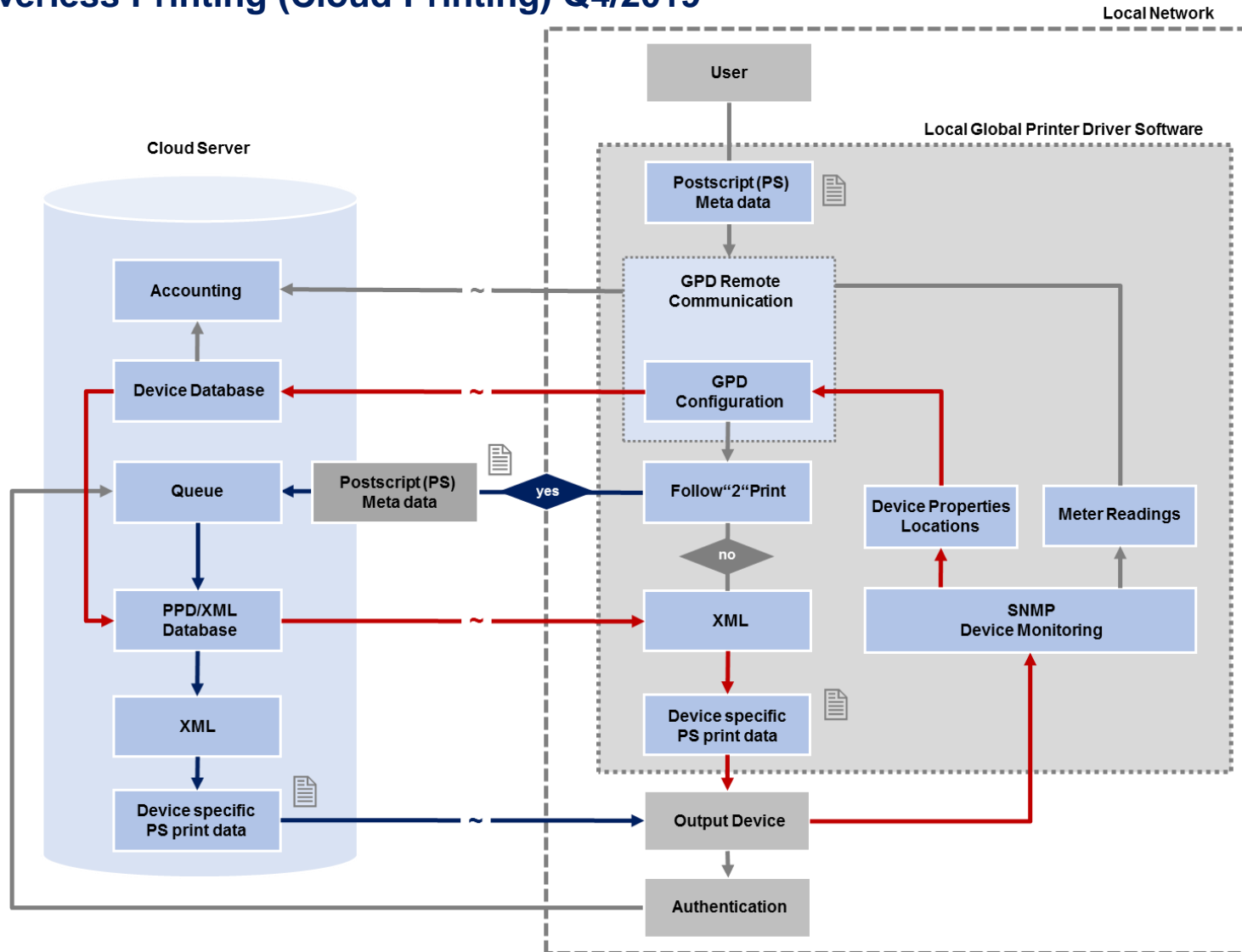


- Transmission of locally found output devices
- Transmission of the configuration of all possible output devices
- Optimal print data for Follow "2" Print & remote printing

Serverless Printing (Cloud Printing) Q4/2019

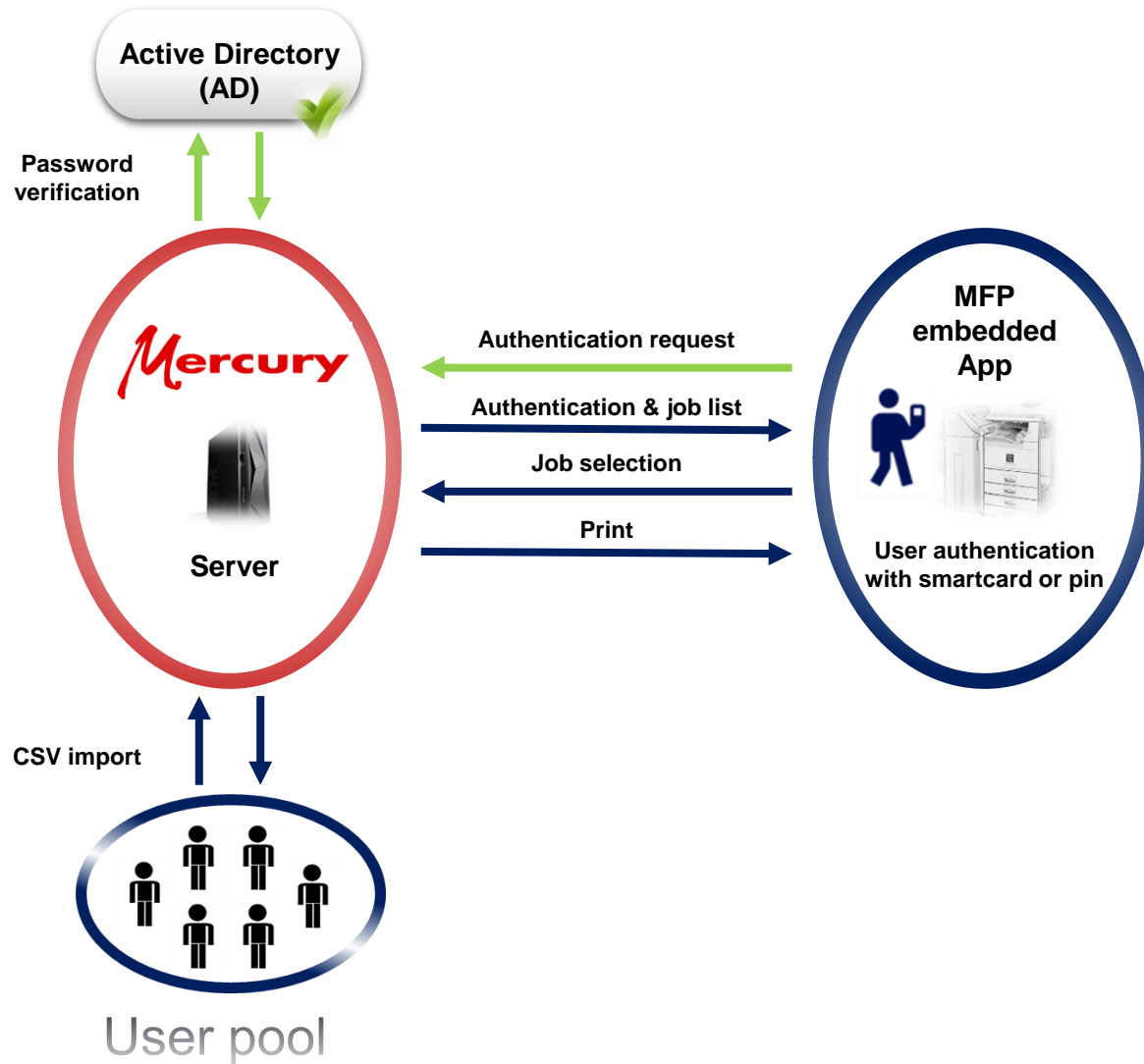


Serverless Printing (Cloud Printing) Q4/2019



Follow“2“Print integration - highlights

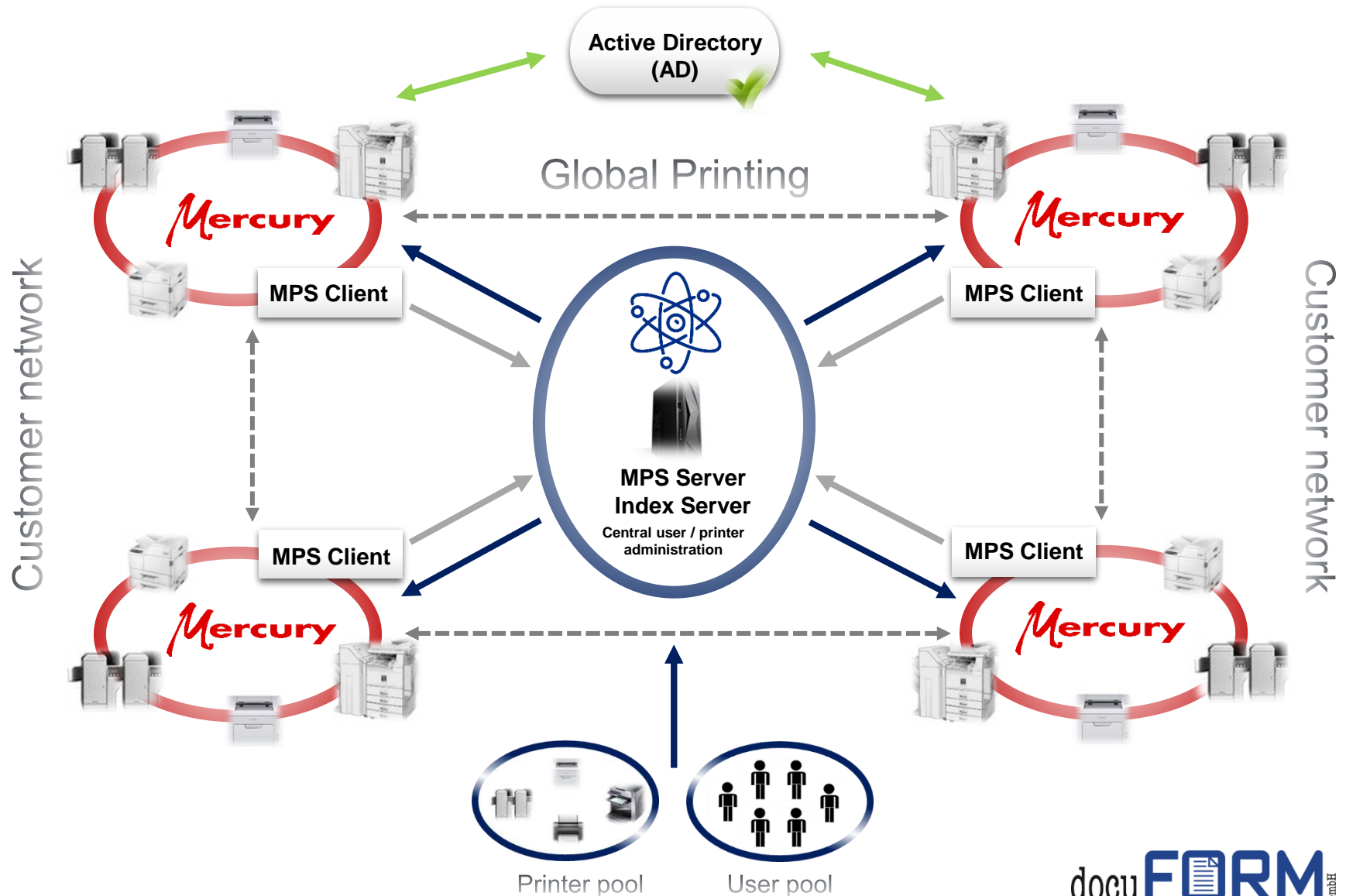
- The manufacturer-independent Follow "2" print solution is based on three different authentications on the devices:
 - Card Reader
 - Barcode authentication by PDA
 - Embedded Java Web Apps (only MFP and manufacturer-dependent)
- Cross-location "cloud printing" from all smartphones incl. AirPrint
- Authentication on pure printing systems through the combination of Doculan / reader hardware possible
- Support of all common card systems:
Mifare, Legic Hitag I & II, Biometric ID etc.
- All data streams, such as host, AS / 400 and SAP, are additionally supported and also offered to the user during authentication on the device
- Feedback of Follow "2" Print Status, etc. into the SAP GUI
- Interface for accounting for e.g. Copy billing, budgets, cost-sensitive printing



Different manufacturer apps:

- HP
- Lexmark
- Konica Minolta
- XEROX
- Ricoh
- Samsung
- Brother
- Canon
-

GLOBAL Mercury Installation with Follow“2“Print



Authority configuration for Follow "2" Print users

docuFORM

Monitor

Administration

Users

Groups

Roles

Printers

Follow2Print

Settings

Administration - Users : test

07/09/2018 12:25:15

Logged in as: superadmin

[Help](#)
[Logout](#)

List

Delete

OK

User Data

Grants

Follow2Print Permissions

	Effective grant	User-specific Role...
Reprint jobs:	✓	<input checked="" type="checkbox"/>
Redirect jobs:	✓	<input checked="" type="checkbox"/>
Schedule jobs:	-	<input type="checkbox"/>
Keep jobs:	✓	<input checked="" type="checkbox"/>
Pause jobs:	✓	<input checked="" type="checkbox"/>
Cancel jobs:	✓	<input checked="" type="checkbox"/>
Delete jobs:	✓	<input checked="" type="checkbox"/>
View all jobs:	-	<input type="checkbox"/>
View group jobs:	✓	<input checked="" type="checkbox"/>
Add / delete users:	-	<input type="checkbox"/>
Define grants for users and groups:	-	<input type="checkbox"/>
Assign identification for Follow2Print:	-	<input type="checkbox"/>
View all event list entries:	-	<input type="checkbox"/>
View all printers:	✓	<input checked="" type="checkbox"/>
Define device routes:	-	<input type="checkbox"/>
User/password login from embedded systems:	✓	<input checked="" type="checkbox"/>

Created at 11/02/2017 14:32:59 by Mercury (MA2K8-10) - Modified at n/a by n/a

Cost center evaluation with global Follow "2" Print functionality

Print
CSV Export
PDF Export
Close

Print volume

Mannheim, Month 1-12/2018

Report generated on 07/09/2018 11:14:10 - Fleet & Service Management V7.11a

Customer: **Mannheim**

Printer	Cost center	S/N	Location	Model	Printer b/w	Printer color	A3	A4	Tabloid	Letter	Legal	Others	Copier b/w	Copier color	Scanner b/w	Scanner color	Fax
brn30055c947f50.ma.docuform.de	Not assigned	E73488J5J252819	docuFORM/Mannheim/Schulungsraum	Brother MFC-L9550CDW	1			1									
c9201.ma.docuform.de	EMA	Z6QT81AC900073M	Mannheim	Samsung CLX-92x1 93x1 Series	8	45	53										
canon0e95a.ma.docuform.de	EMA	WKL10944	Mannheim	Canon IR-ADV C255	6	31	37									1	
et0021b75b9b6b.ma.docuform.de	EMA	7528748011YWZ		Lexmark CX725	5	20	25										
et0021b75b9b6b.ma.docuform.de	SUP	7528748011YWZ		Lexmark CX725													
k3300.ma.docuform.de	EMA	0A83B1AH500030E	ma	Samsung K3250 Series	3		3										
lq-680pro-8f2fb5.ma.docuform.de	Not assigned			EPSON LQ-680Pro	32	2											
lq-680pro-8f2fb5.ma.docuform.de	EMA			EPSON LQ-680Pro	26		3										
lx-x792de.ma.docuform.de	Not assigned	7562029400DN3		Lexmark X792	3		3										
lx-x792de.ma.docuform.de	EMA	7562029400DN3		Lexmark X792	1	3	4										
m4583.ma.docuform.de	SUP	079BBJFH10004GA		Samsung M458x Series													
nm98558c.ma.docuform.de	Not assigned	WKA3000017		P-6030DN													

Printer usage

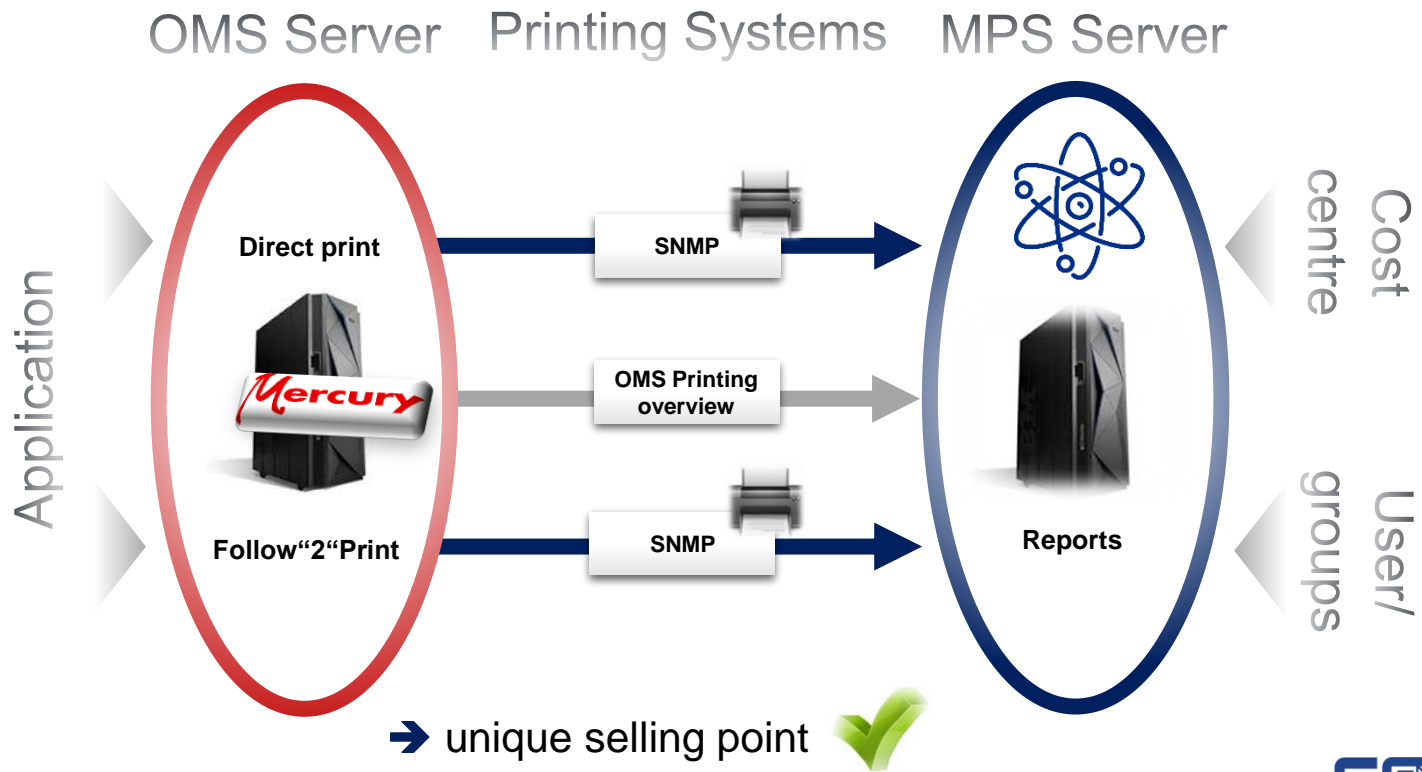
docuFORM Neu-Isenburg, Month 1-12/2017

Report generated on 07/09/2018 11:17:49 - Fleet & Service Management V7.11a

Customer: **docuFORM Neu-Isenburg**

Printer	I/N	S/N	Location	Model	Printed pages	Not printed pages	Printed jobs	Not printed jobs
fs2020d.fra.docuform.de		XEX0771295	Neu-IsenburgOdenwaldstrasse 31.OGBüro Alex	FS-2020D	1	0	1	0
hp2050.fra.docuform.de		CNCKB86001	Neu-IsenburgOdenwaldstrasse 31.OGBüro Oppl/Breimer	HP LaserJet P2055dn	24	0	19	0
mx611de.fra.docuform.de		70165PHH085H4	Neu-IsenburgOdenwaldstrasse 31.OGBüro Oppl/Breimer	Lexmark MX611de	681	2	229	2
TA3051.fra.docuform.de		L876147179	Neu-IsenburgOdenwaldstrasse 31.OGSchulungsraum	TASKalfa 3051ci	377	0	81	0
					1,083	2	330	2

- By combining Mercury OMS with MPS, additional statistical evaluations can be generated:
 - Usage overview of printing systems according to customers and cost centers
 - Follow "2" print statistics on printed / non-printed pages



The Usage Overview report provides an overview of the printed / non-printed pages & jobs of each print system, grouped by:

Customer

Customer: docuFORM Karlsruhe

Printer	Cost center	I/N	S/N	Location	Model	Printer b/w	Printer color	A3	A4	Tabloid	Letter	Legal	Others	Copier b/w	Copier color	Scanner b/w	Scanner color	Fax
bhc3350.ka.docuform.de	Not assigned		A4Y4021010180	docuFORM Karlsruhe, Sekretariat	KONICA MINOLTA bizhub C3350	327	272	599										
bhc3350.ka.docuform.de	CEO		A4Y4021010180	docuFORM Karlsruhe, Sekretariat	KONICA MINOLTA bizhub C3350	188	397	585										
clx6260.ka.docuform.de	Not assigned		Z77ABJED9000N8N	docuFORM Karlsruhe, Sekretariat	Samsung CLX-6260 Series	1	11	9			3							
talfa250ci.ka.docuform.de	Not assigned		QJK0621258		TASKalfa 250ci	4,150	1,843	39	4,467		18		12					
xrx3250.ka.docuform.de	Not assigned		3969299991	Entwicklung Mannheim	Xerox Phaser 3250	605			605									
						5,271	2,523	39	6,265		21		12					

Cost center

Cost center: CEO																	
Printer	I/N	S/N	Location	Model	Printer b/w	Printer color	A3	A4	Tabloid	Letter	Legal	Others	Copier b/w	Copier color	Scanner b/w	Scanner color	Fax
bhc3350.ka.docuform.de					95	239	334										
bhc3350.ka.docuform.de		A4Y4021010180	docuFORM Karlsruhe, Sekretariat	KONICA MINOLTA bizhub C3350	188	397	585										
					283	636	919										

Printer

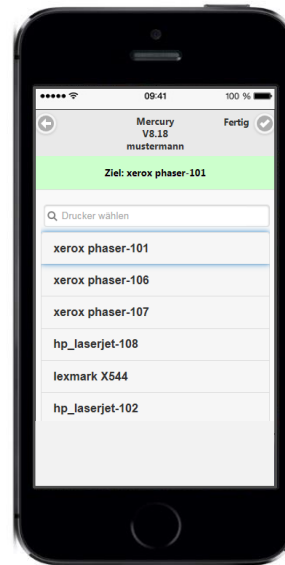
Cost center: Not assigned																	
Printer	I/N	S/N	Location	Model	Printer b/w	Printer color	A3	A4	Tabloid	Letter	Legal	Others	Copier b/w	Copier color	Scanner b/w	Scanner color	Fax
			Unkown device		30	31	55					6					
bhc3350.ka.docuform.de					70	167	237										
bhc3350.ka.docuform.de		A4Y4021010180	docuFORM Karlsruhe, Sekretariat	KONICA MINOLTA bizhub C3350	327	272	599										
clx6260.ka.docuform.de		Z77ABJED9000N8N	docuFORM Karlsruhe, Sekretariat	Samsung CLX-6260 Series	1	11	9			3							
talfa250ci.ka.docuform.de		QJK0621258		TASKalfa 250ci	4,150	1,843	39	4,467		18		12					
xrx3250.ka.docuform.de		3969299991	Entwicklung Mannheim	Xerox Phaser 3250	605			605									
					5,183	2,324	39	5,972		21		18					

Mobile (PDA) option on the smartphone

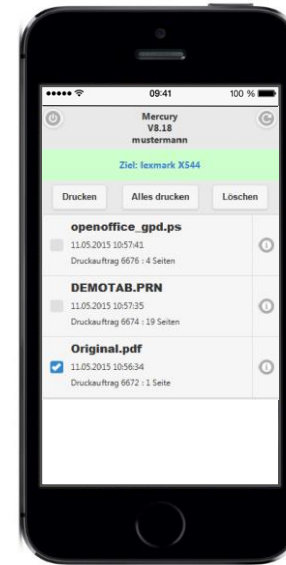
- Unified app for MFP and Smartphone option
- Optical representation of the job selection analogous to the MFP app
- Authentication of the user on the device by barcode scanning
- Additional redirection of print jobs directly on the smartphone



Authentication with PDA

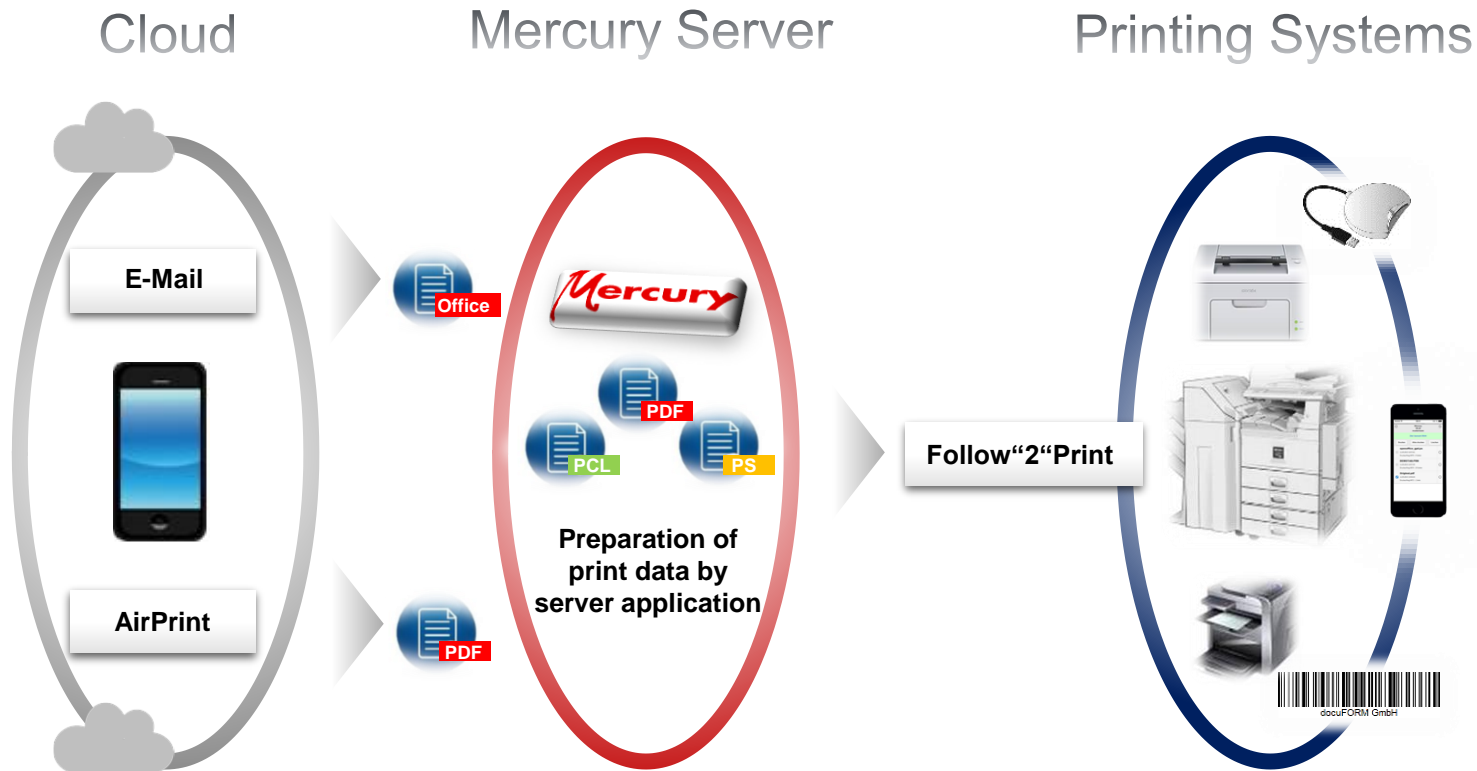


Job redirection with PDA



Job selection with PDA

Completely integrated Cloud Printing functionality - AirPrint



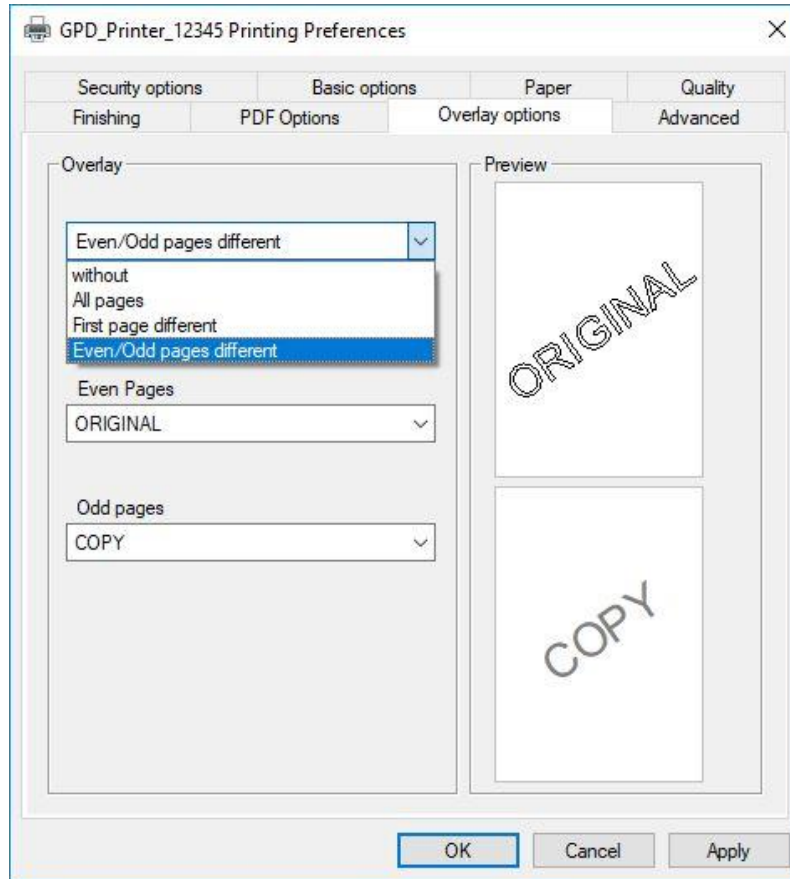
GPD with individual watermark option

- The user can freely define up to 15 different watermarks for himself and superimpose them on his documents.
- The author can classify his own documents and protect them from misuse.
- This important overlay functionality extends the GPD analogously to previous classic printer drivers - as always manufacturer-independent.

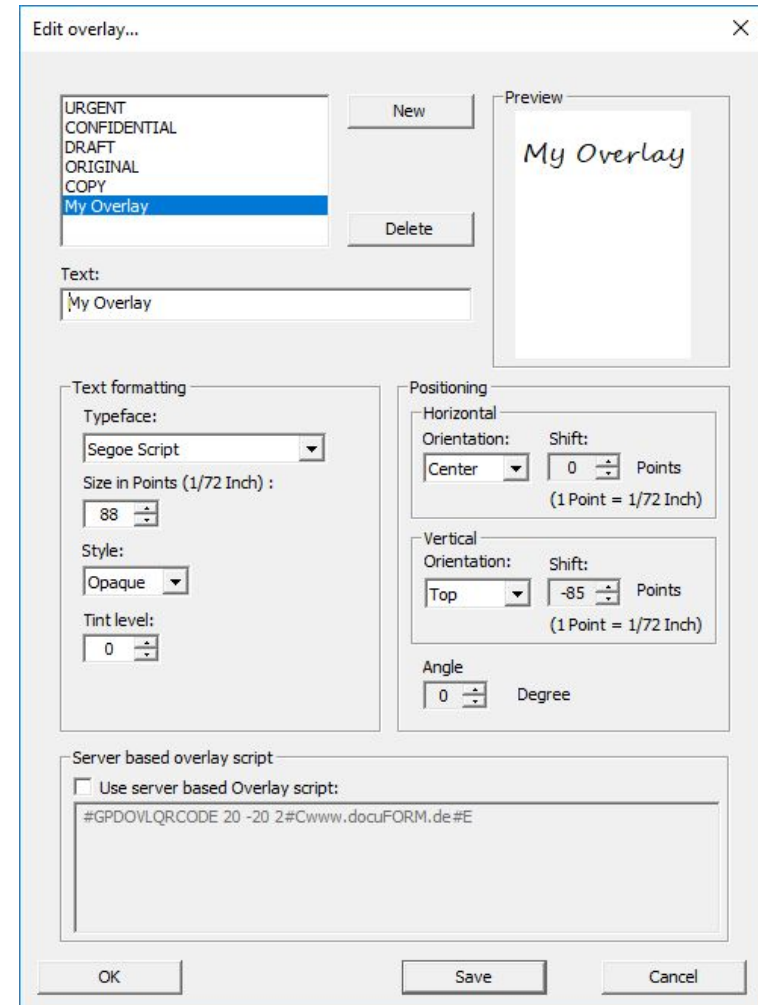
➔ unique selling point 

GPD with individual watermark option

Configuration of watermarks by user



Creation of individual watermarks by user



➔ unique selling point



Integrated form & overlay technique

- By inserting special lines of text that start with a specific GPD script codeword, it is possible to generate overlays of various types when printing via a GPD printer with nearly any available text editor or text generator or word processor.
 - Overlay of a complete static page (letterhead overlay)
 - Overlaying a picture
 - Overlay of a text for the generation of watermarks or stamps
 - Generate one- and two-dimensional barcodes
 - Free script mode
- Special insert operations in free script mode. In this mode, on the desired page, e.g. also code sequences can be inserted, which perform at the printer a paper tray change or effect a switch from simplex to duplex mode.

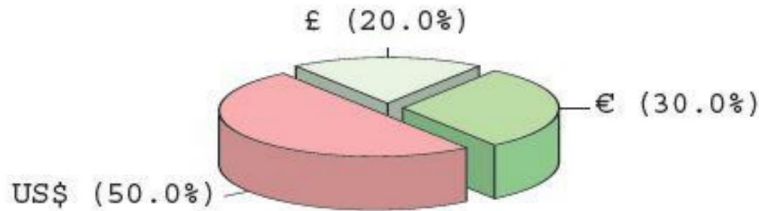
➔ unique selling points 

Example of Script control

■ Script:

```
#GPDOVLSCRIPT 50 0 #C[(£)100(US$)250(€)150] 20 [/3D true  
/SliceBurst 0.1 /PrintValue true] DRAWPIE#E
```

■ Result:



■ Document:

docuFORM

Docuform GmbH, Händelstr. 11, 76185 Karlsruhe

Sehr geehrter Herr Mustermann,
dieses Schreiben zeigt Ihnen einige Möglichkeiten unseres

GPD Forms & Overlay Generator
Inkl. Barcodemodul

Ihr heutiges Druckvolumen teilt sich wie folgt auf:

Druck Farbe (27.9%)
Kopien (8.8%)
Scans (5.6%)
Druck Schwarzweiß (57.6%)

Mit freundlichen Grüßen,

Martin Denk, Dipl.-Ing. (TU)
- Geschäftsleitung -

Martin Denk

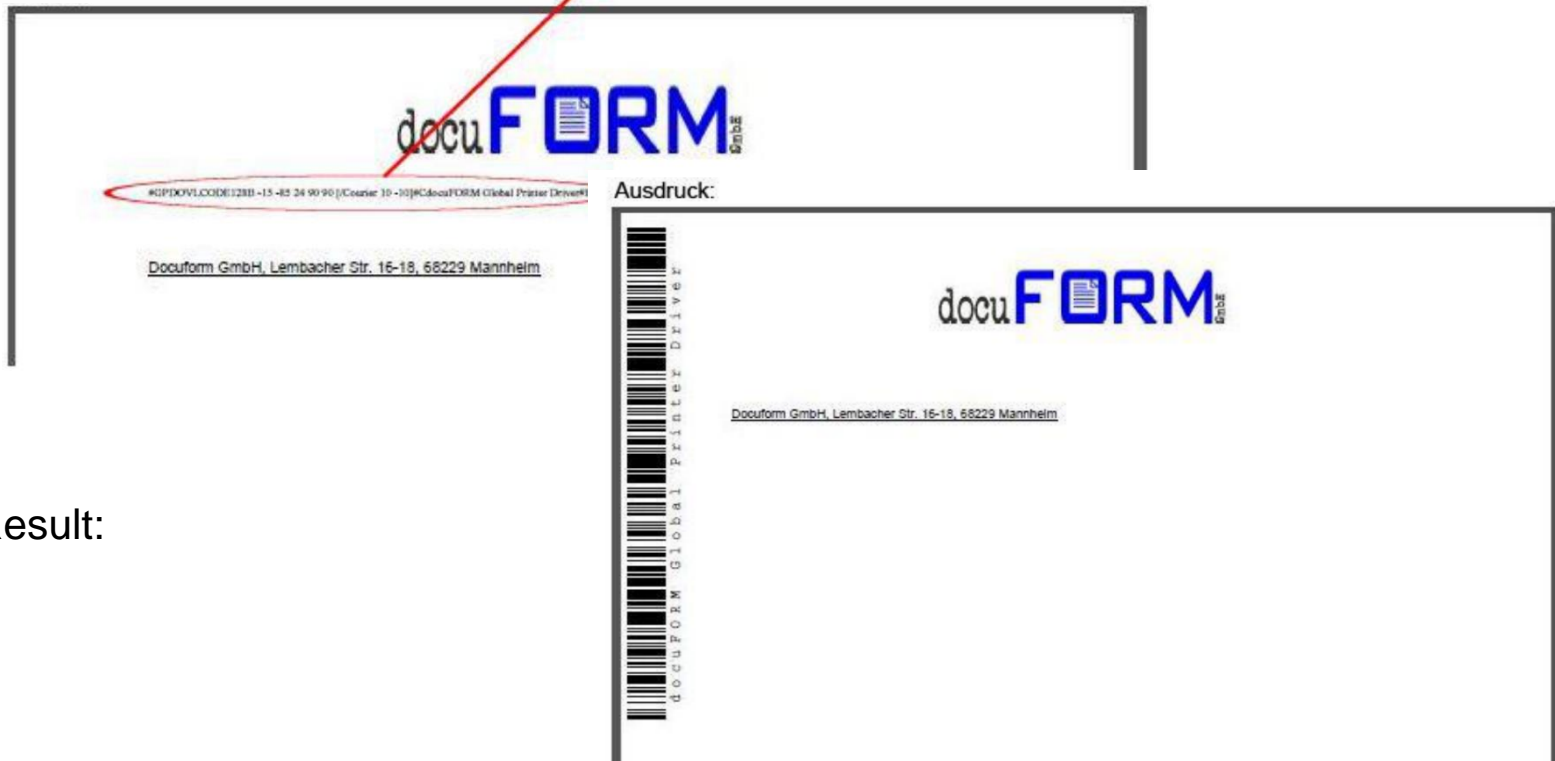
docuFORM GmbH
D-76185 Karlsruhe • Händelstrasse 11 • Fon 07 21/16198-0 • Fax -16
Geschäftsführer: Martin Denk, Reinhard Suhl
Sparkasse Heidelberg • BLZ 672 500 20 • Konto 9108343 •
IBAN DE52672500200009108343 BIC: SOLADE31HDB
HGB Mannheim 110795
Steuernummer: 35005/30929 USt-IDNr.: DE814336599
www.docuform.de

Applying a barcode with any rotation

■ Script:

```
#GPDOVLCODE128B -15 -85 24 90 90 [/Courier 10 -10]#CdocuFORM Global Printer Driver#E
```

■ Edit:



■ Print Result:

➔ unique selling point



Conclusion & unique selling points



- ✓ Optimal manufacturer-independent and cross-cutting solution
- ✓ Elimination of any printer drivers and their administration
 - thus waiving of any MS print server
- ✓ Manufacturer-independent and uniform user interface for the user
- ✓ Self-learning, maintenance-free system
- ✓ Optimum printout at all times
- ✓ Print target selection e.g. according to device properties in real time
- ✓ Direct Follow "2" Print and Pin Print Integration - Multi-vendor
 - including PDA barcode authentication
- ✓ Fully integrated Cloud & AirPrint
- ✓ Encrypted printing (end-to-end encryption also for Follow "2" Print)
- Integrated PDF generation & workflow
- ✓ Integrated form technology and watermark management
- ➡ Considerable cost savings with simultaneous print optimization!



European patent for docuFORM Global Printer Driver (GPD)

- | | |
|-------------------|-----------------|
| 1. Belgium | 14. Netherlands |
| 2. Bulgaria | 15. Norway |
| 3. Denmark | 16. Austria |
| 4. Germany | 17. Poland |
| 5. England | 18. Portugal |
| 6. Finland | 19. Romania |
| 7. France | 20. Sweden |
| 8. Greece | 21. Swiss |
| 9. Ireland | 22. Spain |
| 10. Italy | 23. Czechia |
| 11. Liechtenstein | 24. Turkey |
| 12. Luxemburg | 25. Hungary |
| 13. Monaco | |

The patent is registered at
European Patent Office under number
EP 14154521



Extract of our customer & partner portfolio:



,Who is who' at docuFORM:

docuFORM GmbH Karlsruhe

Headquarters

Händelstr. 11
76185 Karlsruhe
Germany

Fon: +49 721 16198 0
Fax: +49 721 16198 16

info@docuform.de
www.docuform.de

Development Department

Lembacher Str. 16-18
68229 Mannheim
Germany

info@docuform.de

Support & Data Centre

Odenwaldstr. 3
63263 Neu-Isenburg
Germany

support@docuform.de

Management, CEO

Martin Denk

mdenk@docuform.de

Reinhard Suhl

rsuhl@docuform.de