

SECURE & PICKUP PRINTING with PLOSSYS®



SECURE & PICKUP PRINTING

Corporate Output Management features a device independent Secure & PickUp Printing function. This way you can secure the output of all sensitive or confidential documents in your company by printing only after the user has identified himself directly at the printer he wants to retrieve his output from. In addition, a lot of unnecessary paper output can be saved if Secure & PickUp Printing is set as default configuration. Our Corporate Output Management solution works independently from vendors, models and properties of your hardware.

WHAT IS SECURE & PICKUP PRINTING?

Secure & PickUp Printing (SPP), also called Pull Printing or Follow(to)Me Printing, means that a user is not directly printing to a dedicated printer but to an SPP queue on a spool server. The output job of the user

is spooled within this queue until the user is identifying and authorizing himself on a dedicated printer and releasing his print job for this printer.

WHO NEEDS SECURE & PICKUP PRINTING?

Secure & PickUp Printing could be interesting for all companies that are replacing local desktop printers by departmental multifunctional printers (MFP) and want to provide confidentiality to the users for the printing of non public information. It is also recom-

mended for all companies that want to implement sustainable and "green" processes and solutions. Secure & PickUp printing keeps confidential information confidential and reduces the waste of paper drastically (up to 40%).

BENEFITS AT A GLANCE



Increased security

- + Print only after users have authenticated themselves at the printer
- + Confidential printing for confidential information
- + Secure/Encrypted file transfer (if required)



Significant cost savings

- + Considerable reduction of paper wastage - up to 40% of MFP printouts are left untouched in the printers
- + Support of MFP-based departmental printing infrastructure reducing the number of devices and usage of printer consumables



Significant contribution to the GreenIT concepts

- + Reduction of the number of „private“ printers
- + Reduction of paper and toner wastage

PLOSSYS AND SECURE & PICKUP PRINTING

The output management solutions of SEAL Systems enable different concepts for Secure & PickUp Printing:

1. BASIC SECURE PRINTING

In many companies security is the crucial factor for the implementation of an SPP solution. The most pragmatic approach here is to enable users to protect print jobs with a PIN. This method is very easy to implement and it is also cost-efficient. The user can activate secure printing within his Windows printer driver or any other PLOSSYS interface for print job generation. He then enters a PIN and sends his jobs to a printer of his choice. If needed, the information will be encrypted before sending it from the client workstation to the output server or before sending it from the output server to the printing device.

The output job will be processed within the output management server of SEAL Systems as any other job but when it is finally printed, the printing device will be controlled with the secure printing option and the PIN. The user needs to release his jobs in this case manually at the printer by entering his PIN code. The activation of this solution only requires MFPs supporting PIN code printing (standard functionality of MFPs

nowadays) and some configuration at the PLOSSYS side.

Basic secure printing is fully supported by the SEAL Systems MasterDriver and all other print clients from SEAL Systems. It is included in the product standard of our output management solutions and can be activated at any time.

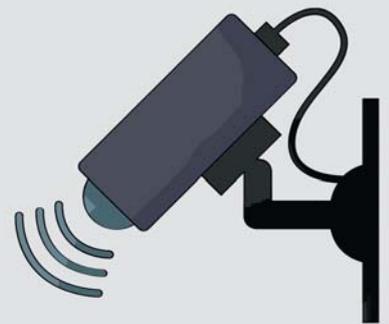
In addition SEAL Systems offers a single-sign-on alternative. In this case, the PIN is entered once per user through an extension of the SEAL Systems Info-client. Each time a user activates "Secure Printing", this PIN – which is stored centrally on the output server or in the AD profile of the user – is used. This facilitates the use of more complex PINs without re-entering them every time. User PINs can then also be used from any other application, not only from the SEAL Systems MasterDriver.

Advantages of this solution

- + Quick and easy implementation, low costs
- + Full secure printing functionality from all applications
- + Same user interface at the client level for all printers (when using SEAL Master-Driver)
- + Supports all MFP models from any vendor

Disadvantages of this solution

- Secure printing functionality only, users need to pre-select the final printing device



2. 3RD PARTY SECURE & PICKUP PRINTING SOLUTIONS, CONNECTED TO PLOSSYS

All printer vendors are normally offering own – sometimes multiple – SPP solutions. They are typically based on a server process for the central spooling of the print jobs and on a client, which is installed at the printer for user authentication and job selection functions. These solutions can be connected to PLOSSYS easily. To provide access to the SPP solution for the users, a PickUp queue on the PLOSSYS output server is installed. If a user sends a job to this

PickUp-queue, the output server converts the output job into a printer specific generic language (typically PostScript, PCL or PCL-XL). The converted job is then being sent directly to the SPP server of the printer vendor together with all required information (e.g. tray or finishing control and user details). User details are required by the SPP server to be able to assign a job to the user when authorizing himself at a printer.



Advantages of this solution

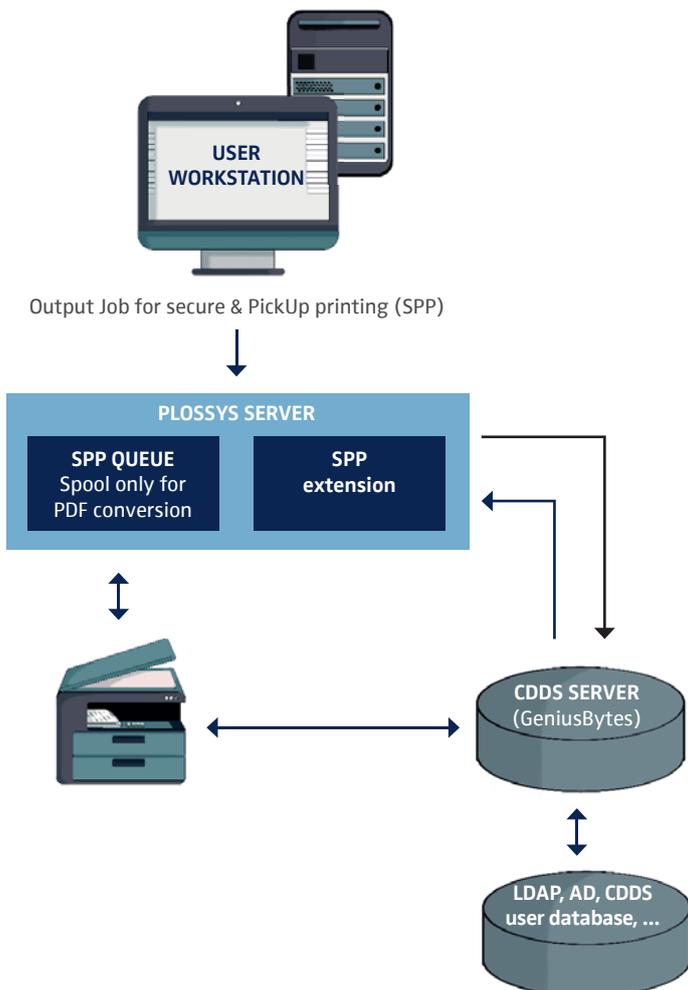
- + **Easy integration with PLOSSYS**
- + **Full SPP support for all applications printing via SEAL Systems Output Management (printer vendors typically offer SPP printing for Windows printing only)**
- + **All benefits listed above for SPP in general**

Disadvantages of this solution

- **Twofold spooling of jobs (within PLOSSYS and within SPP server of printer vendor) causes deficits in print job monitoring and control, e.g. when a job is not printed**
- **Operation of multiple SPP servers might be required, if an enterprise runs a multi-printer-vendor strategy**
- **Strong dependency from a printer vendor for many years reduces flexibility to react to changes in the market conditions and requirements**
- **Licenses for the SPP solution are typically rented and require a new decision-making-process every 3 to 5 years**
- **Printer firmware needs to be modified (embedded SPP client)**
- **Additional hardware needs to be connected to the printer (card reader)**
- **Additional infrastructure is required (at least one additional server for SPP unless a mobile client is used)**

3. SECURE & PICKUP PRINTING SOLUTIONS INTEGRATED TO PLOSSYS (E.G. GENIUS BYTES CDDS)

The architecture of the SEAL Systems/Genius Bytes solution is shown in the following picture:



SEAL Systems has developed a deep integration of PLOSSYS into the printer vendor independent SPP solution CDDS from Genius Bytes. This solution is actively promoted and successfully installed by SEAL Systems in customer projects. In this solution architecture a special SPP-Queue is offered in PLOSSYS. All print jobs sent to this queue will be converted into PDF and kept on hold on the output management server, until PLOSSYS gets informed by the CDDS server on which printing device the job is to be printed.

Then the job is converted on the fly into the device specific printing language and directly sent from PLOSSYS to the printer.

Advantages of this solution

- + **All advantages listed in the section before**
- + **No dependency on any specific printer vendor regarding hardware and software**
- + **Only one spooler for the complete output chain: clear responsibility and transparency**
- + **Only one SPP server for all printer types within the company**
- + **Unlimited software licenses guarantee a long protection of the investment**
- + **Encrypted transfer for all communications guarantees high security**

Disadvantages of this solution

- **Printer firmware needs to be modified (embedded SPP client)**
- **Additional hardware needs to be connected to the printer (card reader)**
- **Additional infrastructure is required (at least one additional server for SPP unless a mobile client is used)**

4. SECURE & PICKUP PRINTING BASED ON PLOSSYS DOCPRINT (MOBILE APP FROM SEAL SYSTEMS)

SEAL Systems offers a mobile App for the output management system PLOSSYS: With PLOSSYS DocPrint users can directly select and release print from an SPP queue to a dedicated printer using their smartphone or tablet PC.

How does this work?

As described above, the user prints from any application into a dedicated SPP queue at the output management server, where the job is held until a user identifies himself for a specific printing device within the company network and releases the output. Instead of using card readers and complex firmware extensions on the printers, the users only use their smart devices to identify the printer by scanning a barcode or RFID tag of the printer. With the PLOSSYS DocPrint-App they can also select the job they want to print. SPP printing with PLOSSYS DocPrint offers all advantages of Secure & PickUp printing, without the need to implement a specific printer infrastructure, including card readers and firmware extensions for the

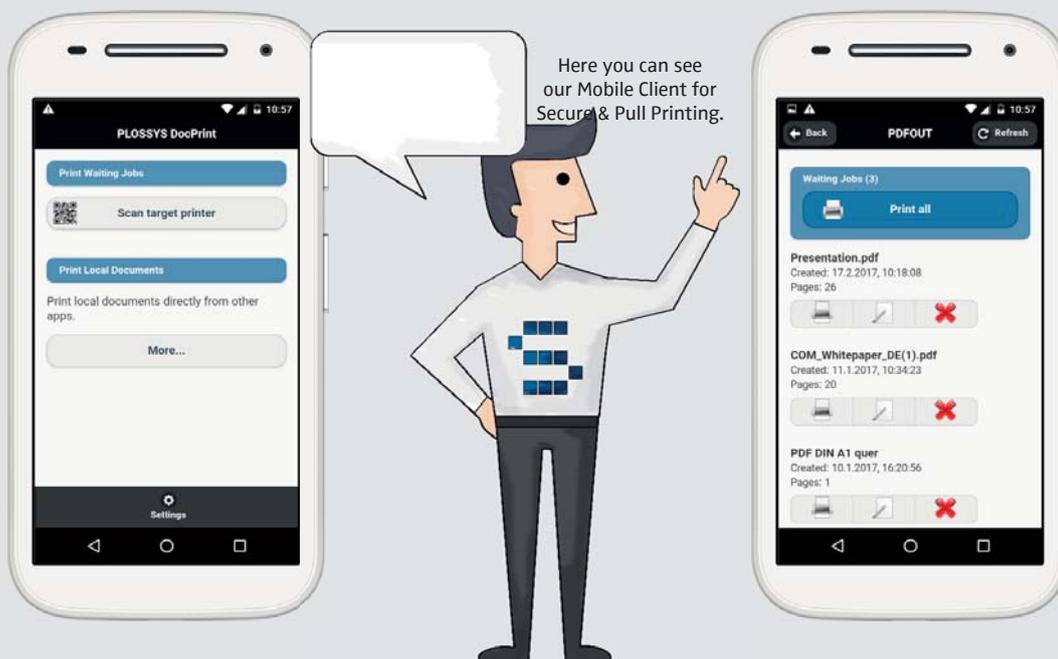
printers. It is also not only available for MFPs, but can be integrated no matter which firmware the printer is running or whether it has a display or not.

User identification while printing via PLOSSYS DocPrint is token-based. This means that password information is not stored locally. The data transfer via HTTPS is safe and efficient.

For all companies with a mobile strategy PLOSSYS DocPrint is a cost-effective and flexible possibility for quick introduction of a secure and personalized printing solution. The solution requires no hardware changes or extensions for output devices. The usual operation mode can be performed as it was. Independence from specific printer vendors is maintained.

PLOSSYS DocPrint has a number of advantages for PLOSSYS users:

- + All advantages of the before described solution
- + Easy to use
- + No modifications of device firmware required
- + Supports all printer models from all vendors (also large format printers)
- + No secure card infrastructure required (cards, card readers, ...)
- + Encrypted transfer for all communications
- + Full Secure & PickUp Printing functionality
- + Supports all Android, iOS and Windows phones
- + Low implementation and maintenance costs



DO YOU WANT TO KNOW MORE?



Gert Oehler

Corporate Output Management

+49 9195 926-136

gert.oehler@sealsystems.de

www.sealsystems.com



USA, CANADA, AMERICAS

Debra Garls

Sales Management

+1 774 200 0933

debra.garls@sealsystems.com

www.sealsystems.com