

Newsletter

September 2020



UNISPOOL®



This newsletter will tell you about the latest developments in the best output and print management systems that use UniSpool and PrinTaurus.

COVID-19

It's easy to be ruled by fear and uncertainty in these times, and it's a very human emotion. We at Holland House are also wondering where this situation will lead. However, thinking positively, many people are also asking themselves what it means to be wholeheartedly committed to something. How are we going to come out stronger together?

While it's true that there is a great deal of uncertainty, it's clear to us that trust in quality and continuity can provide guidance. This is more evident than ever in times of crisis. We also realize something else: we are truly entrepreneurs. We carry on and we come up with ways to continue to serve our customers, so that your company can continue to run your core business process as usual. For example, in most cases, our printing of the documents can be performed from any place – including in the event of a prolonged 'lockdown'.

Changes in the printing field

Although predictions about an eventually paperless office have been around for decades, it's still far from becoming a reality. On the contrary, paper still plays an important role in everyday office life at a lot of companies, whether as an invoice, a time sheet, a pay slip, a banking account slip, or a material slip.

We are constantly monitoring trends in document printing, and this newsletter will touch on a few of them.

Thank you once again for the trust you put in our solutions, services, and our company. We hope to serve you all for a long time to come.

I hope you enjoy reading this newsletter, and I wish you good health and lots of business success.

Kind regards,

Holland House b.v.

Goossen de Bruin
Managing Director Solipsis Group



Philips International • 7,500 printers under control with UniSpool

To put a stop to the high operational costs, intricate controls, and a difficult relationship with all those different printer suppliers, Philips International has made a worldwide selection for UniSpool, the output and printing management solution of Holland House (part of the Solipsis group).

PHILIPS

The result is a substantial saving of costs and control, as more than 7,500 printers are now linked to the same system all over the world. The costs of management will decrease considerably due to the fact that less technical support from specialists is required, as print streams no longer get stuck. Service provider Atos is supervising the maintenance and control of Philips International's crucial data centres.

‘Philips International is a large, globally operating organization that uses SAP as an ERP system at all of its companies. As SAP houses countless ‘independent’ working environments, it’s very difficult to control the output streams and print from such an environment. From different ICT infrastructures and working in SAP, large quantities of documents had to be printed on several production printers controlled from the data centre. In total, this amounts to about 10 to 12 million print jobs per year. A problem caused by the large variety of printers, formats, users, and working environments would spell a huge delay for the Philips organization and cost the company a lot of money. The situation gradually became unworkable, so they decided to search for one uniform solution for this output and printing management problem.’

One solution for all our problems

But things weren’t quite so simple. Atos states that solutions should be implemented seamlessly, causing no trouble at all for users. The only important consideration is that the print order can be entered without any problems and that the print job is performed according to applicable specifications. Whether this is via PCL, PostScript, PDF, or in any or other format or whether it’s printed on a HP, Canon, Lenovo, Ricoh, Xerox, or any other printer shouldn’t make any difference to the user. The files

should be processed in such a way that any format ‘could be put in and taken out again quite easily’. There are very few companies on the market, perhaps even none, that are able to offer this. Obviously, Atos contacted several of our printer suppliers, but they came up with solutions that were based on their own brand – that was exactly what we didn’t want them to do. One example was to uniformize the entire printer fleet according to one control environment and one supplier. Alongside making us overly reliant on one party, this would be a major destruction of capital – we’re talking over 7,500 printers in use all around the world. We were looking for one solution for all our problems and not a solution for every problem.

Experience with UniSpool

And the solution was found. Philips Lighting had already used a solution from Holland House (part of the Solipsis Group), UniSpool, which allowed them to seamlessly control several printers on a small scale and from different ICT environments (Linux, Windows, Unix). In summary, UniSpool adapted all printing orders and files to make them compatible with the device on which the user wanted to print. This was the solution they wanted for Philips International, and Atos believes it’s state-of-the-art from a technical perspective.

‘This has been the incentive for Philips International to start using Holland House’s UniSpool. UniSpool has been put in the middle of the SAP working environment and the central printing environment in order to streamline all output. UniSpool acts as a “spooler”: it receives print files, processes them, and subsequently sends them to a designated printer with all specifications. As a result, every type of printer will always process the files with the appropriate specifications. It sounds very simple when you explain it like this, but believe us, this is a technical ‘tour de force’. Practically, you create one univocal output environment by putting UniSpool between the printers and the users’ highly varied SAP working environments. The users won’t notice this at all. The orders are sent as usual, and the print jobs and files are forwarded to UniSpool, divided between three large servers in a data centre. UniSpool will execute all preparations for the printers and convert the files into a language the printer will understand. We refer to all the devices that are in use to send data from SAP printing orders.

Huge profits

By creating this unique environment for processing millions of print jobs, Philips International has taken a big leap forward. ‘We will save costs amounting to 70% on the operational items such as control, toners, and paper. We would like to emphasize that we’re talking about substantial numbers here. We’re not even taking the reduction of costs into account as a result of fewer malfunctions, i.e. improved company continuity. To achieve that situation, the only measure needed was to configure the printers. UniSpool is not printing software, but it is a solution that processes and uniformizes extensive and complex output sources to ensure that the production environment can continue seamlessly.

That is the big advantage of UniSpool:

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there are no problems that cause a delay in the production. We have gained insight into the total output streams, i.e. who is printing from where. In addition to this, there is complete transparency with regard to the costs involved, which is a major benefit for management in terms of cost control. However, the most important advantage is that enormous gains have been made in control and company continuity. In fact, all the complexity of the varied SAP working environment has disappeared as far as the output is concerned. We’re able to guarantee that the output is always presented,’ says Philips.

GDPR and PrinTaurus (MS Windows)

Designed to ensure the protection of personal data within the European Union, the EU’s General Data Protection Regulation (GDPR) is the first piece of legislation with a uniform set of rules on the processing of personal data for all legal entities throughout the EU.

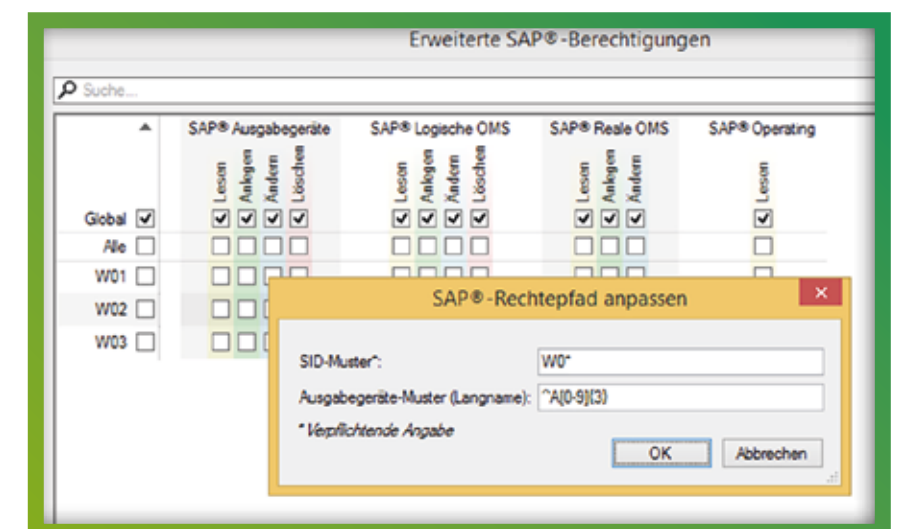
This led us to make extensive changes to our user management in order to gain a comprehensive picture of the new requirements. In particular, we extended user access rights in combination with SAP and added new functions.

User access rights can now be set and managed via a database, and new options are available for assigning rights for managing SAP systems. While it used to be possible to restrict access to SAP functions to a pure read-only right, this can now be restricted for each SAP instance individually down to the level of the output devices. This ensures that a service desk employee or manager can access SAP output devices with

HR master data, for example. Access to individual modules within PrinTaurus for SAP® can now also be individually configured for each user according to customer requirements.

All settings can also be created automatically using patterns to simplify management in large environments. With version 6.1 of PrinTaurus, our existing access rights concept will be integrated into the new user management in addition to the new functions for SAP. This means it is now possible to use the new user management for the entire PrinTaurus solution. Setting

password policies helps managers comply with and enforce the security policies you define. By connecting user management to the customer’s Active Directory, rights can be easily assigned to different groups and persons. In addition to user management, UniSpool 6.30 is supported from PrinTaurus Version 6.1 and upwards. As a result, the UniSpool print environment can be managed and configured as usual via the PrinTaurus graphical user interface. The new release of PrinTaurus 6.1 is available from July 2020.



Interesting changes in the printing field

In our printing trends outlook, especially with digitalization continuing to transform so many aspects of business, one question that you may have is whether printing is still necessary. And like every year, the answer to that question is a solid yes.

Despite moves to greener or paperless offices, printing is still a mission-critical part of our everyday working lives, and people still read better from paper than screens. But that doesn't mean that printing remains as it always was. It's continuing to develop rapidly, keeping pace with trends like Windows Virtual Desktop, increased security, or the cloud-based service approach.



Smart MFPs becoming even smarter

In our first printing trend, printer manufacturers are looking to expand beyond just selling many devices. IT is focusing on additional software and services on top of this.

MFPs that offer not just printing but also copying, scanning, and other functions are increasingly offered with additional apps and workflow solutions. Another expected development is enhanced integration, such as with office applications like Salesforce and QuickBooks or Microsoft's OneDrive.



Security is key

Until recently, people didn't really see printers as being high-tech – despite them being one of the original IoT devices. The evolution of printers from being 'just a printer' to MFPs is helpful for workflows and document management, but there are security risks if proper safeguards aren't put in place. Despite this, and with more security-related print solutions on the market, awareness has grown of the security challenges that printing environments face. UniSpool of Holland House, for example, enables fully compliant GDPR pull printing as well as end-to-end encryption.



Non-print technology having an impact

Microsoft launched Windows Virtual Desktop in September 2019, and it is expected to have a significant impact on the virtualization market (and printing) in the future. It's yet another example of new challenges and opportunities that many IT admins will be dealing with.

Printing on the go

In another printing trend, demand for greater access to printers away from the desk will increase. We're no longer tied to our desks as much as in the past – with smartphones, smartwatches, or tablets –, users have more and more channels to access and edit data.

Enabling mobile workers to become more productive is a drive that will continue in the future, with smooth, trouble-free printing remaining a key aspect of uninterrupted workflows.

Sustainable printing here to stay

While printing is often seen as wasteful, its impact is sometimes overestimated. For instance, one kilogram of virgin pulp paper results in 1.2 kilograms of CO², and recycled paper just 0.7 kilograms. Taking office-standard paper, one sheet results in about 5 grams of CO². To put this into perspective, even including the energy used for printing, one cheeseburger has the same CO² emissions as about 400 to 800 printed pages. However, enabling more climate-friendly printing is easy. Use recycled paper, show the print file before printing and decide to print it or not, enforce duplex printing, and if printing volumes are not that high, use an inkjet printer.

Printing as a Service

For our final trend, we expect print management services that let organizations centrally manage their entire print infrastructure from the cloud to have an even greater impact in the future. By eliminating the need for a range of products, reducing overall operating and printing costs, and increasing employee and IT productivity, their adoption is set to grow.

If you have any questions about printing in your organization today or in the future, feel free to contact us here at Holland House.



source: Gartner

Environment first: reduce printing!

Look around your office. What do you see next to the printer? Ten to one it's the wastepaper basket. There must be a reason why it's located exactly there. Maybe there's no other spot available. But in most organizations, it's there because it's a very convenient place.

Have you ever investigated how many prints are moved directly from the printer's out tray to the wastepaper basket? Do you know how many times a multipage document is printed when all that was needed was the first or last page? Do you also wonder where that report you find each morning on the printer is coming from – you asked your colleagues and nobody knows? Now you can understand why the wastepaper basket was put there!

But it's a real shame that all those valuable resources are wasted producing this useless output. Remember, we only have one world, and the resources available for last year were already exhausted by the beginning of August. The only reason this year's overshoot date has been pushed back to August 22 is because of the coronavirus pandemic – check www.overshootday.org

Of course, your discarded prints aren't the primary cause of this issue and are only a small drop in our (already polluted) ocean. But not doing anything will only make matters worse. Every step – even a small one – helps to reduce the pressure on our environment.



How can UniSpool help?

The introduction to this article clearly shows that not every print request generated really needs to be printed. So why not give users the opportunity to preview the output and then decide whether the document is worth printing or not?



You can instruct UniSpool to convert all output for a printer to PDF files, store them on your web server, create an index HTML page, allow users to preview the PDF files from this index page, and selectively print them. For the tech savvy, the next section outlines these steps in more detail.

Alongside saving quite a bit of paper and toner, this is one small step towards our common goal: a cleaner environment for us, our children, and our grandchildren.

Implementation in UniSpool

After a user has sent a print request, the document is exported to a PDF file instead of being printed. The export mechanism recognizes the input format, most likely PCL, Postscript, or plain ASCII text. Depending on the input format, the export feature will select the appropriate converter – if the input format is Postscript, Ghostscript (gs) can be used as the converter. The available converters are configured in UniSpool, so if your company already has a licence for another conversion product such as Compart's DocBridge-Mill, this product can be used instead. The resulting PDF file must be written to a location that's available to the web server. After the file is written, UniSpool will add an entry to an index

file for the user. This index file is available from the web server and contains UniSpool attributes to identify the print requests as well as links to converted PDF files. When the user opens the URL pointing to the index file in the browser, a web page is shown that enables the user to preview the print requests. Clicking on PDF in the Link column will open the PDF viewer and show the converted print request. The user can then decide whether the document needs to be printed, or whether they only need to view the document and don't require a hard copy. Even if this just saves a few prints a day, the efforts to put this in place are small steps in achieving our common goal: a sustainable environment.

Date	Owner	Document	Job	Printer	Link
4/10/2019 13:37	johan	Daily-report	Status-update-1	xerox	pdf
4/10/2019 13:37	johan	Invoice20190904	Finance	lexmark	pdf
4/10/2019 13:37	johan	Daily-report	Status-update-2	xerox	pdf

Information security that must be assured in printing

Information security is about protecting information assets such as printed documents, address books, and the like against information leaks, data alteration and denial of service attacks, and other such threats while maintaining the three security attributes (CIA): Confidentiality, Integrity, and Availability.



Holland House develops output and print management solutions in full awareness of the three security attributes (CIA), so that customers can securely use the Holland House UniSpool solution.

Confidentiality means that only people who are authorized to access information assets can access and use these information assets. To maintain Confidentiality, we must prevent unauthorized access to information assets. This could include identification and authentication functions embedded in the software, enabling appropriate access control and preventing unauthorized disclosure of customer information assets on MFPs and printers.

Integrity means that information assets must be accurate and correct. To maintain Integrity, information assets must be protected against unauthorized alteration by a malicious third party. For example, the usage of encryption functionality helps to ensure data protection and prevents alteration of information assets on MFPs and printers.

Availability means that information assets must be accessible when authorized users need to access them, while maintaining Confidentiality and Integrity. To maintain Availability, information assets must be available at the exact time at which an authorized user wishes to use it.

Product lifecycle security

Holland House believes that security measures are necessary throughout the product lifecycle, from the time of design and development to installation and operation. In the installation phase, passwords and usage restrictions can be set. In the operation phase, access control, stored data protection and audit logs, security updates, and the like are



performed to support secure usage of the software.

In the planning phase, we continuously check for the newest security trends and vulnerability information. We extract and analyse security requirements based on customers' security requests, so that we can incorporate them into our new models and solve any issues at an early stage.

In the development phase, we develop security functions that enable customers to use Holland House's UniSpool solution more securely. We thoroughly check potential vulnerabilities to ensure we don't embed these known items.



In the production phase, we establish a secure environment and ensure secure production by strictly following an operation process manual that enables us to perform precise operations.

Even after sales, we strive to respond promptly to any security concerns from the market.

How to:

End-to-end encrypted printing from SAP with UniSpool

To prevent prying eyes from looking at your sensitive data, all UniSpool print data can be encrypted all the way from leaving SAP up to arrival at the printer. Of course, once the output lands in the printer output tray, the document is out in the open, and you have to be sure that you're the one picking up the print-out.

A number of technologies cooperate to achieve this goal. When the document is printed in SAP, SAP invokes the UniSpool interface program to transfer the file to the UniSpool print request holding area. If the -EXCrypt flag is defined in the command definition of the UniSpool submit command defined in SAP transaction SPAD, UniSpool will encrypt the data before it is stored on disc. Similarly, if the -EXZip flag is defined there, the data file will be compressed to save disc space.

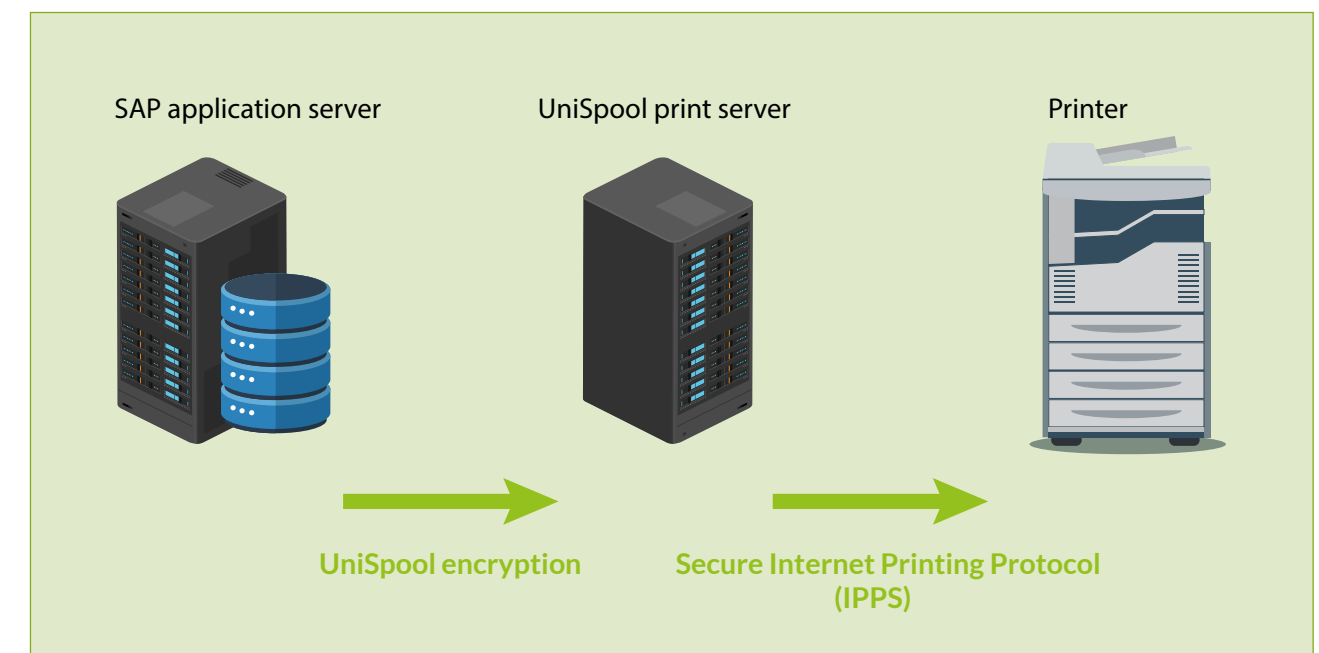
This encryption is performed using UniSpool's own internal encryption mechanisms, and compression is performed using the well-known gzip format.

If you're using a print server in your environment, the encrypted data will be transferred from the SAP application to the UniSpool print server using the UniSpool transfer protocol.

A prerequisite for sending encrypted data to a printer and successfully printing it is that the printer must support the Internet Print Printing protocol – most of today's mid-level and high-end printers and multi-functionals do.

The printer must be configured in UniSpool as a network device (type 6) with the IPP protocol, and the URL to connect to the printer must be specified in the network name, for example:
ipps://myprinter.domain.org:631/printer
The UniSpool driver decrypts the data and sends it to the printer using Transport Layer Security (TLS) encryption, as supported by the IPP protocol. The intermediate results are not stored on disc while the data is being decrypted – this is solely done in memory.

The following illustration explains the process:



For further information, please refer to the UniSpool Technical Reference Manual or contact Holland House support by e-mail at support@hollandhouse.com or telephone on +31 418 67 30 00.



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Discover the restyled website of Holland House. Simply scan the qr-code or directly go to www.hollandhouse.com.



Also available on the website:

Q&A UniSpool: www.hollandhouse.com/downloads/qa-unispool

Whitepaper UniSpool for SAP: www.hollandhouse.com/downloads/whitepaper-unispool-for-sap

Concerns when migrating SAP and UniSpool to Azure

For many SAP managers, it's the journey to SAP HANA and the cloud that raises the biggest concern, as many things need to work side by side until that journey is complete. SAP managers need help plotting this journey to the cloud where all versions of their applications and systems – whether SAP NetWeaver or S/4HANA, Windows or Linux, AnyDB or SAP HANA, UniSpool, non-production or production, temporary or permanent, smallest or largest – can co-exist until the process has been brought to a close.



With the broadest global footprint, the largest compliance portfolio, enterprise-grade SLAs, and world-class support, Azure provides a robust, resilient, and reliable environment for your SAP applications and UniSpool.

Why migrating to Azure makes sense

With most SAP customers looking for an agile deployment architecture, SAP managers are feeling the pressure to start moving business functionality to S/4HANA. But they don't know how their SAP landscape will look on S/4HANA, as SAP roadmaps for S/4HANA don't yet address many of the customer's business processes that are currently in use. As a result, SAP customers face the following situation:

- They don't know how many S/4HANA systems they need to deploy.
- Many short-lived S/4HANA systems must be created for project purposes.
- It's unclear when they can decommission their NetWeaver-based systems.
- With so many unknowns, it's very hard to get an accurate picture of the on-premise hardware investment. Azure provides the answer to this infrastructure investment question.

Azure allows SAP and Holland House customers to deploy S/4HANA and UniSpool systems on demand and pay only for the active infrastructure usage. UniSpool also runs separately on Azure, and Azure also allows SAP customers to move their existing SAP systems that run on all SAP-supported databases. Furthermore, customers can rightsize the Azure infrastructure of older NetWeaver systems as business processes move out of those systems into S/4HANA. For the UniSpool environment on Azure, you need to install US 6.30.

SAP® Certified
Integration with SAP NetWeaver®

For more information, please feel free to contact Goossen de Bruin:
goossen.de.bruin@hollandhouse.com.



Holland House b.v. | Schimminck 1a | 5301 KR Zaltbommel | The Netherlands
t +31 418 67 30 00 e info@hollandhouse.com i www.hollandhouse.com

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