KONICA MINOLTA

Whitepaper

MAKE THE MOVE!

HOW TO SUCCESSFULLY MIGRATE FROM AN ON-PREMISES PRINT INFRASTRUCTURE TO CLOUD PRINT

Giving Shape to Ideas

TABLE OF CONTENT

A hidden gem in the cloud strategy:
Why cloud print should be an essential element in every cloud strategy **03**

Making the transition into the cloud:
A guide for the move to cloud printing **05**

How to get started with cloud printing **08**

1. Look at what you have and what you need 08

2. Find the right partner with which to develop your printing strategy 09

3. Design your ideal and secure print cloud environment 10

4. Implementation 11

5. Ongoing operation and optimisation with the cloud partner 11

Konica Minolta – A strong partner for the cloud print journey **12**

Connect to Microsoft Universal Print and Google 14

Freedom from security concerns 15

Konica Minolta as a strong partner for cloud print 16

CHAPTER 1

A hidden gem in the cloud strategy: Why cloud print should be an essential element in every cloud strategy

Cloud computing has played a vital role in the digital transformation of virtually every industry. Today, businesses large and small are increasingly aware of the benefits and potential that cloud solutions provide. These range from reducing operational costs and capital expenditures (CapEx), to improving scalability, business continuity, security and reliability. During the major disruptions of the COVID-19 pandemic, the embracing of cloud-based services accelerated: Organisations sought practical ways to enable greater flexibility and roll out remote working on an unprecedented scale.

"Even as many IT departments increasingly move away from on-site IT infrastructure and adopt a 'cloud first' approach, one area with significant potential that is often overlooked is cloud print", explains Simone Suerie, Product Manager, Product Management Office, Konica Minolta Business Solutions Europe GmbH. "We find that for many organisations, print management infrastructure is very often one of the last areas still largely run in-house on local servers. However, as businesses become more mobile, more agile, and geographically distributed, connecting printing infrastructure with the cloud is one of the remaining foundations required to build an intelligently connected workplace. Print can – and should be – an essential element in every cloud strategy. Managing and maintaining on-premise infrastructure makes up a significant share in the work of the IT employees. Cloud print adds an extra layer of flexibility and frees IT staff up from managing a myriad of print servers."

> "Print can – and should be – an essential element in every cloud strategy."
>
> **Simone Suerie**
> Product Manager, Product Management Office
> Konica Minolta Business Solutions Europe

For large organisations with comprehensive IT resources, managing the print environment can be less of a challenge than it is for small and medium-sized enterprises (SMEs), whose IT resources are often limited. For SMEs in particular, on-premises print infrastructure such as print servers can prove costly to purchase and manage internally – with management in particular proving an ongoing burden on internal IT resources. As a result, cloud print, where servers and print management tools are provided and managed via the cloud via an outsourced service provider can remove many of these challenges while providing a range of additional and hitherto unavailable benefits.

Chief among these benefits is cost: Cloud print offers the ability to pay for services as a subscription, thereby making the ongoing costs more transparent and predictable: Organisations only pay for what they actually use – not for what they own. Further, cloud printing also provides the option to easily scale up as required. As well as removing the CapEx associated with hardware and software, handing over management tasks to a service provider helps businesses free internal resources from these tasks.

Internal IT resources can focus their time and energy on other more mission-critical tasks and projects. During the pandemic, this was exemplified by the way IT teams enabled remote working to ensure business continuity. In this context, cloud print is a key enabler to that ensure print services remain accessible and usable from anywhere and from a breadth of devices.

Most importantly, however, considering that businesses increasingly embrace flexible and remote working and Bring Your Own Device (BYOD) policies, cloud print can also help to ensure highest levels of security and privacy protection for sensitive information through the inclusion of dedicated solutions for secure document handling.

Key advantages of cloud print

- **Increased security in information management compared to on-premises solutions**
- **Cost reduction and efficiency**
- **Unburdening of internal IT resources**
- **Enabling more flexible and remote work**
- **Organisational flexibility and scalability**

39% of organisations have **already implemented some form of cloud print management platform**, whilst **37% intend to do so.**

Quocirca Cloud Print Services 2021 report:
https://www.konicaminolta.eu/eu-en/services/smart-cloud-services/konica-minolta-cloud-print#quocirca

Given the advantages and opportunities, it's little wonder that research by Quocirca has found that 39% of organisations have already implemented some form of cloud print management platform[1], whilst 37 percent intend to do so. This leaves many businesses still considering the challenges and practicalities of bringing print into their cloud strategy. This whitepaper will provide an overview on what to consider when embarking on this journey.

[1] Quocirca Cloud Print Services 2021 report:
https://www.konicaminolta.eu/eu-en/services/smart-cloud-services/konica-minolta-cloud-print#quocirca

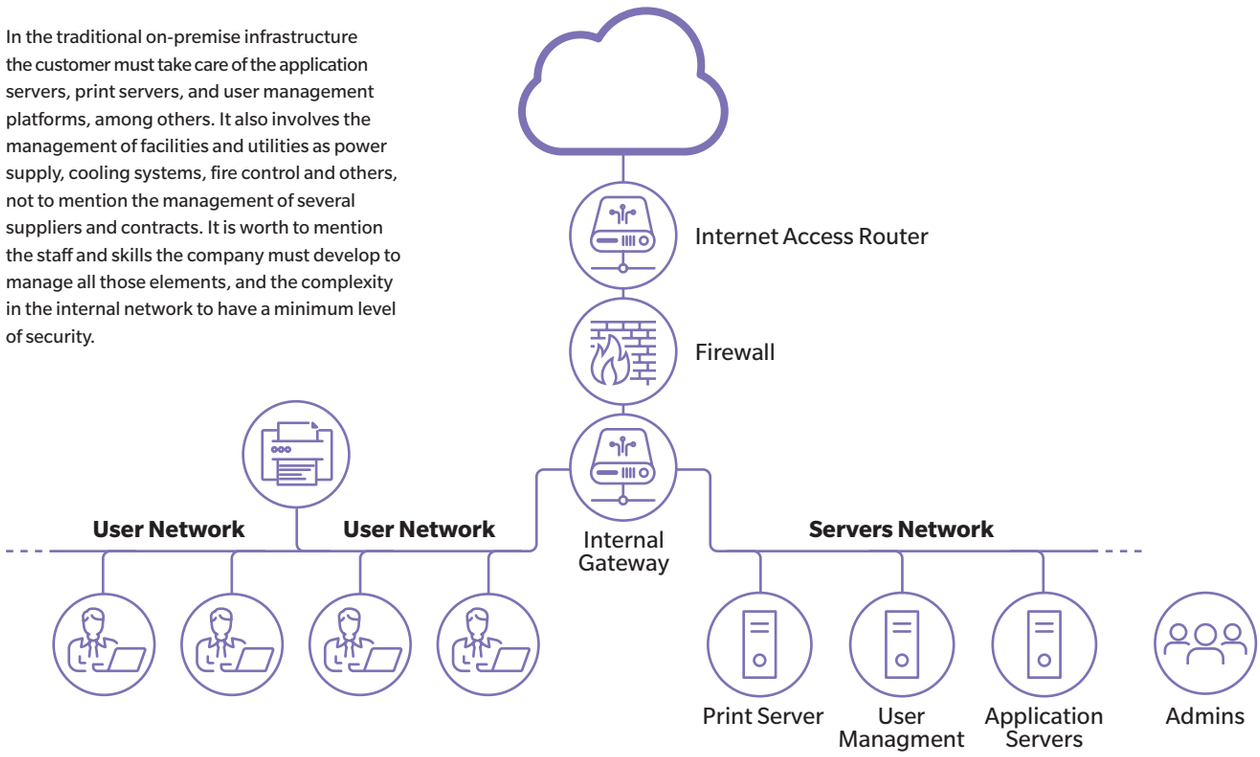
CHAPTER 2

Making the transition into the cloud: A guide for the move to cloud printing

To understand cloud printing, it is useful to consider how the 'traditional' on-premises client-server model works in general: Multiple users' devices or clients are connected over the network to a local printer server that sends jobs on to printers and helps manage and prioritise the order of inbound print requests. The printer server can also manage policies as to who can print what on which devices, how much printing resources given users or departments can consume and provide the records and data need to analyse and account for such usage. These dedicated servers are also vital in maintaining and updating printer drivers, enabling the diversity of printers and multi-functional peripherals (MFPs) connected to the network to work with continually evolving operating systems and applications. However, the hardware, software and licenses for these dedicated servers comes at a high initial and ongoing expense, requiring IT resources to maintain – especially as the print server itself becomes a potential point of failure and costly disruption.

On-premise print infrastructure

In the traditional on-premise infrastructure the customer must take care of the application servers, print servers, and user management platforms, among others. It also involves the management of facilities and utilities as power supply, cooling systems, fire control and others, not to mention the management of several suppliers and contracts. It is worth to mention the staff and skills the company must develop to manage all those elements, and the complexity in the internal network to have a minimum level of security.

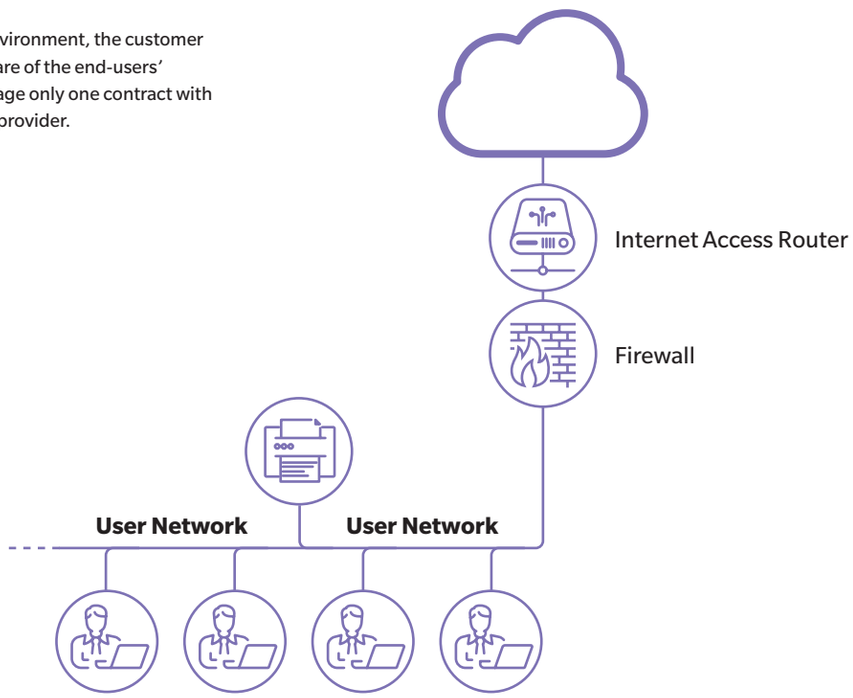


With cloud print, the printers and MFPs used by a business naturally remain on their premises, but the print infrastructure that connects users to devices is hosted in the cloud. This provides the opportunity to reduce or even fully remove the need for a print server on premises – instead working with a third-party service provider that takes care of the hosting and management of cloud-based print servers. This unburdens IT staff from the complexity of managing printers, servers, drivers, applications, and network as well as an array of manual tasks. Such tasks can be installing and keeping up-to-date antivirus software, continuous monitoring of hardware, patch-management, troubleshooting or backup and disaster recovery planning, and so on.

Cloud print is often provided via a Software as a Service (SaaS) model that offers advantages such as consumption-based pricing and the ability to be scale the solution up or down to match changing requirements. Cloud printing provides organisations with the flexibility of location-independent printing, allowing end-users to access networked printers from any device and location.

Cloud print infrastructure

In a pure cloud environment, the customer only has to take care of the end-users' support and manage only one contract with the cloud service provider.



“When implementing cloud printing there are a range of possible approaches”, explains Simone Suerie. “Some organisations may wish to take a fully serverless approach, while those with existing on premises infrastructure and specific security concerns may prefer to retain this infrastructure and deploy cloud services – either private or public or a mix of both types – in parallel. In this latter case, a hybrid approach can be adopted, where cloud-based infrastructure and servers may be used alongside each other using a single management platform. The hybrid cloud model also offers a way for organisations to transition from their current set up towards a cloud print infrastructure in future.”

In addition, cloud providers can offer applications or services on dedicated infrastructure just reserved for one customer – so-called single-tenant cloud architecture – or offer an infrastructure that is shared by multiple customers but with secure spaces for each customer’s data. Thanks to the efficiencies of sharing infrastructure, this multi-tenant approach is more cost effective, but doesn’t offer the degree of flexibility and configurability as a dedicated single-tenant infrastructure. Similarly, businesses requiring specific security arrangements may accept the higher costs of a dedicated platform.

How to get started with cloud printing

Setting up a cloud strategy for any IT field should not be taken lightly. Yet, when pursuing the following established five-step process, organisations can ensure they consider all important steps they need:

1. **Look at what you have and what you need**
2. **Find the right partner with which to develop your printing strategy**
3. **Design your ideal print cloud environment**
4. **Implementation**
5. **Ongoing operation and optimisation with cloud partner**

1. LOOK AT WHAT YOU HAVE AND WHAT YOU NEED

The starting point is to fully assess how the businesses printing environment in the organisation is currently set up. This involves understanding what devices are at each location and of what brand. It is also important to understand which processes these devices support and to know the level of internet connectivity available.

Understand the status quo of your printing infrastructure. For example:

- How many print devices are there in each location? Do you have more than one office location? If yes, how many are there and how are they geographically distributed?
- What tasks do the employees use the devices for (printing, scanning, fax, etc.)?
- Are all devices from one manufacturer or from different ones?
- Describe the current printing infrastructure in your organisation
- How fast and stable is internet connectivity at the printing location(s)?
- How does your IT Team set-up look like and print-related tasks are managed inhouse?
- Who are your current printing suppliers and partners, what SLAs do you have with them?
- Are there any end-of-life deadlines with regard to both hardware and software to keep in mind?

Identify your organisation's specific goals for cloud print. Examples:

- Reducing capital expenditures and operational costs for printing
- Unburdening the internal IT team – a desired shift towards managed services
- Making seamless work and print in different locations possible, such as from a client's location, on the road or from home
- Increasing your organisation's readiness for 'new work'
- Flexibility to scale up and down print infrastructure in line with the business needs
- Is a single point of contact for all print-related tasks needed?
- Improved IT security. Ensure IT and security is always up-to-date, e.g. through automatic updates
- Existing and upcoming organisation-specific security and compliance requirements. Restricting information from leaving premises

Understanding the present state and future goals of your organisation will help drive an effective cloud print strategy. Those managing the transition should consider the functionality needed by users in various teams and locations, and balance these against potential costs (and desired cost objectives) and internal resource demands. It is also important to take into account future developments of the company, such as whether in future greater flexibility might be required (for example, if the company will be introducing greater levels of flexible or remote working or introducing a hot desking policy or to create flexibility in storage capacity, for example when new applications are being introduced or old ones removed).

2. FIND THE RIGHT PARTNER WITH WHICH TO DEVELOP YOUR PRINTING STRATEGY

Unlike the traditional Managed Print Services (MPS) model, the move to the cloud is less reliant on a transactional focus on products and services and more on solutions that enable strategic change and digital transformation. According to Quocirca, service providers in this space must work with organisations through "lasting, value-led relationships that elevate MPS into the realms of a strategic partnership". Such relationships will involve "delivering complementary productivity-boosting services, security innovations and advanced analytics that become critical" in achieving business' objectives.

All of this means that as well as choosing a partner with the right portfolio of solutions based in the right location, it is just as important to find a partner able to understand and align to your business objectives. A further consideration – especially for the many businesses with a 'mixed fleet' of MFPs and printers from multiple vendors is the ability to use the print infrastructure with these devices – rather than be locked to a particular vendor's hardware. It's important to make sure the cloud print technology enables devices from multiple manufacturers to have full finishing capability using a single "cloud-friendly" printer driver.

Even if an organisation currently has a homogenous environment that exclusively uses one vendor's devices, adopting vendor neutral cloud infrastructure may be a sensible and future-proof way to avoiding being locked into that eco-system in future.

When searching for an IT partner in general: Eight questions to ask when you are looking for the ideal IT vendor:

1. **What are my business goals? And is my current IT ready for them?**
2. **What internal team resources do we have?**
3. **What is my vision for the future of my business?**
4. **How financially stable and reliable are the vendors and their partners?**
5. **How is the vendor set up with regard to their customer service infrastructure?**
6. **How do your peers evaluate the vendor?**
7. **Is the vendor an industry driver and a thought leader?**
8. **Is the vendor looking for a long-term partnership?**

https://www.konicaminolta.eu/eu-en/forms/ebooks/guide-finding-the-right-it-vendor

3. DESIGN YOUR IDEAL AND SECURE PRINT CLOUD ENVIRONMENT

One of the first decisions to make with your selected partner is the best approach to take to implement cloud print, which will be largely defined by the requirements defined in phase one above.

For organisations with a homogeneous MFP/printer environment, with multiple locations, a platform as a service (PaaS) approach – where everything from hardware to cloud services is all provided under a single contract may provide a simpler option. However, where there are multiple different types of devices in the company already, having the print servers and management tools hosted by a third party in the cloud and continuing to have the devices on site managed by internal IT may make more sense. Yet, this should be evaluated with the cloud print partner. In either case, ensuring compatibility with common systems is key.

It is also important to determine how best to ensure the highest possible level of security. This should include a 'Zero Trust Policy'. This system requires verifications for all types of actions, from within the organisation or from external sources alike. Considerations should also include ensuring that any third-party data centres have relevant security certification (e.g. ISO 27001) and that adequate end-to-end encryption technologies are in place to ensure data and documents stay private. The location of data centres is also important – especially with regard to GDPR compliance – as are the disaster recovery measures in place to protect and back up data in those data centres. Hence, a solution with the cloud servers based in Europe can be a deciding compliance factor. Furthermore, solutions such as "follow-me authentication" can ensure secure printing by making sure that only the person that requests a print can collect it from a device. On a related note, work with your partner to determine how to implement appropriate policies to ensure that only people with the right to access data are able to print it.

Just 21% of IT Decision Makers (ITDMs) say they are completely confident in the security of their print infrastructure, compared to 33% prior to the COVID-19 pandemic.

64% of ITDMs have reported a data loss as a result of unsecure printing practices

£825,000 is the average cost of a data loss incident in a company in Europe

Quocirca Print Security Landscape 2020 report: https://print2025.com/reports/print-security-2020/

Within this design phase it is also necessary to define the scope of service and support with the cloud print partner and confirm their service level agreements (SLAs). Typical agreements consist of solution availability including minimum uptime levels and expected downtime/maintenance requirements, when support will be available and response times based on priority, clear definition of data ownership, and plans for disaster recovery and backup. Where appropriate, some businesses may demand a premium SLA – for example, one that offers 24/7 support or that agrees to a minimum uptime of 99.5%. The flipside of this coin is to also define clear roles for internal resources to ensure everything runs smoothly. It is also important to define workflows for business-as-usual processes like adding new users.

4. IMPLEMENTATION

The process of transitioning to a new model will involve set-up of any new devices, migrating user management to the new solution and setting up monitoring and maintenance processes. As this will naturally highly depend on the solution and set-up of choice, there cannot be a general rule on how the implementation phase should look. This is a key project element to be defined together with the selected partner.

"While every implementation phase is different – there is one success factor they all have need to have in common: Take your employees with you on the transition journey", says Simone Suerie: "Often modernisation and improved user experience go hand in hand. However, with something as traditional as printing, there may be significant resistance to change. During this critical stage it is important to communicate effectively to explain to end users the reasons behind the transition, the benefits they will gain from the new system and also provide necessary training."

A good approach to minimise disruption to end users and reduce adoption curves is to ensure that a cloud print platform enables users to continue as if nothing had changed. The key is actively including key users of the company into the transformation process, coordinate changes with the users and continuously and proactively communicate both the adaptions as well as benefits for them.

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> Konica Minolta Business Solutions Europe

5. ONGOING OPERATION AND OPTIMISATION WITH THE CLOUD PARTNER

Implementing the new cloud-based printing infrastructure with a partner is just the first milestone in an ongoing relationship. Per the terms of the agreed SLAs, there will be continuous communication regarding user management, update management, monitoring, and issue resolution. Considering the various possible set-ups and agreements, the ideal ongoing operation of the cloud printing vary considerably from organisation to organisation.

Nonetheless, to ensure a successful ongoing cloud print operation, there are some general tasks that need to be pursued beyond the operational activities:

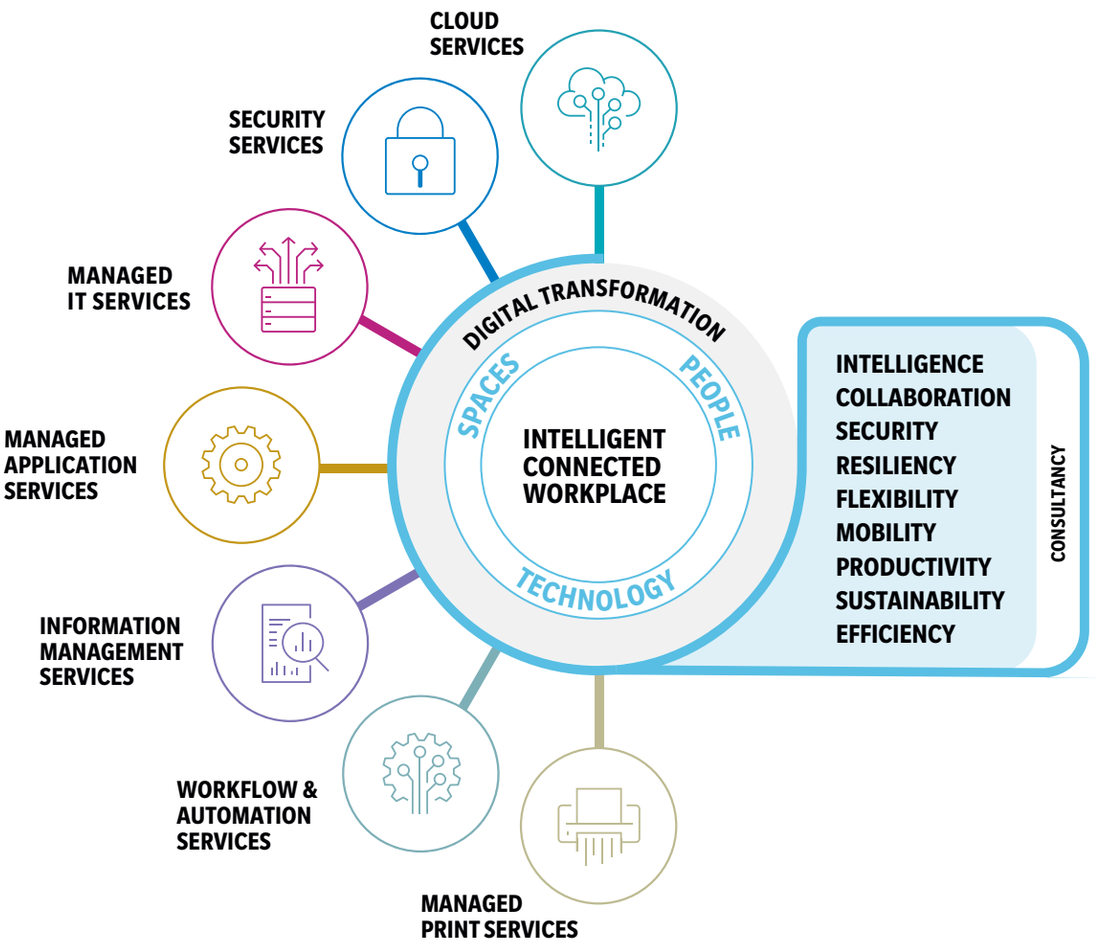
- Feedback and 'hiccups': Gather information from the employees for continuous improvement and evaluation of both the performance of the solution as well as collaboration with the partner. Provide partner with timely feedback for adjustments.
- Define "check points": Set timings for reviewing the status of the operation, either internally or ideally together with the partner (first 100 days, 6 months, first year etc.)
- Strategy alignment review: On a regular (e.g. annual) basis, critically review the alignment of the organisation's strategic goals with the established cloud print strategy

CHAPTER 3

Konica Minolta – A strong partner for the cloud print journey

The right partner is essential when seeking to integrate cloud print into your organisation's cloud solution. For many businesses print is just one facet of a wider digital transformation, which is why Konica Minolta is ideally placed to support this journey. In additional to decades-long experience as a leader in high quality printing solutions, Konica Minolta offers a broad range of managed IT and security services as part of its strategic commitment to empower 'Intelligent Connected Workplace', acting as a single point of contact for all questions around the digital workplace. This includes enabling remote working, collaboration, workflow management and automation and security through cloud, IT, managed print and even video solution services.

Konica Minolta's Intelligent Connect Workplace approach



Thanks to this breadth of capabilities, Konica Minolta is ideally positioned to help organisations reach the next level of digital maturity. Indeed, IDC notes that Konica Minolta is today "recognised globally as a leader in print transformation'[3]. Meanwhile, Quocirca, describes Konica Minolta's offering as being "comprehensive, spanning digital print, IoT, artificial intelligence" with investments in IT services enabling Konica Minolta "to deliver on its strategy to provide integrated IT services and become a reliable partner for digital workplaces."[4] Further, Konica Minolta is committed to providing its customers with the highest level of service and functionality, winning it the BLI PaceSetter Award for Serviceability and Support 2020–2021 in Western Europe awarded by Keypoint Intelligence [5]. The recognition honours that Konica Minolta offers the best-designed tools, programs and trainings to enhance the serviceability of its products and services.

Beyond deep expertise in print, this strong portfolio of adjacent cloud technologies makes it possible to work with customers to develop and implement a cloud print strategy in a holistic manner that aligns to their wider business objectives. As a trusted advisor, Konica Minolta can provide customers with independent advice on the optimal cloud solution for their businesses and take care of migrating, operating and constantly optimising print infrastructure to address evolving challenges.

Konica Minolta offers a broad portfolio of cloud print solutions. Find more information and contacts here.

konicaminolta.eu/cloud-print

The Konica Minolta Cloud Print Portfolio has been created to offer a range of solutions to address the breadth of customer needs. The portfolio includes EveryonePrint Hybrid Cloud Platform (HCP) and bizhub Evolution, for example: EveryonePrint HCP provides all the benefits of cloud printing, not only for Konica Minolta printers, but also for printing devices from other vendors, making it the go-to solution for organisations with mixed print fleet. For organisations that aim to seamlessly include functionalities such as cloud fax or translation services, the bizhub Evolution cloud platform provides access to a full range of different cloud services besides cloud printing.

[3] IDC, IDC MarketScape: Worldwide Print Transformation 2020 Vendor Assessment, Doc #US45354420, August 2020, https://www.konicaminolta.eu/eu-en/idc-names-konica-minolta-as-leader-in-print-transformation

[4] Quocirca MPS Vendor Landscape Report 2021, https://www.konicaminolta.eu/eu-en/quocirca-names-konica-minolta-as-leader-in-managed-print-services

[5] Keypoint Intelligence, One Vendor Recognized by Keypoint Intelligence with the Buyers Lab PaceSetter Award in Serviceability & Support for Western Europe, https://www.keypointintelligence.com/news/awards/2020-2021/one-vendor-recognized-by-keypoint-intelligence-with-the-buyers-lab-pacesetter-award-in-serviceability-support/?regionChoice=europe

Learn more about Konica Minolta's solutions:

EVERYONE Print

https://www.konicaminolta.eu/eu-en/software/cloud-mobile-printing/everyone-print-hybrid-cloud-platform

bizhub Evolution

www.konicaminolta.eu/eu-en/services/smart-cloud-services/bizhub-evolution

CONNECT TO MICROSOFT UNIVERSAL PRINT AND GOOGLE

bizhub Evolution from Konica Minolta offer the necessary connectors to Microsoft Universal Print to provide a secure and simple way to create a corporate print environment within the Microsoft 365 business environment. Universal Print is subscription-based, integrated in Microsoft 365 and runs entirely on the cloud computing platform Microsoft Azure. On-premise print infrastructure is no longer required, freeing organisations from the burden of managing your print infrastructure.

For organisations that had been using Google's now discontinued Google Cloud Print service, bizhub Evolution and EveryonePrint HCP provide an excellent alternative.

bizhub Evolution has even been 'Chrome Enterprise Recommended'. The Chrome Enterprise Recommended badge demonstrates to Konica Minolta's clients that bizhub Evolution runs seamlessly on Chrome OS.

Konica Minolta's Chrome OS solution for bizhub Evolution is available to install via the Chrome Web-Store. It can also be rolled out via Google Workspace. The integration of the Google Workspace into bizhub Evolution offers the advantage that all users created in the Google Workspace are automatically transferred to the user administration of bizhub Evolution and therefore do not have to be created again. Hence the same credentials can be used for convenient Single-Sign-On. Also EveryonePrint HCP enables single sign-on via Google Workspace. IT can simply deploy the Chrome extension for HCP via the Google Admin Console, and roll-out the pre-configured extension to all users. The solution also provides users with the flexibility to install and configure the HCP Chrome Extension from their desktop if required.

For bizhub Evolution Konica Minolta also offers an integrated connector to Google Drive. This means that if users want to convert, translate, fax or much more, they can store the edited documents directly in Google Drive. They can also pull-print their Google Drive documents directly at the MFP. Google Drive is also integrated in bizhub Evolution.

FREEDOM FROM SECURITY CONCERNS

One of the key advantages of working with Konica Minolta to manage the print environment is security. The partner ensures everything is always up to date and meets the latest security standards, independent of the implemented solution, the data's storage type or location. The organisation has obtained an ISO 27001 certification for its established Information Security Management System (ISMS). The scope of this certification also entails the customer-facing print management services such as office printing. Solutions that are hosted by Konica Minolta are run on the provider's ISO27001 and DIN EN 50600 certified data centre. It has strict authentication protocols in place and data is reliably protected with continuous backups via a dedicated backup system, for example. Customers are also guaranteed full network isolation on the platform, including their own network segment, routers and firewalls.

Safety must always come first – and this includes the printing environment. Learn more here.

https://www.konicaminolta.eu/eu-en/solutions/digital-office/device-security

Solutions also offer advantages such as follow-me authentication, which ensures that only the person that orders printed material receives it and that it does not fall into unauthorised hands. Meanwhile, Konica Minolta devices themselves are certified with the highest security-standards.

KONICA MINOLTA

KONICA MINOLTA AS A STRONG PARTNER FOR CLOUD PRINT

"With cloud print from Konica Minolta, businesses of every size can benefit from cost-effective, sophisticated and secure printing infrastructure delivered as an easy-to-use service," concludes Simone Suerie. "Our Cloud Print Portfolio offers a breadth of powerful solutions for high quality services that can be matched to your individual needs. In short, our role is to be your indispensable partner and help you navigate the first steps into the cloud and onwards to the intelligent workplace of the future."

Five reasons to choose the cloud

Our Konica Minolta Cloud Print Portfolio focuses on connectivity, flexibility and liberation. We connect your printing infrastructure with the latest cloud technology to bring your business one step closer to an intelligent connected workplace.

1

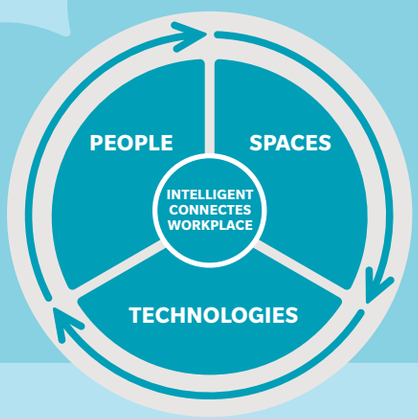
Reduced workload and peace of mind

We host your cloud solution and ensure that it is always available, taking care of performance and optimisation too.

2

Full cost control facilitates planning

Thanks to a fixed monthly rate and low initial investment, you only pay for what you actually use.



3

Maximum data security

Your data is in good hands and stored securely in our certified Data Center that comply with the GDPR regulations.

4

Fit for the future with unlimited possibilities

Cloud and hybrid services offer maximum flexibility and scalability to keep your business' IT infrastructure growing.

5

Say goodbye to outdated systems

We provide state-of-the-art hardware and software, as well as any necessary updates.