

E-Book

Migrating Printing to the Cloud



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Introduction

Almost all companies are to some degree dealing with the cloud migration of their systems. The strategies used to achieve this differ significantly. Some companies are pursuing the goal of setting up their corporate IT in a private cloud in order to retain complete control over the IT systems and data and to ensure security and compliance requirements. Other companies, on the other hand, choose to leverage SaaS services to drastically reduce IT costs and increase flexibility and scalability.

Regardless of the strategy chosen, it is clear that the cloud offers numerous advantages in every case. These include the ability to provide IT resources in a flexible and scalable way to meet business needs and reduce costs. In addition, companies can react more quickly to changes in the business world by adapting their IT infrastructure quickly and easily. Cloud-based services also enable easier cross-departmental and multi-site collaboration, which increases the productivity and efficiency of employees.

There are also many changes that come with the cloud. Companies need to be prepared to manage and maintain cloud-based IT systems and ensure that they meet security and compliance requirements. They also need to adapt to managing data and applications in the cloud and ensuring that they meet regulatory requirements.

It is important that businesses carefully consider the different cloud migration strategies and their pros and cons to make the best possible choice for their business. Careful planning and implementation are essential to reap the full benefits of the cloud and overcome the challenges.

What Does Cloud Migration Mean?

Cloud migration is the process of moving data, applications and other IT resources from an on-premises environment or traditional data center to a cloud. This can be a private cloud hosted by the organization itself or a public cloud provided by a third-party provider such as Amazon Web Services, Microsoft Azure or Google Cloud. As previously mentioned, the main advantage of cloud migration is the ability to deploy IT resources in a flexible and scalable way to meet business needs and reduce costs. In addition, companies can react more quickly to changes in the business world by adapting their IT infrastructure quickly and easily.

What Are the Different Types of Cloud Migration Strategies?

There are various cloud migration strategies that companies can use to move their IT resources to the cloud. One option is the “lift-and-shift” strategy, where existing applications and data are migrated to the cloud without major changes. Another strategy is the “re-platforming” strategy, where existing applications are modified and adapted to the cloud. Another strategy is “re-factoring”, where applications are completely redeveloped to take full advantage of the cloud. Selecting the right strategy depends on the individual requirements of the company and should be carefully considered.

Why Should You Migrate Print Infrastructure to the Cloud?

When migrating to the cloud, printing should not be forgotten. When it comes to cloud migration, few think about printing. But a cloud migration strategy that doesn't consider printing can easily fail, or at least lead to costly problems and lower user adoption later in the project. Of course, in the end the printers remain on-site and cannot themselves be migrated to the cloud, but all processes up to paper output can.

Seven Advantages of Cloud Migration of the Print Infrastructure

Printing to Remote Printers

One of the most important benefits of migrating print infrastructure to the cloud is the decoupling of printer and end device. This allows employees to access the printers in the company from anywhere, whether from the sales floor or a distant branch, for example. This significantly increases staff productivity and efficiency.

Uniform Printer Assignments

Another advantage is the uniform, fixed assignment of printers regardless of location and network connection. This enables fast and efficient management and distribution of printers in the company.

Lower Hardware Requirements

The use of cloud-based printing solutions places hardly any requirements on the end devices, as no local printer drivers are needed. This makes administration and maintenance of the IT infrastructure much easier.

Improved Print Integration with Applications

Another advantage is the integration of all cloud-based applications, whether virtual, desktop-based, web or SaaS applications. The result is that companies can optimize their IT systems and processes and improve collaboration and cooperation between different departments and locations.

Fewer On-Site Attack Vectors

Cloud-based printing solutions also enable the reduction of local attack vectors and the consistent implementation of Zero Trust. This increases the security of the IT infrastructure and offers businesses more protection from data loss and attacks.

Improved Reporting

Through cross-site management and reporting, companies can monitor and optimize the use and management of printer resources in real time. This leads to efficiency gains and cost savings.

Easier Management of Branch Offices

Finally, the use of cloud-based printing solutions enables the implementation of fully administration-free branch offices. This greatly simplifies the management and maintenance of the IT infrastructure and enables companies to minimize their IT resources and costs.

ezeep Blue – The Printing Solution of Choice Regardless of Migration Strategy

ezeep Blue is a cloud printing solution that is suitable for “lift-and-shift” as well as for “re-platforming” and “re-factoring” strategies.

As a printer driver, ezeep Blue can be easily integrated into existing applications (lift-and-shift). By using ezeep.js and the API, ezeep Blue can also be integrated into newly developed or modified applications (re-platforming, re-factoring). In this way, companies can integrate ezeep Blue as a cloud printing solution into their IT infrastructure and fully exploit the advantages of the cloud. Thus, ezeep Blue offers a high degree of flexibility and adaptability to the individual requirements of the company.

ezeep Blue as a SaaS Printing Service for all Applications

ezeep Blue can be easily integrated into cloud desktops such as Microsoft Cloud PC, Azure Virtual Desktops or Citrix and VMware solutions via the ezeep App. However, cloud desktops tend to play a subordinate role in cloud migration; rather, classic desktop applications tend to be replaced by web-based applications. These can also be very easily connected to the ezeep Blue infrastructure with just a few lines of code. This eliminates the need to download PDFs before printing, and

printing is possible from any device that can access the web application. With the mobile apps, optimal printing support for mobile applications can also be realized. Likewise, ezeep Blue can be set up as an ideal Chrome OS printing solution via the Chrome Extension. Regardless of the end device, printers are easily managed and assigned via the ezeep Blue portal.

How to Implement ezeep Blue

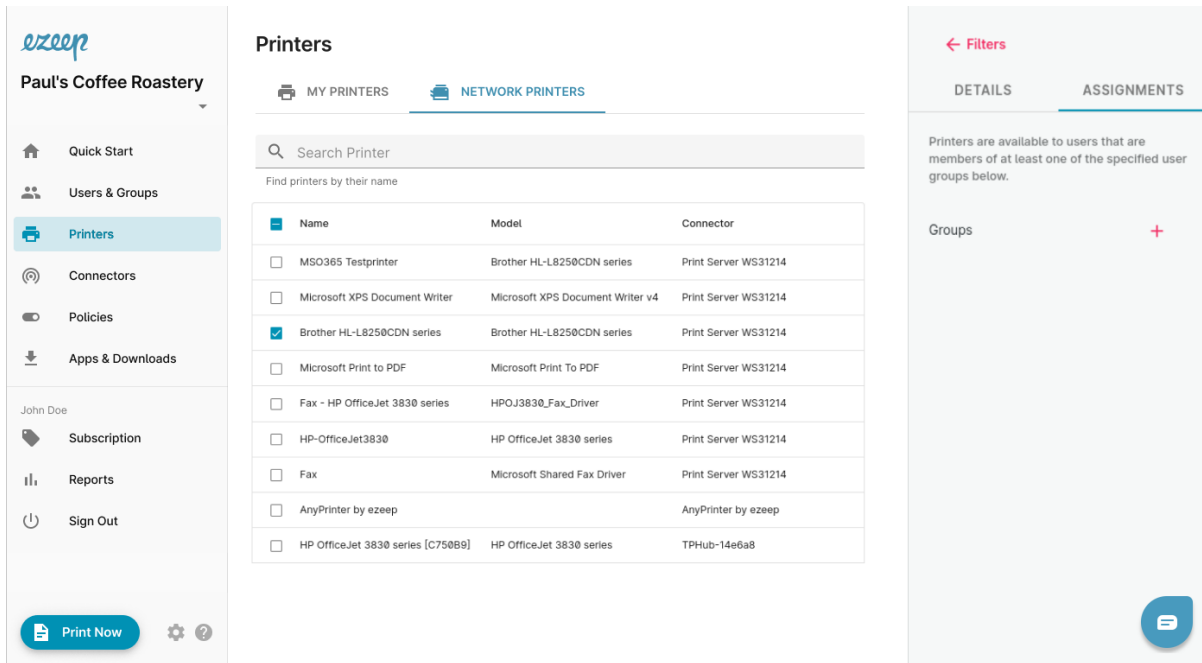
But how do you manage to move the entire print infrastructure to the cloud while keeping the printer itself on-site? It's simple: with the help of ezeep Blue.

ezeep Blue is scalable and easy to implement for all types of businesses. Whether large or small, you can have your printing infrastructure up and running in the cloud in minutes.

This is made possible by ezeep Blue's simple architecture, which consists of just three components: The ezeep Blue Connector software and/or hardware, the ezeep Blue Admin Portal and the ezeep Blue Apps.

The following steps explain how these parts are used and what steps IT staff take to implement ezeep Blue.

1. Create an ezeep Blue Account and Log In to the ezeep Admin Portal

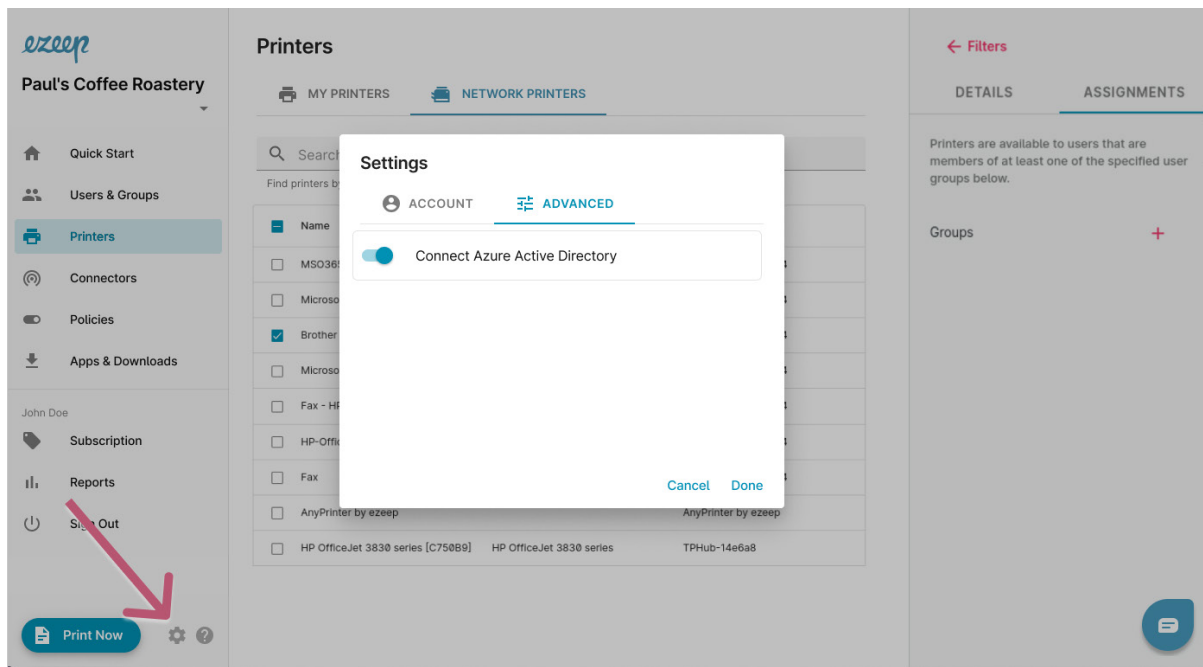


The ezeep Admin Portal

ezeep Blue is free for a small team of up to 10 users and gives IT administrators the freedom to start at their own pace. The ezeep Admin Portal - available after creating an ezeep Blue account - provides a central overview of the entire print infrastructure from any web browser.

The menu on the left contains sections for all major print management tasks - user management, printer management and policies. All ezeep Blue apps are available for download in the portal, reports can be created and all connectors can be managed.

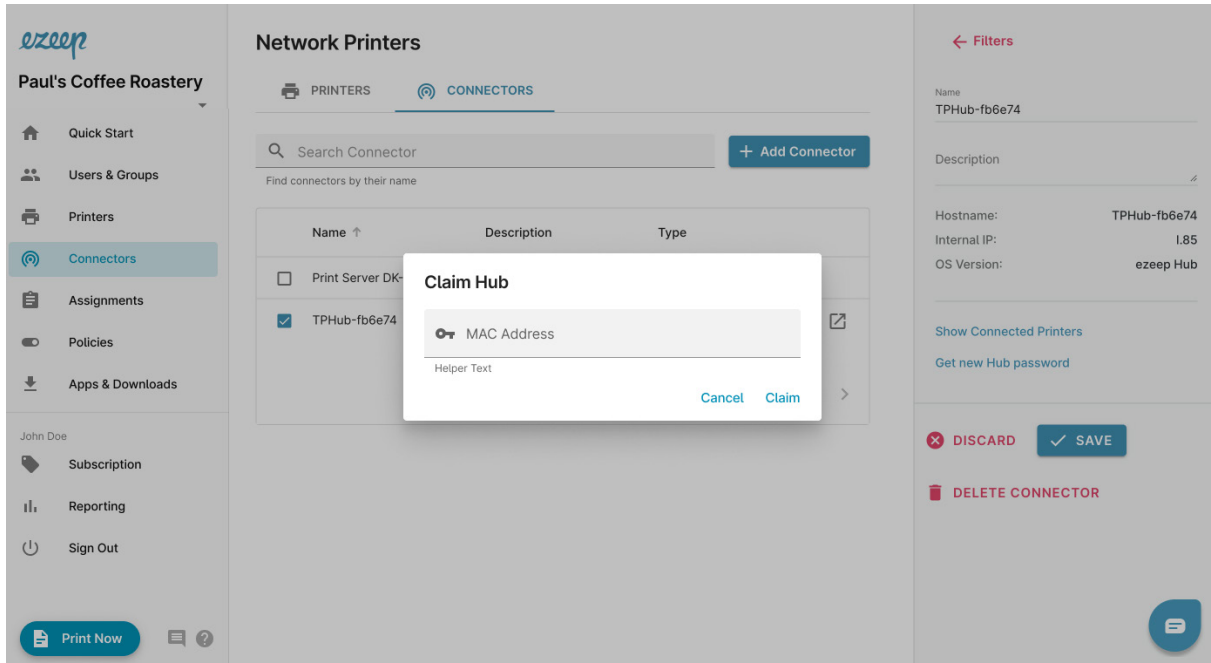
2. Import Users / Set Up Synchronization with AAD



After clicking “Connect Azure Active Directory”, you will be prompted to log in to your AAD to import users.

By clicking on “Settings” and the option “Connect Azure Active Directory”, all users in Azure Active Directory are automatically imported into ezeep Blue. Other users are imported individually or in bulk via the menu “Users & Groups”.

3. Connect the ezeep Hub



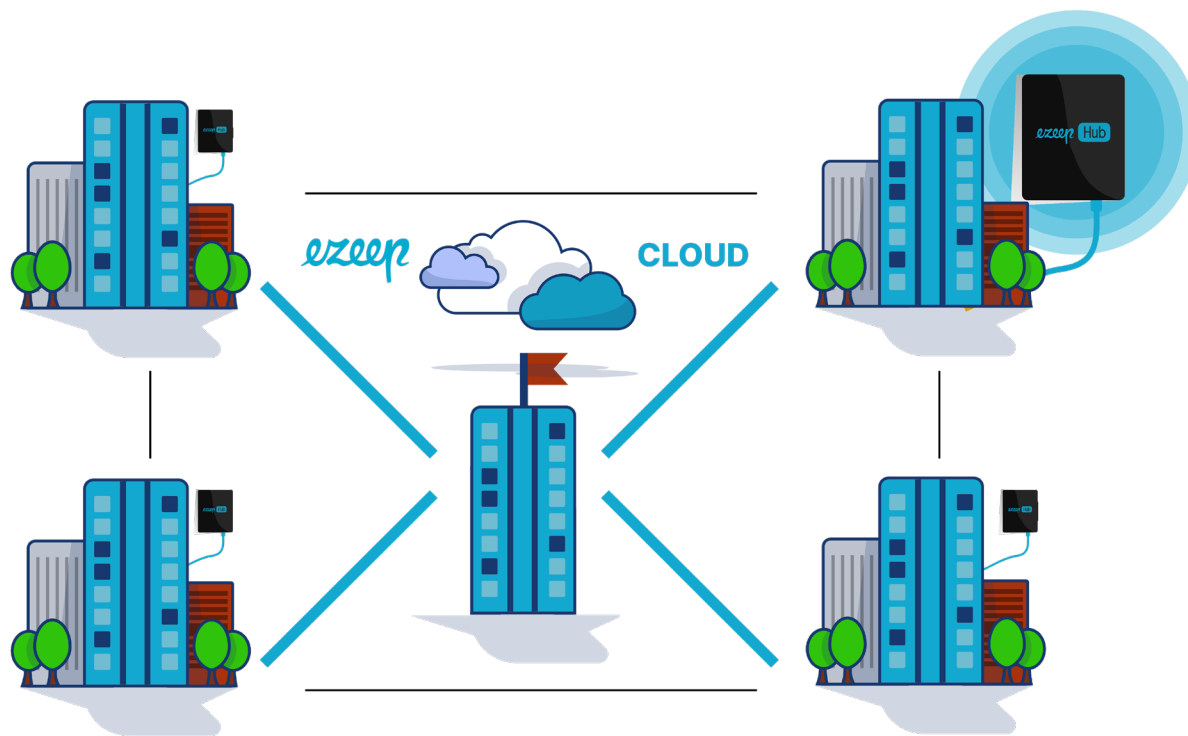
Claiming an ezeep hub via the MAC-Address

There are various ways to connect printers to the cloud. For example, the ezeep Blue connector software can be installed on the print servers in the organization where the printer objects have already been created. This is suitable for hybrid cloud strategies; full cloud migrations are achieved by connecting printers to the cloud with the ezeep Hub.

The ezeep Hub is a small appliance about the size of two packs of cards stacked on top of each other. It only needs to be plugged into a power socket and connected to the network via an Ethernet cable. All printers that are on the same network as the Hub are reported back to the ezeep Blue Cloud. The Hub is then registered by the organization in the ezeep Admin Portal by entering the MAC address printed on its back in the 'Connectors' section.

Now the ezeep Hub is connected to the organization and all connected printers can be managed via the Cloud.

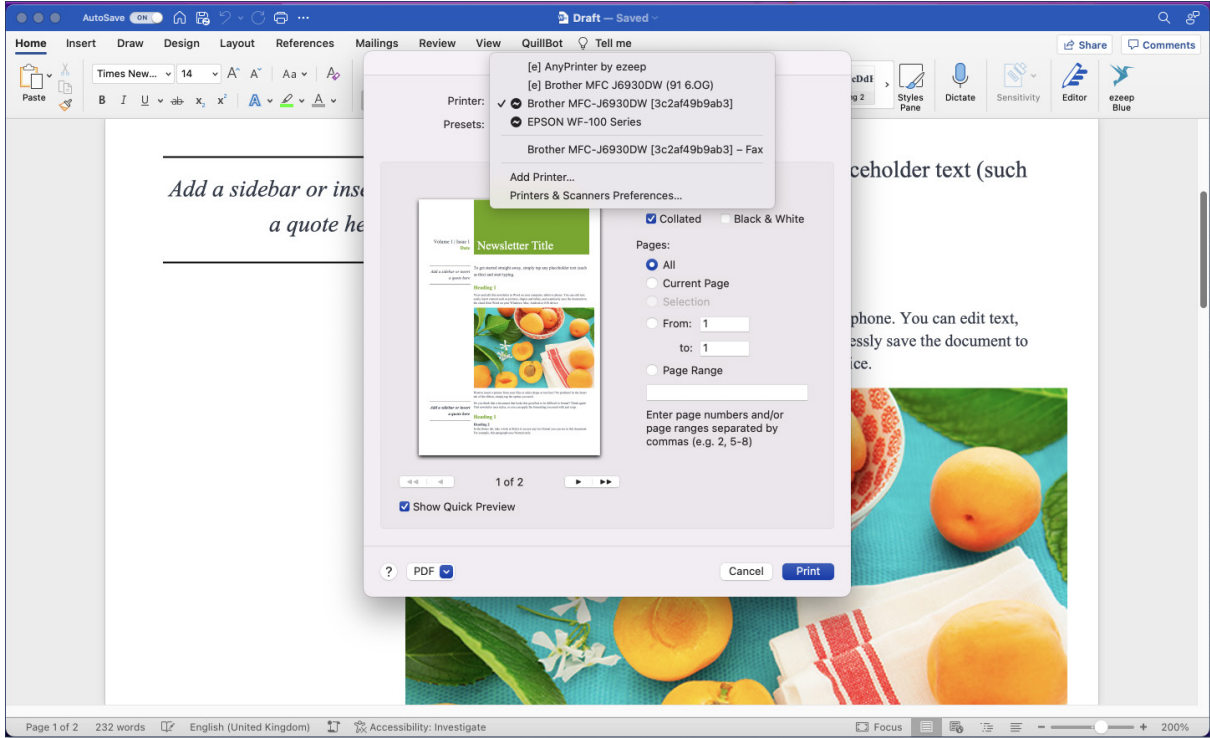
4. Distribute Further Hubs Off-Site to Branch Offices



With the ezeep Hub, printers at remote locations can be managed easily from the HQ office.

Larger organizations with multiple sites manage the printers of their entire organisation by distributing ezeep Hubs to these sites. Since the Hub automatically detects all printers, there is no need for anyone with special IT skills to be on site. By registering the Hub by its MAC-Address, IT staff manage all Hubs from the convenience of their web browser. If a printer or a certificate needs to be changed at another location, this can be done completely remotely.

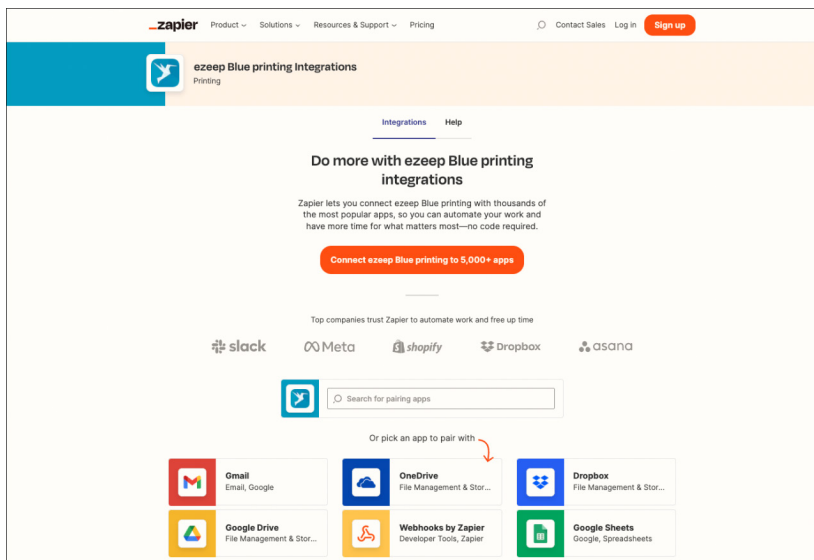
5. Deploy ezeep Blue Apps



Print from an app on a macOS device. The ezeep Print App for macOS is installed and runs silently in the background. Cloud printers assigned to the user appear in the native print screen.

The ezeep Blue apps, which are available for Windows, macOS, iOS, Android, ChromeOS and for remote desktops, are distributed to all user devices and run unnoticed in the background. The user prints natively from any desktop or mobile apps. With the Print Now app in their ezeep Blue user portal, any user can also print even if an ezeep Blue app is not yet installed.

Integrating SaaS apps via Zapier, ezeep.js or the API



ezeep-Blue integrations on the homepage of Zapier.com

The integration of printers in web applications is a bit more difficult, but is also supported smoothly by ezeep Blue. Sometimes print jobs are triggered from the backend in another network. Also, sometimes large quantities of jobs need to be printed automatically. In these use cases, the speed at which the print jobs are completed plays a crucial role in the workflow.

To simplify the print integration of SaaS apps and enable native printing from apps, the ezeep API is used to fully integrate printers into workflows. IT admins get their Client ID, Client Secret and Redirect Uri from ezeep and follow the implementation documentation. In addition, ezeep's Javascript library, called ezeep.js, allows IT staff to implement ready-made printing functions with less preparation and scripting.

Additional services such as Zapier or Pabbly Connect can also be used to set up triggers between apps and ezeep Blue to automate the printing process.

Private Clouds: Optimising Print Servers with ThinPrint in Special Cases

When migrating to the cloud, some companies also pursue the strategy of setting up a private cloud, i.e. mapping the entire infrastructure in their own, separate private cloud. In principle, this corresponds to having one's own data centre, except that this is now realised on the basis of a certified cloud provider, who is usually also responsible for platform security. However, the servers themselves are maintained entirely by the company itself. A print server outsourced to the cloud is therefore initially exactly the same as a normal print server on site.

However, completely new requirements are placed on such a print server in the cloud. Print jobs should not unnecessarily burden the transfer volume from the cloud, printers should be able to be used independently of the printer drivers installed on the cloud print server. It should also be possible to exchange printers without making changes to the cloud print server. And although the print server is now running in the cloud, the local mapping should work flawlessly. In this way, each employee should be able to access precisely the printers he or she needs and which are available in his or her environment. For customers who want to run their print servers in a private cloud, we offer our ThinPrint solution, which has already proven itself with hundreds of cloud providers. A ThinPrint-equipped print server meets all the requirements described above.

More information about the ThinPrint Cloud Print Server in the [Azure Marketplace](#).

Conclusion

Printing should be considered in any cloud migration. For the private cloud, an implementation based on ThinPrint is recommended. Otherwise, ezeep is the ideal solution to enable printing in any context, saving time and costs.

To learn more about how you can migrate your print infrastructure to the cloud with ezeep Blue or ThinPrint, contact hello@ezeep.com or call us on **+1-720-253-1400** or **+49-30-3949310** to arrange a virtual product demonstration. ezeep Blue is also free to use for up to ten users. Create a free account via our website to test the solution yourself right now at: <https://www.ezeep.com/free-trial/>