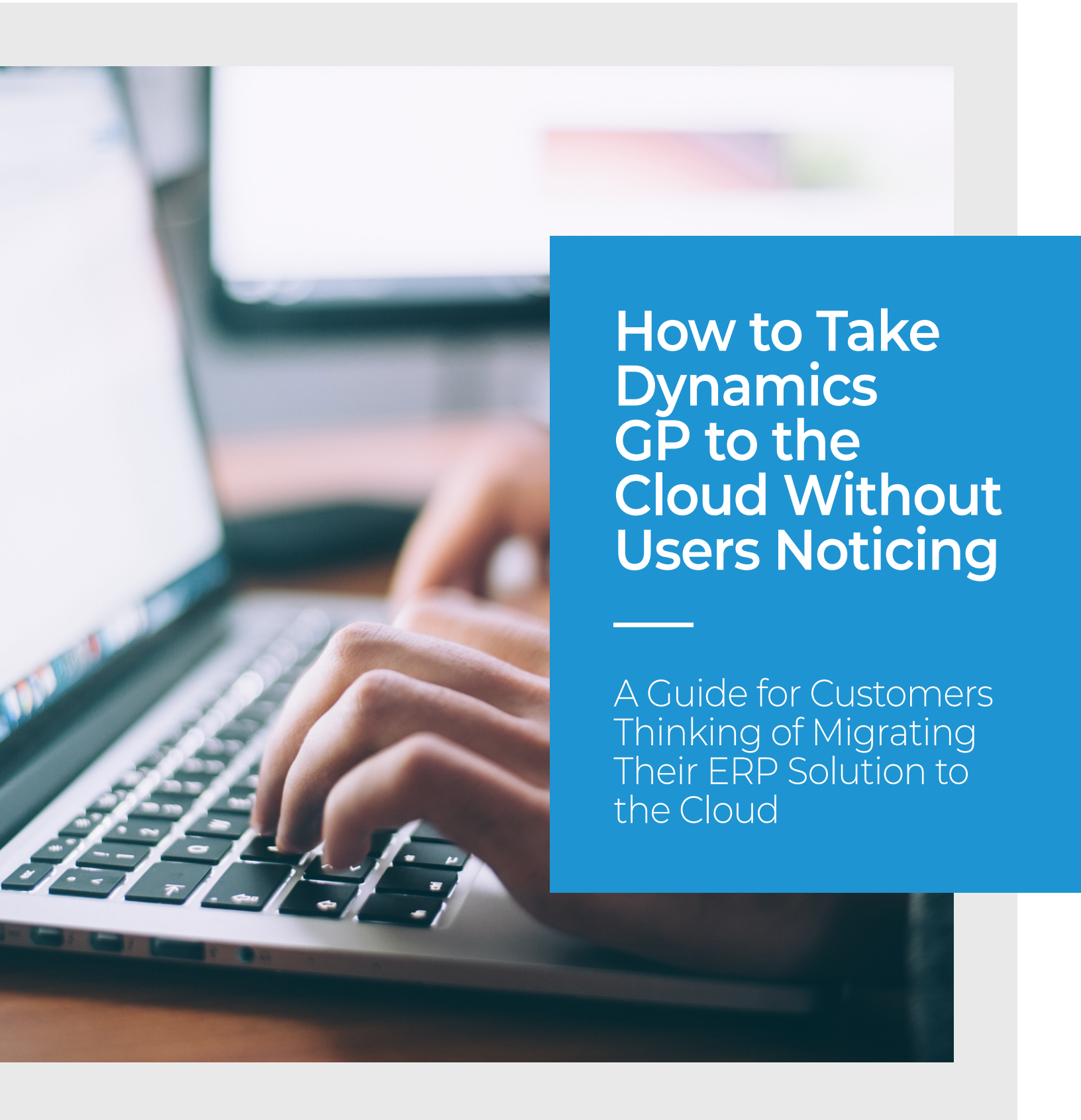
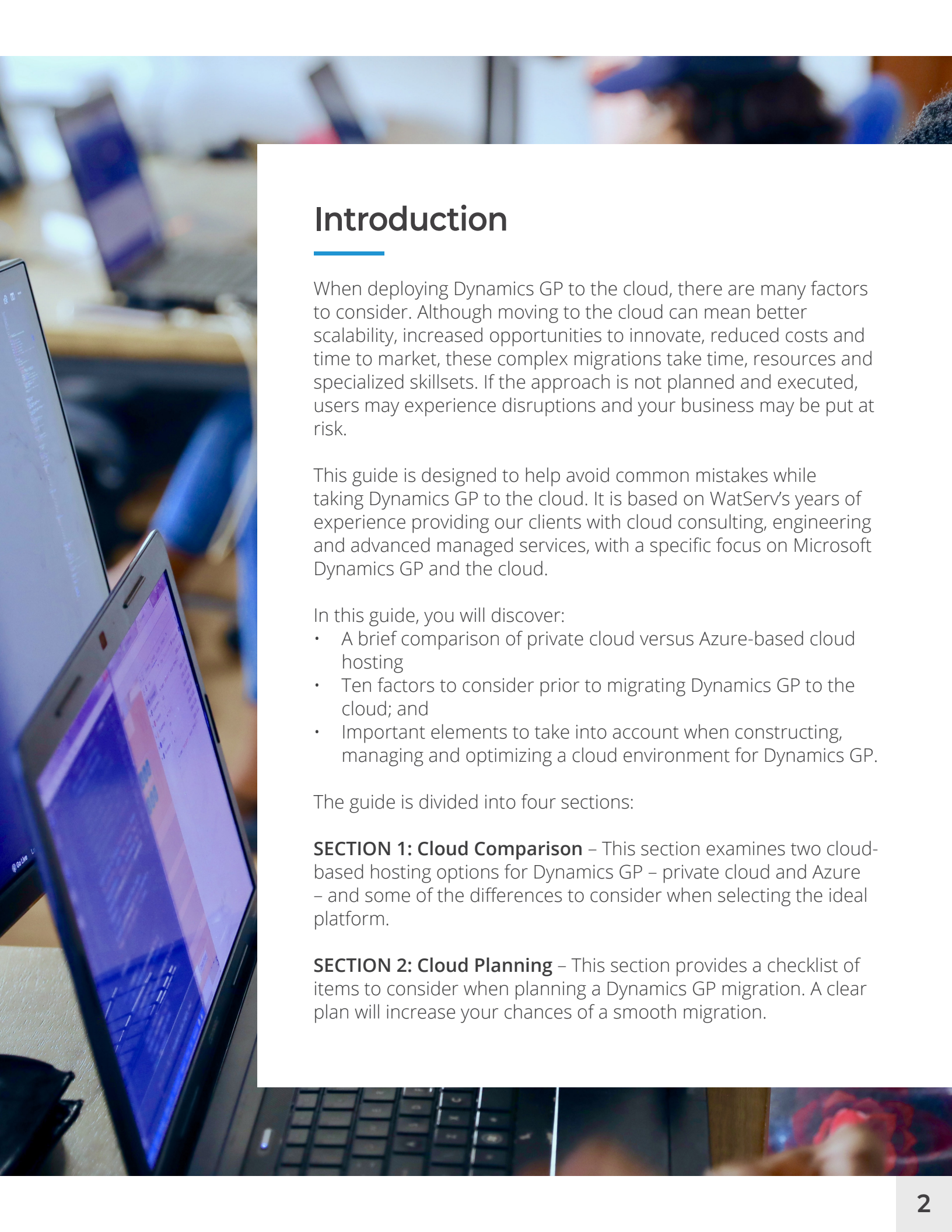


A close-up, shallow depth-of-field photograph of a person's hands typing on a laptop keyboard. The keyboard is silver, and the keys are black. The background is blurred, showing a laptop screen and some office equipment.

How to Take Dynamics GP to the Cloud Without Users Noticing

A Guide for Customers Thinking of Migrating Their ERP Solution to the Cloud



Introduction

When deploying Dynamics GP to the cloud, there are many factors to consider. Although moving to the cloud can mean better scalability, increased opportunities to innovate, reduced costs and time to market, these complex migrations take time, resources and specialized skillsets. If the approach is not planned and executed, users may experience disruptions and your business may be put at risk.

This guide is designed to help avoid common mistakes while taking Dynamics GP to the cloud. It is based on WatServ's years of experience providing our clients with cloud consulting, engineering and advanced managed services, with a specific focus on Microsoft Dynamics GP and the cloud.

In this guide, you will discover:

- A brief comparison of private cloud versus Azure-based cloud hosting
- Ten factors to consider prior to migrating Dynamics GP to the cloud; and
- Important elements to take into account when constructing, managing and optimizing a cloud environment for Dynamics GP.

The guide is divided into four sections:

SECTION 1: Cloud Comparison – This section examines two cloud-based hosting options for Dynamics GP – private cloud and Azure – and some of the differences to consider when selecting the ideal platform.

SECTION 2: Cloud Planning – This section provides a checklist of items to consider when planning a Dynamics GP migration. A clear plan will increase your chances of a smooth migration.



SECTION 3: Cloud Construction – After developing a plan, it is time to build the Dynamics GP cloud environment. This section offers a list of items to consider during cloud construction to help facilitate the process.

SECTION 4: Cloud Management and Optimization – After you have migrated Dynamics GP to a private cloud or Azure, this section provides a checklist to help ensure your cloud environment is managed optimally.

It is important to remember that each scenario and deployment is unique. Before undertaking any work, we recommend consulting with an organization with cloud migration experience or a certified cloud engineer. If you have any questions or need assistance, please get in touch with our team at info@watserv.com.

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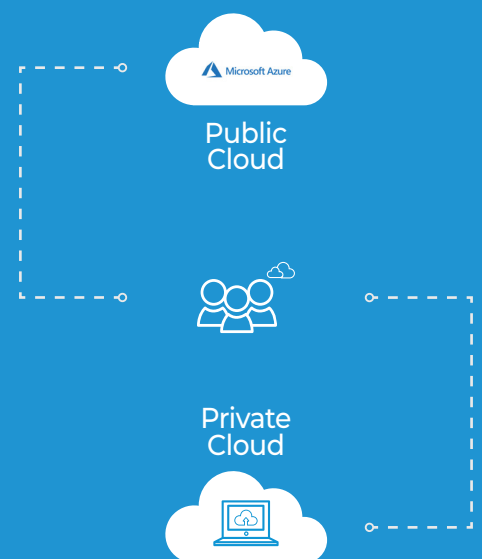
Section 1: Cloud Comparison

Private cloud versus Azure. What are the key differences?

When companies are considering moving their Dynamics GP solution to the cloud, there are two primary options: private cloud and public cloud (Azure). The experience to the end user, and the points presented in the rest of this guide, remain the same with either option, however there are some practical differences to consider.

When deploying in a private cloud, the hardware and infrastructure is owned by a third-party provider. Our experience shows that private cloud deployments can be less expensive than public cloud deployments depending on the number of users and data storage requirements. As a general rule of thumb, we have found that when the GP deployment involves less than 12-15 concurrent users and database sizes are small, private cloud is usually the less expensive option.

That being said, the cloud provider can be a key differentiator. Some customers have peace of mind knowing their data is stored in a Microsoft Azure datacenter, allowing them the option to change their managed services provider while leaving their core applications in the same environment. This flexibility is not available in the private cloud. Further, the investments that Microsoft makes into Azure from a security, reliability and technology perspective are also not achievable for most providers operating a private cloud. Azure based deployments can also be more cost efficient if you have a large dataset and a higher number of users.



It is helpful to work with a provider who can objectively compare and contrast the two options. Differences in reliability and SLA's between private cloud and Azure should be negligible, so the intangible differences and costs are key to picking the right solution.

Section 2: Cloud Planning

Ten factors to consider when planning your Dynamics GP migration.

Migrating to the cloud requires a robust plan. Here are some questions to ask when designing a course of action. Though the remainder of this guide focuses on deployments in Azure, there are many similarities when considering a private cloud.

1. How many concurrent and named users do you have?

From a load perspective, you only need to scale your infrastructure to meet the needs of your concurrent users, however you need to have licensing in place for all named users.

2. What client type will be ideal?

Many businesses consider alternatives to the web client provided by Dynamics GP, as existing users tend not to like it. For instance, you may consider providing a direct connection (though not recommended), an RDP or Citrix server, or even potentially web portal access. What you select will depend on licensing considerations and the type of user experience you want to provide.

3. How will you handle your existing ISV solutions?

If your third-party product is deployed within the Dynamics dictionary file, it should have no bearing on your infrastructure needs or hosting costs. That is because the ISV solution will sit within the Dynamics GP application. However, you should pay close attention to third party solutions that require direct connectivity such as EDIs, bar code scanners (think: pick, pack, ship), or certain printers. These can require additional infrastructure considerations.



4. Do you have an adequate disaster recovery and business continuity plan in place?

Many businesses fail to put a sufficient disaster recovery and business continuity plan in place. The level of investment required is dependent on a risk-reward conversation. What sort of downtime, for instance, are you willing to accept and what is the cost to your business? How much would you pay to have that risk and business disruption go away? There are no right or wrong answers, the tolerance of each business in the event of a disaster is different. Some organizations have fully tested and documented disaster recovery plans. Others are fine with offsite backups and a manual rebuild of the system in the event of a disaster. With Azure, the options for RTO and RPO's are almost endless. Furthermore, it is important to remember that with Azure, you will be able to perform certain actions quicker than you could on-premise, such as replicating data with the click of a button.

5. Which Azure data center location will you choose?

Azure's data centers are located in several regions across the globe, each with different pricing options. The data center(s) you select could be based on location or cost considerations. However, if you have data residency or data sovereignty requirements, your choices may be constrained (e.g., government departments may need to deploy within certain geographies to ensure compliance).

6. Will you still need a VPN?

In most cases, you will be able to eliminate your VPNs. However, you will likely need to retain them for certain equipment such as warehouse handheld devices or printers.

7. Is high availability high on your list?

During its growth years, Azure outages were common. However, in recent years, downtime has become significantly less frequent. It is important to assess your organization's needs to see if you will be satisfied by the reliability provided by Azure. There are options for more resilient infrastructure, but this will come with a higher price tag.

8. How will you manage Office licensing?

Did you know that there are hundreds of different Office 365 SKUs available? This becomes a consideration when migrating to the cloud since your GP users will need to be licensed in a way that is compatible with your cloud deployment. For instance, if you are using a Citrix server, you will require a copy of Office on the server, as well as on each machine. Furthermore, Office 365 can come with 5 different licenses depending on the SKU, so you will need to keep track of which ones you are using. Also, not all Office 365 SKU's have license portability rights to use in a cloud environment, so understanding your Office 365 licensing is key to avoiding redundant or duplicate licensing fees.

9. What is your database size, and how many do you have?

This consideration is applicable more so for your migration efforts, rather than for ongoing hosting costs, since the cost of storage in Azure is usually quite minimal.

10. How will you handle integrations?

Many GP customers are still doing integrations manually through the Integration Manager tool in Dynamics GP or through SmartConnect. Whether you are bringing data in on a periodic basis or automatically will have a bearing on your deployment and configuration.

Section 3: Cloud Construction

Three things to remember when constructing your Azure environment.

After you have finished planning your migration, it will be time to move on to the construction phase. Although you may be working with a specialized cloud service provider, below are some factors to consider.

1. How will you handle authentication?

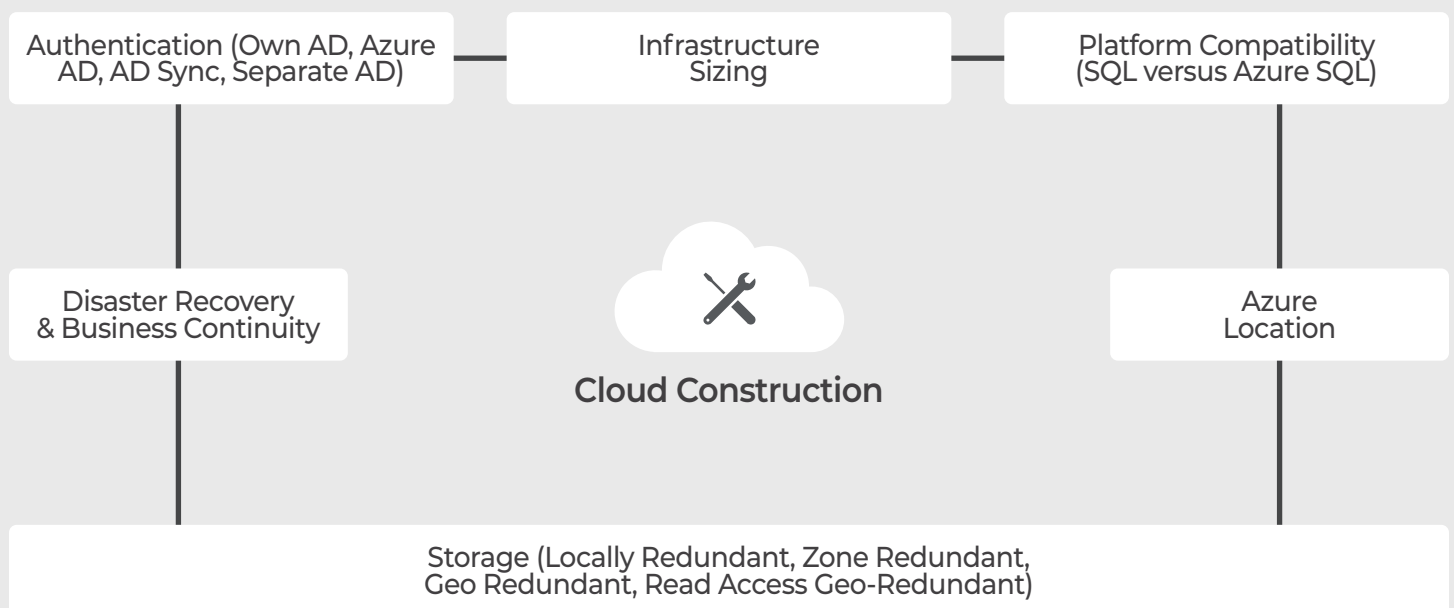
Dynamics GP still relies on SQL authentication, though you have the option of syncing usernames and passwords from your own active directory, from Azure AD or leaving them separate. If you are considering syncing with Azure AD you may need an ISV solution as GP does not support this out of the box. It is important to keep in mind that this may open you up to greater risk from user error, malware threats and so on. Keeping your systems separate usually offers a more secure option.

2. What size and configuration of server do you need?

Your user count and load will drive the size of the servers and infrastructure needed. Azure realizes that no two customers are the same and offers approximately 30 unique server sizes and configurations, all of which you can access with the click of a button from a dropdown menu. Conveniently, if you choose the wrong one or want to move to the next size, you can easily change your selection.

3. What are your storage requirements?

Locally redundant. Zone redundant. Geo redundant. Read-access geo redundant. Azure offers many different options to store your data and VMs. While each option has different costs associated, you may have different setups for different workloads. For instance, you may want your SQL server to be geo redundant and your GP application to reside in one data center only.





Cloud Comparison

When companies are considering moving their Dynamics GP solution to the cloud, there are two primary options: private cloud and public cloud (Azure).



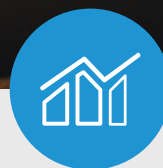
Cloud Planning

Migrating to the cloud requires a robust plan. A clear plan will increase your chances of a smooth migration.



Cloud Construction

After developing a plan, it is time to build the Dynamics GP cloud environment.



Cloud Management & Optimization

After you have migrated Dynamics GP to a private cloud or Azure, you must ensure your cloud environment is managed optimally.

Section 4: Cloud Management & Optimization

Nine things to consider after deploying GP Dynamics in Azure.

You have planned your cloud migration. You have built your cloud environment. And, you have completed your migration. However, the work does not end here. Below are some items to consider when managing and optimizing your cloud environment, regardless of whether you have an internal team or are relying on a managed services provider.

1. How will you manage the ongoing design of your Azure environment?

Many customers find that the longer you leave a VM sitting in Azure, the more expensive it becomes in relation to newer technologies released by Microsoft. When using the cloud, it is important to conduct ongoing design evaluations. Conveniently, the process to update background infrastructure in Azure is quite simple and usually involves the click of a button.

2. How will you conduct ongoing monitoring of Azure?

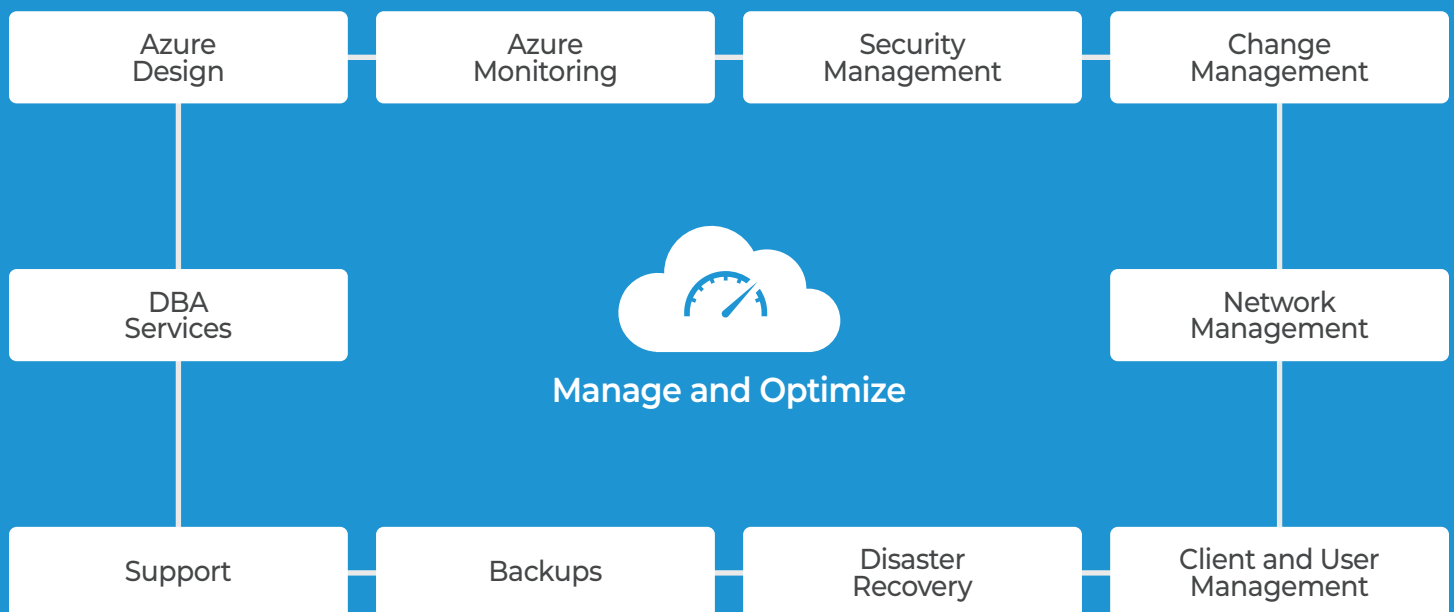
Azure offers many native monitoring tools, making it simple and accessible to monitor elements like utilization, users, the network etc. on an ongoing basis.

3. How will you deal with ongoing security management?

Unfortunately, the cloud does not eliminate the need to consider security. Rather, it simply changes the strategy. Security management must be consistently managed in your Azure environment.

4. When it comes to network management, how will this be handled?

This is something to think about if you have interconnectivities between on-premise or multiple sites and Azure. It is critical to ensure you have these integrations well documented and managed appropriately.



5. Who will provide client and user management?

It is true that most customers find moving to Azure creates more work in terms of user management. However, if your organization does not have a significant turnover, it is feasible to handle this extra task assuming there is a defined process in place.

6. How will you handle disaster recovery?

Now is the time to make sure you have a run-book built and that you are performing annual tests and simulations.

7. What is your protocol for conducting backups?

The truth is, when operating on-premise, most customers do not perform the correct backups, at the right times. However, in Azure, you can set backups to occur automatically, making the process more efficient and less complex to manage.

8. Who can provide DBA services?

Having a certified SQL DBA on call to make changes, troubleshoot and provide support is recommended. In some cases, these services may be provided by your Dynamics VAR partner.

9. Who can provide support when you need it?

Who can you call for platform or Dynamics GP support? What about cybersecurity support? Having a plan in place will safeguard your business and bring you peace of mind, knowing you are covered.

Conclusion

Deploying Dynamics GP to the cloud does not have to be complex. There are ways to effectively manage these projects so that business operations and users will experience minimal disruptions.

Armed with answers to the questions above, you will be better positioned to anticipate issues before they arise and approach the process with a solid plan in place.

Need additional support?

Our team of Dynamics GP and cloud experts would be pleased to assist.
Please contact us at info@watserv.com.

WatServ is an IT solutions provider helping clients digitally transform their businesses through cloud technologies and services.

For more information, visit www.watserv.com