CLOUD VS ON-PREMISE
WHICH PLATFORM FITS YOUR ORGANISATION BEST?

CONTENTS

ARE YOU READY FOR THE CLOUD?

You probably hear more and more about working in the cloud. Especially now that working from home has really taken off due to COVID-19. But what does it mean to work in the cloud? What benefits does it provide? Is it safe?

When you switch to Business Central, you can choose to host your solution on-premise or move to the cloud. The cloud has many advantages, but there are still some uncertainties about cloud computing. There are several cloud options. How do you know which one is right for you and your business? Is the cloud something for your business at all?

In this whitepaper we explain the difference between the cloud and on-premise. In addition, we zoom in on the various cloud platforms that 4PS offers. Our Technical Innovation Manager Arjan Hollebrandse has also answered the most frequently asked questions about working in the cloud. We hope that you can then make an informed choice between the cloud or on-premise.

I often get questions when I discuss the possibilities of the cloud. "Do I know where my data is?" "Who guarantees that the cloud will work properly?" These are all very good questions that we will aim to answer in this whitepaper.

- Arjan Hollebrandse, Technical Innovation Manager

CLOUD VS ON-PREMISE
What's the difference?

Are you unsure whether on-premise or cloud is a better fit for your company? In this section, we will have a look at the differences.

ON-PREMISE

On-premise is the IT term for locally installed software. When you opt for an on-premise solution, hardware and software will run in your business premises and you are therefore responsible for the availability and maintenance of the software and systems. This means that you are responsible for purchasing and maintaining all hardware. You are also responsible for the updating and upgrading your software.

Advantages:
- ✓ Not dependent on internet
- ✓ Own equipment
- ✓ Security in your own hands

Disadvantages
- ✕ Investments in equipment and licenses
- ✕ Operational costs for your own IT department
- ✕ Disruptive maintenance of hardware and software
- ✕ Scaling up requires investments
- ✕ Risk of security vulnerabilities

WORKING IN THE CLOUD

When you work in the cloud, you purchase software from a supplier via the internet, as a service. The supplier is responsible for the availability and maintenance of the software and systems. If you choose the cloud, there are several options. These options are explained later in the whitepaper.

Advantages:
- ✓ Data is professionally secured
- ✓ Always real-time insight into data
- ✓ No major investments in hardware and licenses required
- ✓ Updates are carried out automatically
- ✓ All-inclusive price per month
- ✓ Only pay for the number of employees who use the system and the required storage space of the system

Disadvantages
- ✕ Always need an internet connection to work
- ✕ Depends on a third party

CLOUD VERSUS ON-PREMISE

The 5 biggest differences explained

1. DIFFERENCE IN COSTS

When you work on-premise, you pay costs for customisation, implementation, hardware, IT personnel, training, but also the costs of a server room and its management and security. You may also be faced with unexpected costs. For example, when you have a malfunction that is not covered by the standard maintenance contract. When working in the cloud, you pay a fixed amount per month, where you only pay for the capacity that you actually use. As a result, you do not have to make a large investment in one go, but shift these investment costs to operational costs.

2. MAINTENANCE AND UPDATES

There are also a number of differences between the cloud and on-premise when it comes to maintenance and updates. In general, on-premise infrastructure is more labour-intensive. In an on-premise environment, the infrastructure must be renewed or replaced every few years. When necessary, you will have to make another investment in the hardware.

In addition to management and maintenance of the hardware, on-premise also deals with software updates that are installed manually. Your supplier or IT administrator must do this. If you opt for a cloud solution, you no longer have to manage the hardware yourself. This is taken over by the cloud supplier. In addition, you can receive automatic updates from the cloud supplier, so you no longer have to perform updates yourself.

3. SCALABILITY

A big difference between working on-premise and in the cloud is the amount of flexibility in terms of upscaling and downscaling. With on-premise software, you make an investment in advance in the capacity that is needed at that moment. As your organisation grows, you need to make additional investments. When your organisation shrinks, you may be paying for non-users. This works differently in the cloud. You can easily expand the available capacity. If you have more resources you can expand capacity, if you need fewer licenses you can adjust the number of licenses per month. This means that you only pay for the functionality or capacity that you actually use.

"If you opt for the cloud, your data will be with a server supplier or in a data center. When using 4PS Construct in the cloud, the data center is Microsoft Azure. The advantage of working with Microsoft Azure is that the servers are 99.9% available. It also offers continuity in the field of cooling, power supply, internet connections and maintenance." - 4PS Technical Innovation Manager, Arjan Hollebrandse

4. FLEXIBILITY AND ACCESS

There is also a difference in the flexibility and access between working on-premise and in the cloud. With on-premise, you often have limited or no access to business applications and documents outside of your own office. You can give access to users outside the office via a VPN connection, but the security of this is the responsibility of the customer. The flexibility of the cloud is that you can work with the software anywhere, anytime, as long as you have an internet connection.

5. SECURITY

Because cloud services can only be accessed via the internet, this entails security risks. However, the data centers where the cloud servers run have maximum security. Cloud providers and data centers specialise in managing cloud solutions. They have security procedures in place that other companies themselves could not achieve. The security of servers on-premise is often a lot weaker.

"When I discuss the possibilities of the cloud with customers, I regularly get questions about security. "Do I know where my data is?" "Who guarantees me that it will work properly?" "Is all of my data properly secured?" Very understandable questions. Good to know: the requirements that Microsoft sets for the security of its data centers are much, much higher than an average company can achieve. Microsoft complies with 92 compliance standards in total, from global, to regional, to industry-specific. The cloud is therefore much safer than when a customer uses the software on-premise."- 4PS Technical Innovation Manager, Arjan Hollebrandse

CLOUD PLATFORMS
The different cloud types

4PS offers you the choice of two types of cloud solutions. The Microsoft Cloud, where Microsoft determines the updates, and the 4PS Cloud, where 4PS, in consultation with the customer, determines when software updates are installed. Both cloud options run on the Microsoft Azure platform.

For some companies, it can be disadvantageous if the cloud provider determines when the new version of the software will be installed. If you work on-premise, you determine when you perform an update and can therefore schedule it. If you work in the cloud, this will be done for you. Companies often want to keep control over this. That is why 4PS offers two types of cloud solutions. In this chapter, we list the main differences between on-premise and the two cloud options of 4PS.

ON-PREMISE

If you work on-premise, you are responsible for the hardware and availability of this. You can buy or rent this hardware. The update schedule at on-premise is flexible: you are responsible for application management yourself. You also have the choice of your own hardware or the hardware of a data center.

4PS CLOUD

4PS Cloud is one of the cloud solutions from 4PS. The software solution 4PS Construct is available on the Microsoft Azure Platform while technical management and possibly also application management is in the hands of 4PS.

This makes the update schedule flexible and updates will only be performed in consultation with you. Furthermore, you can continue to use the perpetual license in the 4PS Cloud.

MICROSOFT CLOUD

When you choose the Microsoft Cloud, Microsoft manages the software solution 4PS Construct on the Microsoft Azure platform. The update schedule is automatic and determined by Microsoft and 4PS. 4PS is responsible for application management.

ON-PREMISE	4PS CLOUD	MICROSOFT CLOUD
Perpetual or subscription license.	Choose between perpetual or subscription license	Benefit from Subscription license
Own hardware: - Self-control	Data centre is Microsoft Azure	Data centre is Microsoft Azure
- Planning in your own hands	Technical management and possibly also application management is in the hands of 4PS	4PS is responsible for application management
- Arrange IT yourself		Update schedule is automatic and determined by Microsoft and 4PS.
Datacenter: - Scalable	Update schedule is flexible and planning in consultation.	No investments and migrations required.
- Update schedule is flexible: you are responsible for application management.		

PERPETUAL OR SUBSCRIPTION LICENSE

With a perpetual license you pay an amount in one go, buying the right to use the application without an end date. In addition, you pay a fixed amount annually for maintenance, support and updates. With a subscription license you have a subscription to the software, which means that you pay a certain amount per month. With a subscription license you can easily cancel or scale your software.

MIGRATION PROCESS TO THE CLOUD
How do you go about it?

Do you think you are ready to move to the cloud? What does the migration process to the cloud look like? In this chapter, we list the most important steps of the migration process.

Step 1. Choose the suitable cloud solution

If you choose to move to the cloud, you can pick from two options - the 4PS Cloud and the Microsoft Cloud. It is worth thinking about which cloud solution is best for your company. 4PS can help you in this process with a calculation tool and a decision tree or consultation with your account manager, for example. In this way we can discover together which option suits your company best.

Step 2. Agreement on investment proposal

When you have chosen a platform, 4PS can make an investment proposal. In this proposal all costs of the migration process are listed. These include: costs for migrating your database, costs for training users and costs for hosting (depending on the choice of the Microsoft Cloud or the 4PS Cloud).

Step 3. Start migration process

If you agree with the investment proposal, the migration process starts. A copy of your database is made. This is then updated and transferred to Business Central.

Step 4. Testing and training employees

During the migration process, your employees are trained to work in the new environment. You can start testing the new environment. In this phase, customisations are also implemented and links are tested.

Step 5. Migration process ready

Congratulations, you have completed the migration process to the cloud! After the migration process, your software environment will be managed by 4PS or Microsoft (depending on your platform choice). A maximum of four updates will be made annually. In the Microsoft Cloud these updates are automatically implemented, in the 4PS Cloud these updates are implemented in consultation / optionally.

"If you want to switch to the cloud, I advise you to contact your account manager. Then we make an appointment to discuss the possibilities, advantages and disadvantages. Not opting for the cloud is of course also an excellent choice, every company makes its own decisions. Whether it is working in the cloud or on-premise, with 4PS Construct you can do both." - 4PS Technical Innovation Manager, Arjan Hollebrandse

More information?

Do you want more information? Please contact International Partner and Sales Manager Erwin Kreijne.

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