### Hybrid Cloud: the right cloud for every workload

In the digital transformation that is under way, hybrid cloud is confirming itself as both crucial and complex at the same time. With the right questions and the right partner, you will reap the rewards and escape the pitfalls.

Cases: Picanol Group and Van Havermaet each find a unique workload solution tailored to their needs.



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## Preface

One of the great advantages of the digital transformation is the creation of an increasing number of new data sources. One of the biggest challenges is the exponential growth in data resulting from this, calling for a new IT architecture with quick and scalable flexibility.

This was found in the cloud... but not with immediate or guaranteed success. This first period of cloud hype, in which workloads and systems were often over-enthusiastically migrated to a cloud, was already followed by an adjustment. At the same time, the onpremise running of all workloads is definitely a thing of the past.

The year 2022 is confirming the hybrid cloud as the new, most future-proof standard. A combination of on-premise, private cloud and public cloud. Meanwhile, 83% of European companies have chosen this data path.

Despite all its advantages and the first true success stories, choosing to set up/manage a hybrid (multi)cloud is becoming an increasingly complex matter today.

Fortunately, you as an entrepreneur can count on partners that support you in every step of this process.

In the first chapter, this e-book provides a clear overview of the following:

- the assets and advantages of the right hybrid cloud strategy
- the questions that every company needs to consider first
- the main steps to be taken to arrive at a bespoke hybrid cloud.

The second chapter briefly presents two data-driven hybrid cloud cases. It explains how Picanol Group and Van Havermaet - two successful Belgian companies in quite different sectors - found in Fujitsu a partner for a bespoke answer to their specific workload questions.

# The assets and advantages of the right hybrid cloud strategy

Simply put, the leading motivating factors for a company to choose a hybrid cloud strategy are:

- 1. to save money and generate incomeFlexibiliteit
- 2. flexibility
- 3. to drive innovation

These are all attractive and at the same time crucial points in the current disruptive economy.

Hybrid cloud offers an intelligent and transformed experience. Intelligent in the sense of a new and productive, user-friendly way of working.

Transformed because of the competitive, personalised and differentiated customer experience.

It is hardly surprising then that the proportion of workloads that are run on-premise fell by no less than 41% between 2019 and 2021. 68% of CIOs surveyed by Deloitte in 2020 considered 'the migration to a public cloud and/or the extension of the private cloud' as the biggest expenditure driver.

From that there follows another - ever more widely considered - reason for the rise in popularity of the hybrid cloud: an increasing number of companies have grown beyond their first steps in cloud computing: they have had a taste of the benefits and are now looking for new cases.





# The right hybrid cloud solution requires the right questions



There is no single standard configuration for anyone who wants to enjoy the advantages of the hybrid cloud in complete security and with full data access.

This is demonstrated the most clearly in the so-called workload placement dilemma: which workloads should be migrated to the private cloud, which to the public cloud(s) and – last but not least - which should be kept on-premise?

The short answer is to make a distinction depending on the complexity of the workloads.

- Complex workloads demand high-level customization and have security, privacy and compliance requirements. Total control and low latency are essential. All this makes them suited for on-premise processing.
- Less complex workloads, that are still necessary for business value, operate better in the more flexible, agile and cost-effective cloud.
- Workloads with low complexity and lower business value can be outsourced off-premises, in the data centres of a host/provider.

However, the short answer only lifts the corner of the complex shroud that is the hybrid cloud. As this list of relevant questions for every company that aims to achieve a successful multi-cloud strategy shows:

- Do you process critical workloads in your own data centre?
- Do you use the optimal infrastructure for this currently?
- Which applications can be migrated to the cloud in a cost-effective manner?
- Which apps require a new build or architecture depending on scale or technology requirements?
- For which apps is it preferable to be restructured to PaaS?

- Which apps can/must be purchased again or replaced?
- Do you have other workloads that are hosted by service providers?
- Do you source IT services from the cloud?
- With which virtualisation software supplier(s) do you work?
- Are the compliance requirements, legal implications and regulations on data protection dependent on where the data is located?
- What budget can be reserved for hybrid cloud migration?
- How secure is the chosen hybrid cloud strategy?
- Who will manage which infrastructure?



# How to achieve the right hybrid cloud solution in 4 steps

Based on extensive experience from a growing number of projects for customers in a wide range of sectors, Fujitsu has developed the 'Right cloud for the right workload' concept. An optimal four-step approach.



1.

Start by identifying the challenges for your company in order to have an overview of which applications to keep, relocate, restructure, rebuild and replace. 2.

The second step is choosing the right architecture based on the workload requirements. To do this, the application landscape must be thoroughly analysed and charted.

3.

Step three is to select the delivery model for each application. The critical factors here are control over access to data – which is distributed between edge, core and cloud.

4.

Lastly, the data architecture on all physical and virtual locations needs to be integrated. A crucial step, because successful data architecture integration and management is the key to growth and more productivity.

## The right cloud with the right partner

In theory, the hybrid cloud can be defined quite briefly. In practice, the concept takes on a different and unique interpretation for every company.

It forms a complex whole, made up of a large number of elements - each of which mutually interacts with the others. With data centre products such as servers, storage, network and software. With integrated systems that scale down time and risk factors when these data centre infrastructures are built, while boosting their efficiency once they are operational.

As a result, the 'bespoke product' hybrid cloud also demands 'bespoke support' in hybrid IT.

Not all companies have the resources, expertise and possibilities to carry out this transformation themselves.

The following chapter briefly describes how - together with Fujitsu and technology partners Incrius and Van Havermaet - Picanol Group and Van Havermaet very recently succeeded in achieving an optimal hybrid cloud migration.





### Van Havermaet makes its own existence and that of its customers easier with a hybrid cloud solution

For no less than 75 years, Van Havermaet has been the trusted partner of entrepreneurs, the liberal professions and high net-worth individuals for financial, legal, taxation and HR consulting. Their more than 200 specialists combine quality, a personal approach and expertise with bespoke work on a national and international level.



#### A specific need

For the past 10 years, Van Havermaet ran its workloads and applications on Intel on-premise systems. However, these were beginning to age and the company was faced with a choice: either to purchase new hardware that would eventually have to be replaced again, or to make the switch to a cloud solution that would be able to stimulate scalability, innovation and differentiation from competitors. At the same time, its own on-premise resource planning system (ERP), which is still used by Van Havermaet and its customers, still needed to remain online.

#### A cutting-edge solution

In concrete terms, there was a need for a hybrid solution, with higher capacity and scalability, without this necessarily requiring large investments. Also on the checklist was a back-up and disaster recovery plan and a relatively quick and seamless migration.

Fujitsu proposed Azure Stack HCI as a solution. "A new product in which Van Havermaet was not yet confident at that time", explains Karel Michiels, Account Manager at Fujitsu. That is not surprising, since at the time the first discussions between Van Havermaet and Fujitsu took place, 'the product' Azure Stack HCI was only a few months old.





### The focus is shifting

At first Van Havermaet did have a few reservations, which makes sense. When as a company you need to trust a brand-new product with all your data, you need a little time to weigh things up.

Over the course of a long weekend, and admittedly after a few months' preparation, Fujitsu set up a new hyper-converged infrastructure (HCI) environment with tech partner 3-it engineers. A cluster of two nodes containing super-powerful Intel processors, scaled to the on-premise requirements. A clear, proof of concept construction - the results of which convinced Van Havermaet to continue in this story.

"Azure Stack HCI helped us to integrate the cloud into our current environment quickly and seamlessly", states Benny Westaedt, Chief Information Officer at Van Havermaet. "And thanks to frequent updates, it is a platform that is growing along with us".

The result of this hybrid cloud approach is that Van Havermaet has taken a successful step in the digital transformation for its own company and its employees. At the same time, they are able to unburden their customers with a more holistic offer of IT solutions. "After all, the scalability of the chosen infrastructure allows them to run larger, more complex customer workloads. This means they can focus on their own business", explains Dominik Verrydt at 3-it.

The focus is also shifting at Van Havermaet as well. "Since we no longer need to deal with new problems using old technology, we are free to focus on the challenges of tomorrow", concludes Westaedt.









Picanol Group chooses a hybrid cloud solution for low latency and improved performance.

#### **Picanol Group**

Picanol Group is active worldwide in mechanical engineering, agriculture, food, energy, water management, efficient (re)use of natural resources and other industrial markets with a focus on water. In 2021, Picanol Group recorded consolidated turnover of EUR 2.7 billion.

#### A question of speed

The three main reasons to choose Microsoft Azure Stack HCI are compliance, connectivity and latency. It was latency that made the difference for Picanol Group. The production systems in the factory in Ypres are controlled from a local ICT environment. Latency cannot be permitted and it can never be completely avoided in a cloud-only environment.

#### Performance-oriented practical test

Picanol Group's desire to move to the cloud was therefore hindered by latency requirements, but performance was also an important factor. At night the company runs an extensive batch system to process all data from the previous day of production and consolidate everything by the morning. The current 3-tier environment was no longer able to process the growing quantity of data within the span of one night.

Servers that were still fully occupied with computing in the mornings when the production systems should in fact have been started up already, heightened the need for a solution. When Picanol Group sat down with Fujitsu to discuss the matter, the company had already tested an alternative solution with another partner. This involved a platform that had already been adopted in their umbrella group and therefore seemed to them to be the more suitable choice.





However, Picanol Group did not achieve the performance results they hoped for in these tests. This resulted in Fujitsu being re-hired to install a proof of concept configuration of 4 Azure Stack HCI nodes. Picanol Group was perfectly able to indicate the heaviest workloads, and it was these workloads that were assigned to the POC nodes.

Somewhat unusually, this POC environment with super-powerful Intel processors would need to be up to the task of running part of the effective production workloads. This created a high level of responsibility as regards redundancy and continuity so as not to compromise production in the factory.

For this project, Fujitsu worked alongside tech partner Incrius. Due to their specialisation in hybrid cloud, it was able to provide close support to the customer in this case and to give the POC environment some potentially crucial hands-on consideration. The POC itself eventually ran for 3 weeks and proved to be a success.

Kris Walraevens, CEO at Incrius, also points out another advantage that should not be underestimated. "The choice of Azure Stack HCI in this project allowed Picanol Group to keep its data under the supervision of a single security platform.

This is always the most secure option and the Microsoft Zero Trust model of this is one of the best in this respect".

The greatest challenge for Fujitsu then was to deliver the requested systems to the customer within an acceptable period, in the midst of the current international supply chain crisis. To compensate for these delays, Fujitsu deployed a few of its own engineers so as to speed up the implementation from the old system to the Azure Stack HCI infrastructure.

This implementation took place at two locations. Four nodes go to a new factory built by PsiControl in Romania, for the factory in Ypres there are another twelve.





Interested in the benefits, but not the risks and complexity of a hybrid cloud? Then contact Fujitsu and together we will have a look at what we can mean for your company!

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