empower

Cloud-based technologies - what you need to know

FAQ on the topic of cloud computing

There are a few things to consider when adopting cloud computing

This guide is intended to serve as a guide for evaluating various cloud services. The topic is complex and many different aspects need to be considered.

To help you choose a provider and give you an overview of the topic, we answer the most frequently asked questions about cloud computing in this e-book.

empower

Our mission

We know MS Office like the back of our hand. We have spent day and night with Office for years, getting to know its strengths and weaknesses. That is why we set out in 2005 to revolutionize everyday office life. We develop MS Office solutions that enable users worldwide to work more easily, consistently, and efficiently so they perform at their best and have time for what really drives them. That is our mission.

empower

The 10 most frequently asked questions when adopting cloud services

1. What are the types of cloud computing?

In essence, there are 3 types of cloud computing, differentiated by the architecture of the cloud.

- Public clouds
- Private clouds
- Hybrid clouds

Public cloud: cloud resources shared with several client companies (whether operated by a third-party provider or by the company itself).

Private cloud: resources used only by one client company (whether operated by a third-party provider, by the company itself in an external data center, or completely on-premise).

These two types can also be combined in hybrid clouds to deliver the flexibility of public clouds with the security of private clouds. In addition to cloud computing, it can make sense to rely on on-premise solutions where a company provides the entire infrastructure itself, especially in the case of data-sensitive topics.

2. What kinds of cloud services are there?

There are several variants of cloud services, which differ in the scope of the technology provided.

- Infrastructure as a service (IaaS)
- Platform as a service (PaaS)
- Software as a service (SaaS)

"Infrastructure as a service" (IaaS) is the most basic type of cloud service, where network structure is rented from a cloud provider. This is extended by "platform as a service" (PaaS), where operating systems and management tools are also offered. Building on this, "software as a service" (SaaS) provides software applications in their entirety, with the cloud provider taking over all maintenance and management of both hardware and software.

3. How do you use cloud computing?

The possibilities that cloud computing opens up are almost unlimited and very much tied to individual needs. The greatest advantage of cloud computing is flexibility: the network structure and all cloud resources can be quickly adapted to growing or declining demand and programs can be made available company-wide in a short timeframe. In most cases, this even works with per-minute or per-hour billing, which is an excellent way of absorbing peak loads.

4. What are the optimal requirements for data encryption?

Data security in cloud services is a highly complex issue. To guarantee maximum security, data should be stored encrypted in the cloud service and also when being transmitted via TLS or SSL.

5. What to consider when it comes to compliance?

Even if data sets are located on a cloud provider's infrastructure, the user of a cloud service still must adhere to compliance requirements. If possible, data should be categorized in terms of its compliance relevance and handled accordingly. If data is located in the cloud, it should also be noted in which country the corresponding servers are located and from where they are managed. Depending on the necessary security relevance of the data, on-premise solutions may be more suitable for compliance-sensitive data.

6. In a global context, how can you ensure that all employees can access the cloud services?

A major challenge when working globally is the spatial difference between different workstations and the associated latency times. To enable smooth and delay-free work everywhere, it makes sense either to interconnect additional, globally distributed servers or to globally mirror an existing server (however, depending on the application, this can be technically quite complex). In this respect, it would be advantageous to ensure that the cloud provider operates its own data network with as many global POPs (points of presence) as possible (Azure has 185, for example).

7. Which role does “multi-cloud” play?

Multi-cloud means the use of several cloud services from different providers. This can be particularly useful if specific solutions are offered for individual cloud service problems. In this way, the strengths of different providers can be flexibly combined.

8. What quality of service (QoS) and latency criteria should be expected?

The most important QoS criterion is probably a stable, fast connection to the cloud service provider. This should be evaluated in conjunction with quality parameters such as percentages of premature disconnections or incorrectly transmitted information.

In terms of efficiency, a middle ground between utilization and latency should be chosen for cloud services. This means that the available infrastructure is used cost-effectively without causing overloads and high latency times. Extremely low latency times can be an indication of insufficient utilization, while long latency times suggest overloaded cloud services.

9. What about support?

Not all problems with cloud services can be solved by internal IT alone. Therefore, fast and responsive support from the cloud provider is essential. To assess this before using a cloud service, check the provider's references. Also, service level agreements should be in place with the provider in order to contractually specify the desired support.

10. What service level agreements (SLAs) are necessary?

A distinction must be made between public and private clouds. In the case of public clouds, there are usually only standardized, predefined SLAs which are specified by the provider. Private clouds, on the other hand, are more flexible and can contain more freely negotiable SLAs. If you can negotiate SLAs, the performance and availability of the cloud services as well as response and repair times of the support should be agreed.

empower GmbH
KölnTurm
Im Mediapark 8
50670 Cologne
Telefon: +49 221 99 37 85 – 0
+44 20 39365433
+1 800 6570270
E-Mail: request@empowersuite.com