

# Myth or truth?

Fact checking  
about the public cloud...

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Let's power  
higher performance

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The public cloud is becoming increasingly popular. For IT decision-makers, the main arguments in its favor are faster scalability of IT resources, mobile access to them, higher performance and more flexibility. At the same time, companies also expect using the public cloud to mean lower IT costs and less administrative work.

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**But how much truth lies behind these supposed advantages? Does the public cloud deliver what CIOs generally expect? It's time to critically examine a few points. Here comes the fact check with a look at the public cloud:**

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Fact No. 1:

**The public cloud is always the cheapest option.**

Yes, it's true: Public clouds are a cost-effective solution for IT infrastructure, but this is only true under certain circumstances. For example, hyperscalers such as Amazon, Microsoft or Google advertise that users only have to pay for what they actually use, in other words: "pay as you go." This payment model is also very attractive for training systems, for example, or other capacity expansions that are only needed in the short-term. For SAP applications that are in use 24/7, however, the situation is quite different. In this case, the public cloud can quickly result in spiraling costs. After all no one would think of booking a taxi to use permanently. It only makes sense for short trips. For 24/7 workloads, so-called "reserved resources" are, therefore, often the more cost-efficient solution.

But a shadow IT with hidden, sometimes unused, applications that have been transferred to the public cloud without a second thought can also drive up costs. Therefore, a transparent, individual calculation is essential to determine what is really the most cost-effective solution for the respective workload. This should always be calculated based on the expected uptime. A combination of different cloud solutions, i. e. a multi-cloud, may turn out to be the best solution in this specific case. This is where cost-optimizer tools can come in handy.

Fact No. 2:

## The public cloud runs by itself.

This is also true: Public clouds have a convenient level of automation, as the hyperscalers have done a really good job. But: There's still the complexity of a data center to consider. What do I mean by that? Computing power, networks, firewalls, storage space – all these resources can be quickly put together with just a few clicks via the cloud's web console. There are also a number of useful additional services and microservices that make it very easy for users to create applications. However, plug & play is a misconception. The individual components must also be put together in the right order and with the right parameters. It's not enough to be able to communicate with the machines via interfaces, you also have to know how to use them correctly.

Despite all the automation, experts with the appropriate know-how who understand how to implement and orchestrate everything correctly are still needed. Standardized infrastructure templates can help here, but even these first have to be designed based on expertise.

Fact No. 3:

## The public cloud is easily accessible via the Internet.

Yes, the public cloud management console and API are easy to operate via the Internet. This means that many functions can be administered via normal Internet connection. But you can't simply access the public cloud from the corporate network because a public cloud is actually like your own data center. And there are good reasons why the virtual machines are not easily accessible via the Internet: firewalls, encryption and a de-militarized zone (DMZ), for example, are essential to protect the virtual machines in the public cloud. As a result, virtual machines are typically only used with a private IP address.

In addition, the public cloud VPC must be connected to the corporate network so that the cloud services provided can be smoothly integrated into the IT landscape. Most company networks only open the ports http and https, and the remaining data traffic is blocked and is not allowed to leave the network. To access services hosted in a public cloud, a trusted network connection must therefore be established. This can be an Internet VPN or another dedicated network connection.

Unfortunately, there is no ready-to-use solution for integrating the public cloud into the company network. Every user therefore must consider: Where is the public cloud I want to use? And how do I integrate it securely into my network? That also requires expertise. After all, a public cloud is only secure if it has been securely configured. Otherwise, unwanted security gaps could open the floodgates to hackers.

## Conclusion

In short, the public cloud should not be approached with too much naivety; it is not a sure-fire success either. If you pay attention to a few things and set them up properly with the help of experts, then a public cloud – possibly in combination with other cloud models – can still offer a number of advantages.

### About Hansjörg Groß

Since 1999 Hansjörg Groß has worked in different positions within T-Systems International GmbH and since 2006 he is engaged in development of highly automated cloud solutions for SAP®. After being a manager for operation of data base and Web based applications in the non-SAP area, Hansjörg Groß took over management responsibility for the development of highly automated SAP® solutions on private cloud infrastructure. Since March 2015, in his current role of an architect, his focus is on development highly automated SAP® solutions for multi-cloud and hybrid cloud solutions with a strong focus on the currently leading hyper-scalers, Microsoft Azure, Amazon WEB Services and Google Cloud Platform.

### About T-Systems

T-Systems is one of the world's leading digital service providers. It is based in Europe and offers integrated solutions for business customers. The company uses a global infrastructure of data centers and networks to operate information and communication technology. As a leading end-to-end service provider for SAP® solutions, it covers the entire value-added chain of the SAP® lifecycle. And it provides everything from a single source: from secure operation of existing systems and classic IT and telecommunications services to transformation to the cloud and SAP S/4HANA®, and from needs-based infrastructure, platforms, and software to new business models and innovation projects in the Internet of Things.

Further information is available at [www.t-systems.com](http://www.t-systems.com)



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### Solutions

By operating SAP® applications in the public cloud, companies save costs and significantly reduce the total cost of ownership (TCO). At the same time, they can react quickly and flexibly to market changes and drive innovation. T-Systems offers agile hyperscaler solutions from the public cloud of Microsoft Azure, Amazon Web Services, Google Cloud and the Open Telekom Cloud to use SAP® applications flexibly and at any time. The predefined SAP® software appliances are provided with the same operating quality as on a private cloud – as certified Managed SAP® PaaS, GDPR-compliant and with pay-as-you-go pricing models.

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