COURSEWARE

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Comparing Cloud service models:		

laaS, PaaS, SaaS

Private Cloud

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Overview

A **Private Cloud** contains computational services which are only available and accessible to select users over the internet or an internal network.

A *Private Cloud* has all the capabilities of a *Public Cloud*, with added improvements in **control** and **customisation**.

There are two cloud models that can be delivered via *Private cloud*:

- Infrastructure-as-a-Service (laaS)
- Platform-as-a-Service (PaaS)

Similarly the two Cloud models can be combined into a *Hybrid Cloud*.

0	Infrastructure-as-a-Service (IaaS)	
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Private

- · Single tenant implementation
- Self-service and automation capabilities provide new agility
- Define your own data management policies
- Owned and operated by IT organisation

Security

Usually, *Private Cloud* security is a level higher compared to its *Public Cloud* counterpart.

What this entails is that not only is the third party Cloud provider's security used, but additionally the company's own security practices can also be implemented.

All of these security practices are in place so that sensitive data is not accessible to the third party Cloud provider.

Advantages

The most noteworthy advantages are:

- fully-customisable
- higher level of security
- better performance

Disadvantages

There are, however, some disadvantages, including:

- higher up-front capital expense
- risk of under-utilising resources
- higher ongoing costs
- more maintenance required

An additional drawback is that the company's IT department is held responsible for both the cost and the accountability of using a *Private Cloud*.

Essentially, a *Private Cloud* requires the same staff, management, expenses and maintenance as a wholly on-premises solution would need.

Business Cases

Here are some of the best business cases:

- highly secure systems or applications
- systems that require customisation

Tutorial

Try answering the following questions:

- ▶ To whom is a *Private Cloud* usually available to?
- ▶ Which Cloud models can be successfully delivered by using a *Private Cloud*?

Exercises

There are no exercises for this module.