



A cloudy future

'The Cloud' - warm or cold?

Cold 

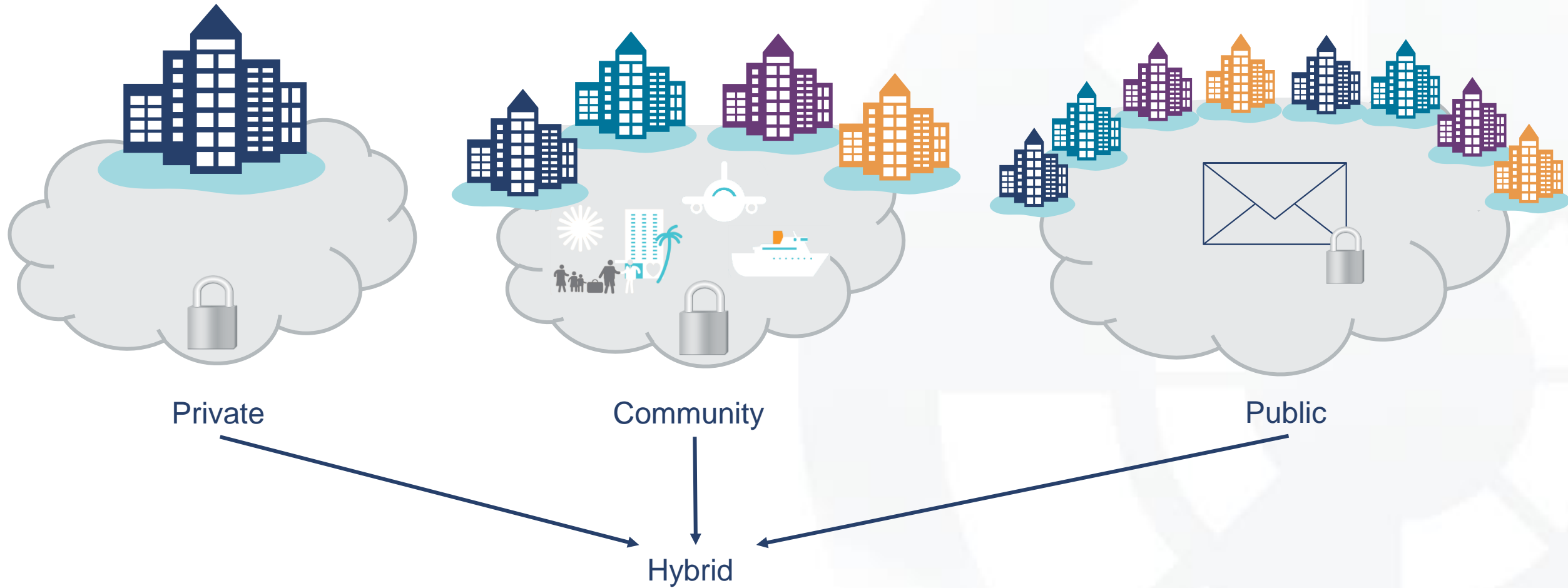
- A cold front is a body of cold air which pushes into warm air, the cold air causes the warm air to rise up quickly, causing thunderstorms and flooding
- Does this imply that 'The Cloud' is all conquering leaving extensive collateral damage in its wake?

Warm 

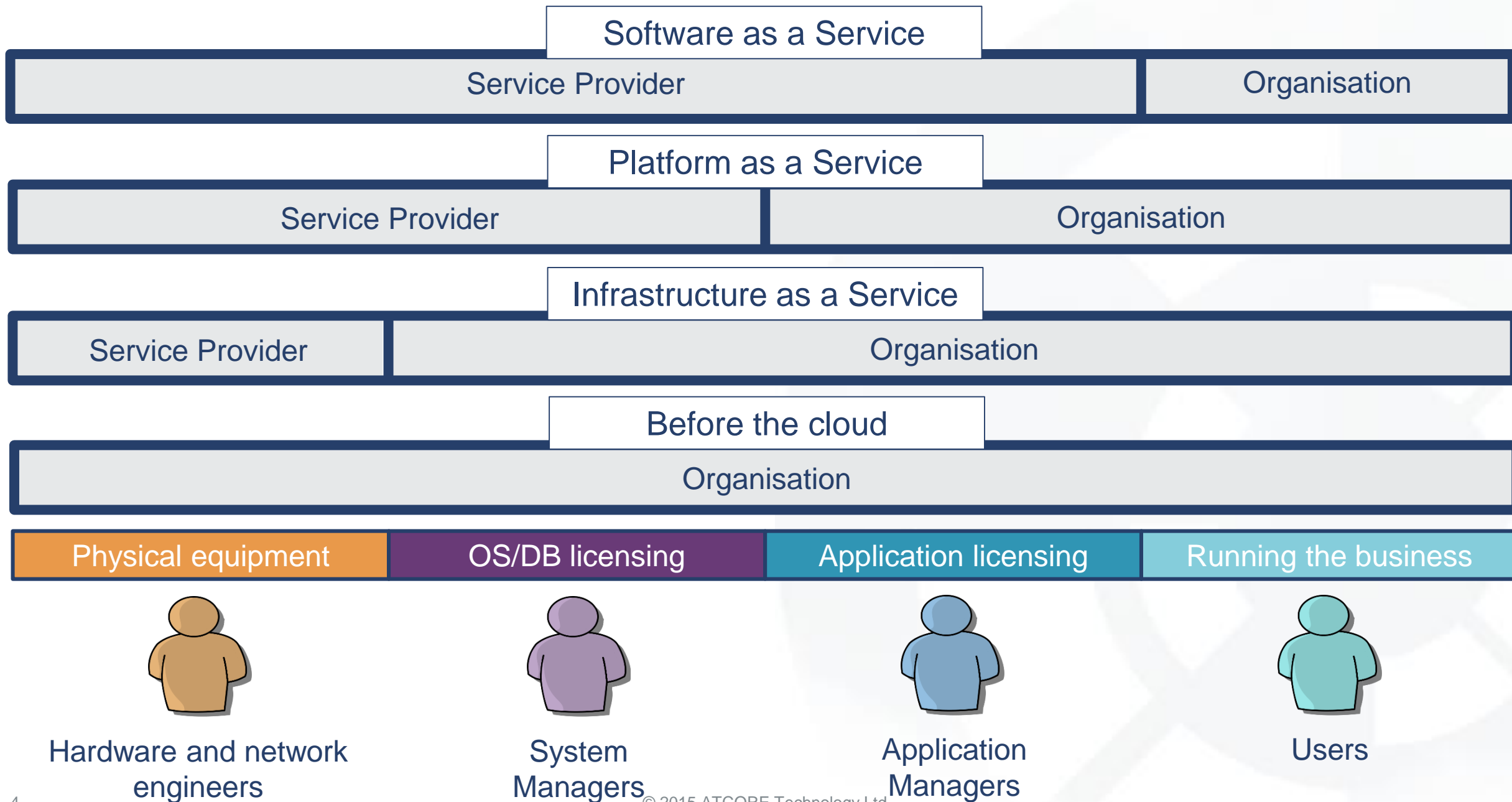
- A warm front is a body of warm air which rises up slowly above a body of cold air causing clouds and light rain before it pushes the cold air out of the way
- Does this imply that 'The Cloud' complements existing collateral and gradually replaces it over time?



Types of cloud

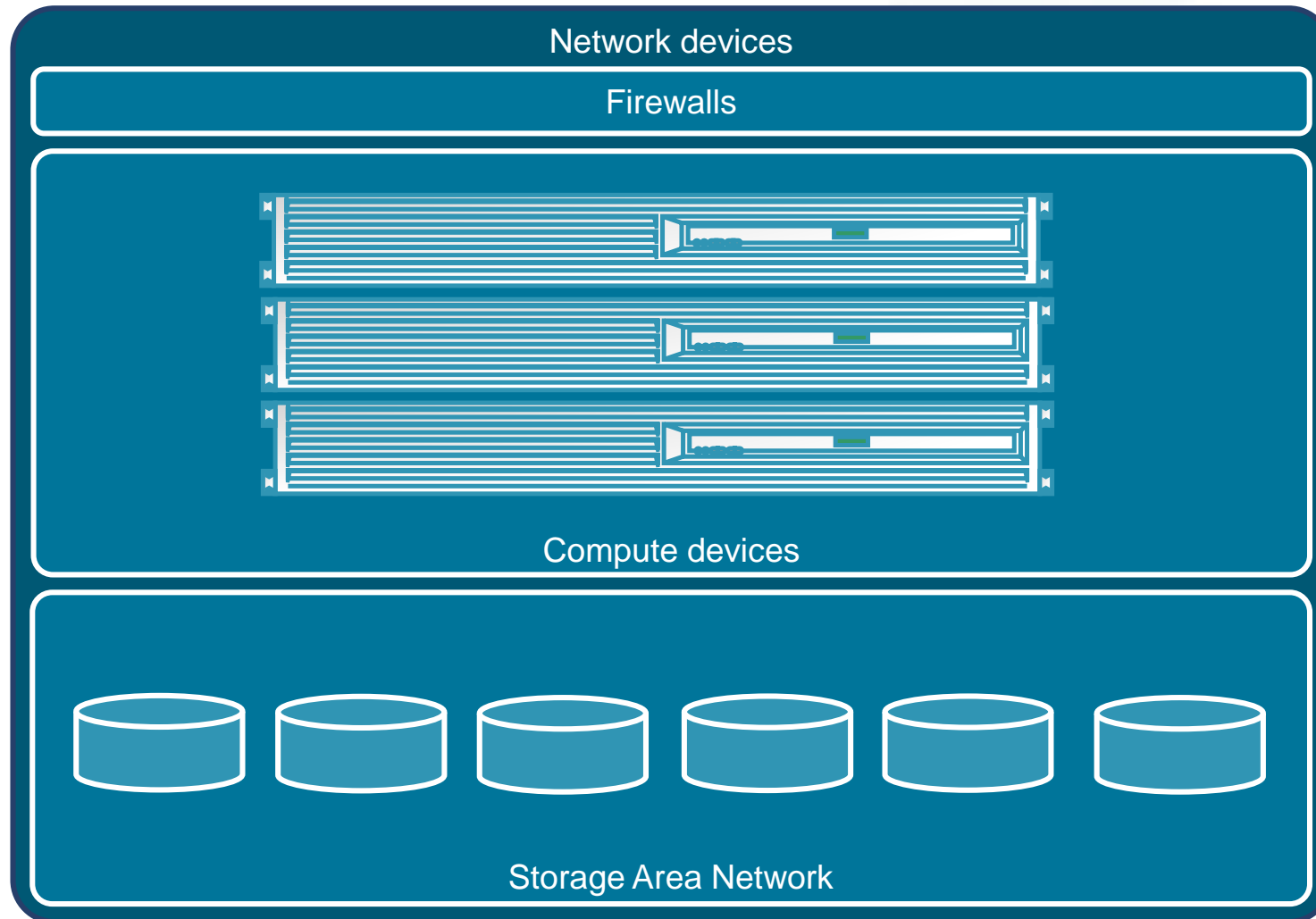


Types of cloud service delivery



Cloud technology

At a physical level, cloud and non cloud are the same – the difference is virtualisation



Cloud technology

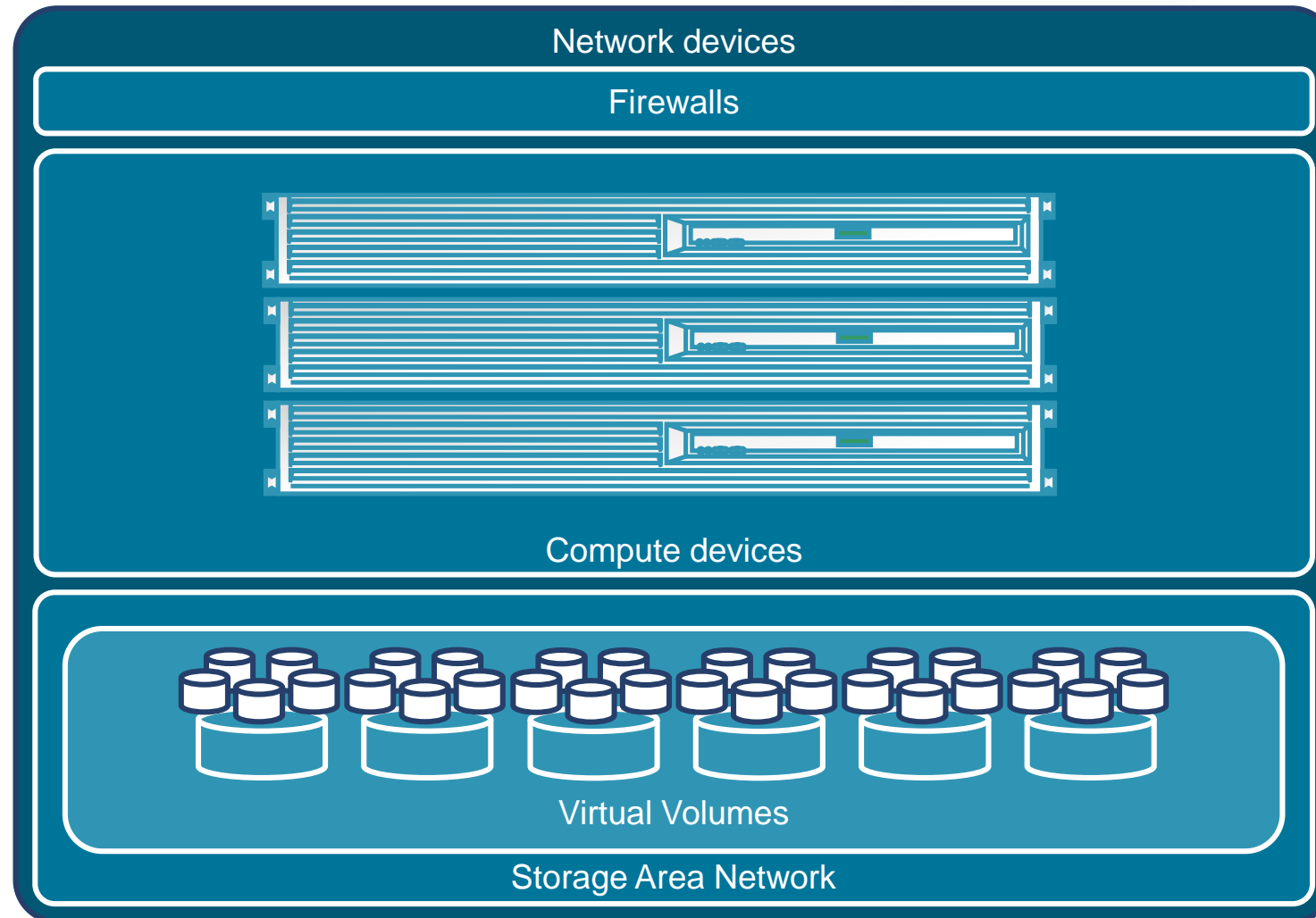
What is virtualisation?

Virtualisation uses software called a Hypervisor to enable a physical server or storage device to be split into multiple logical servers or disks

- Non-Cloud
1 physical server = 1 Microsoft Windows server (20% busy with 80% wasted)
- Cloud
1 physical server = 1 hypervisor and 5 x Windows servers (100% busy)

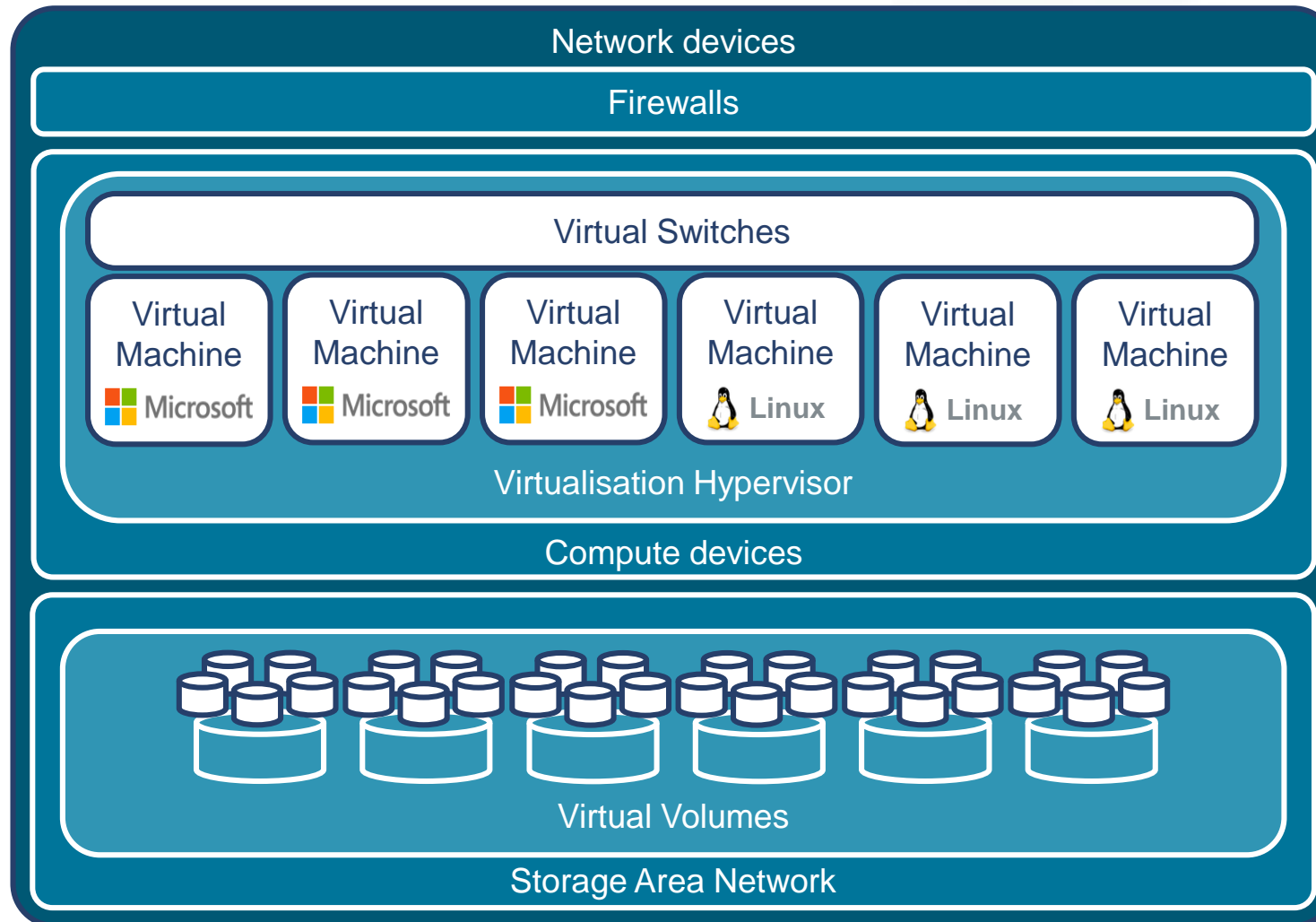
Cloud technology

- Virtualisation lets us split a big disk into lots of small logical volumes



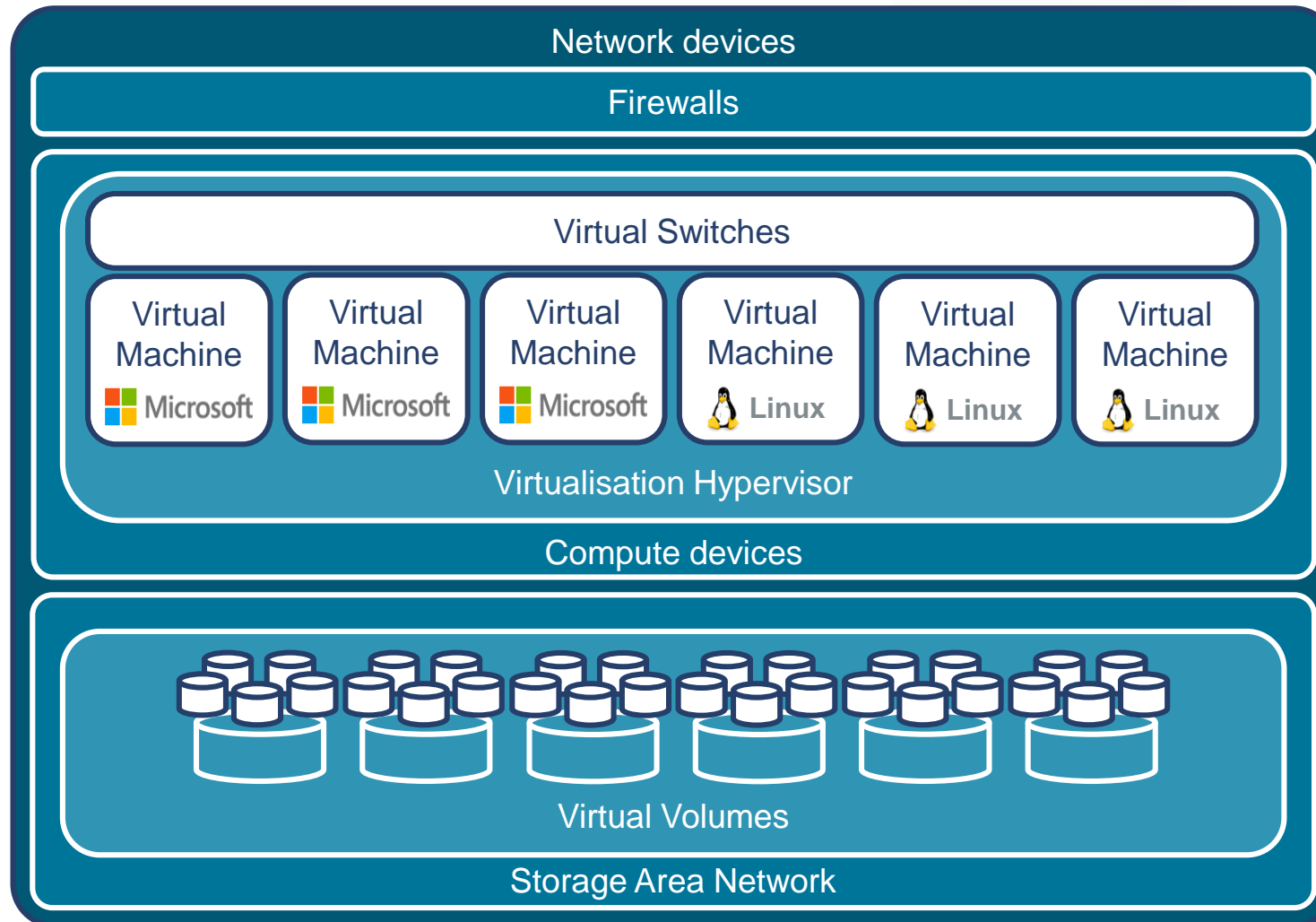
Cloud technology

- Virtualisation lets us create many logical servers of different types on the minimal number of physical servers



Cloud technology

- Virtualisation enables a virtual machine to continue running even if the physical machine it was using fails, enabling better disaster recovery options



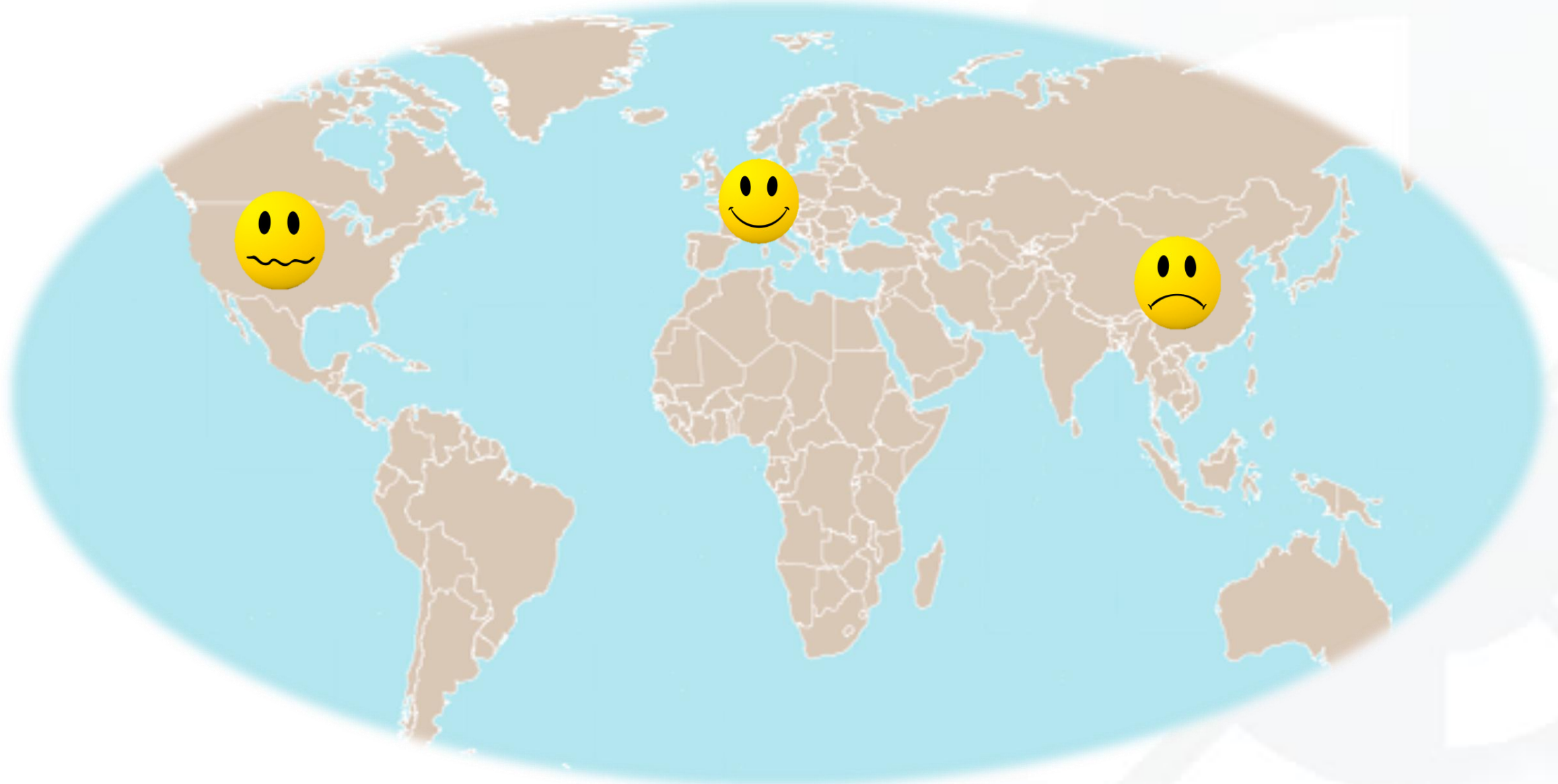
Cloud security

Don't call it 'the cloud',
call it 'someone else's computer'

*All my business
data is backed up
on the cloud 😊*

*All my business data is
backed up on somebody
else's computer ☹️*

Security – where in the world is your data ?



Security – protect your data

If your data is sensitive –
ENCRYPT IT



Beware the
dodgy selfie!



Ensure that your data is kept private –
USE A FIREWALL



Cloud security

- Does the service provider have required certification?
 - PCI DSS
- Does the service provider offer a service level agreement?
 - Loss of service may have a significant impact on your business so make sure that you understand the risks associated with a provider who won't provide you with an agreed SLA
- Are infrastructure access control and monitoring facilities in place?

It may not be possible for you to comply with regulatory requirements. Can you:

- Restrict access via single sign on and two factor authentication?
- Is there log management and alerting to identify security issues
- CCTV monitoring

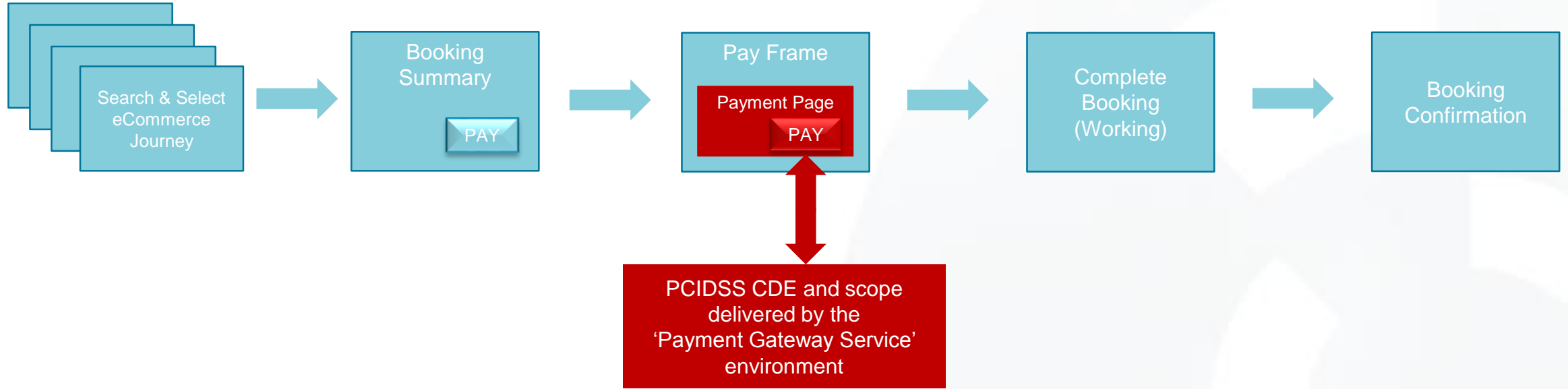
Case study

ATCORE Payment Gateway Service

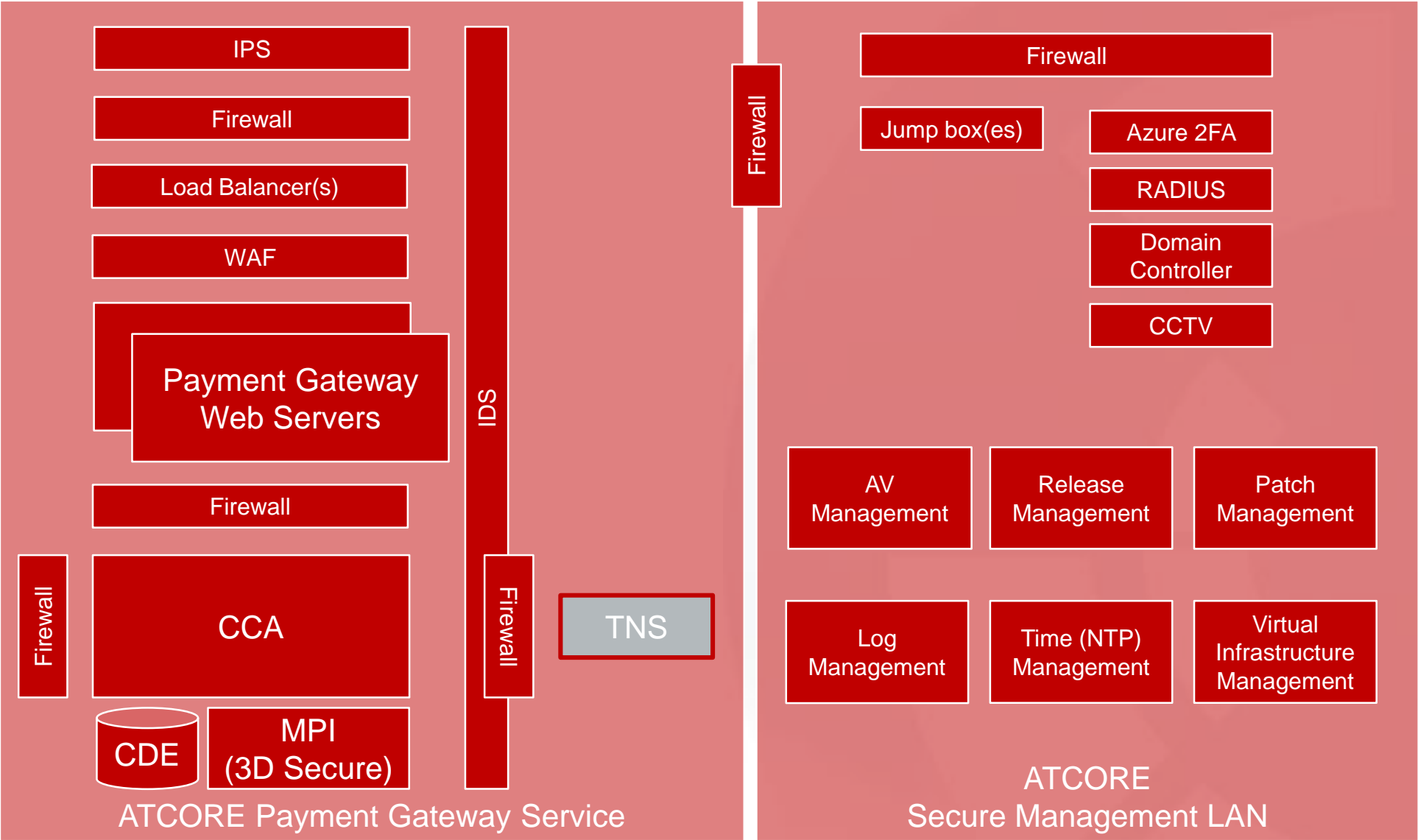


- Minimises PCI DSS compliance overhead
- Enables channel specific card type surcharges
- Enables automatic transaction back out if a 3rd party component fails during the booking create process
- Acquirer agnostic, no need to re-engineer when you change your merchant agreement

User Experience



The full architectural picture



In answer to my question earlier:

Cold 

- A cold front is a body of cold air which pushes into warm air, the cold air causes the warm air to rise up quickly, causing thunderstorms and flooding
- Does this imply that 'The Cloud' is all conquering leaving extensive collateral damage in its wake?

Warm 

- A warm front is a body of warm air which rises up slowly above a body of cold air causing clouds and rain in the process pushes the cold air out of the way

Yes, and it's happening now





Thank you