Multi-cloud Architecture Is it a thing or a Mythical Creature?

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Overview

CLOUD COMPUTING

MULTI-CLOUD

HAZARDS

SETUPS

SOLUTIONS

CONCLUSION

Cloud Computing: Evolution

- 50s
  - Mainframe computing
- 70s
  - Virtual Machines
- 90s
  - VPN Connections
- Grid computing
- Utility computing
- SaaS
- Cloud Computing

Cloud Computing: What is it?

- Provided by a vendor
- Multi-customer infrastructure
- Multi-service solution
- Elastic scaling
- Automated
  - Upgrades
  - Backups
  - Uptime
- Ubiquitous

Cloud Computing: Services

SaaS -> Software as a Service

- Consume
  - Email, CRMs, Collaborative, ERP

PaaS -> Platform as a Service

- Build
  - App Development, Support decision, Web, Streaming

IaaS -> Infrastructure as a Service

- Migrate
  - Caching, Storage, Backuping, Security, Networking, System Management

Single Cloud: Limitations

- Downtime
- Privacy
- Security
- Vulnerability
- Flexibility
- Limited Control
- Limited Resources
- Dependencies
- Cost

Multi-cloud: Definition

It consists of one single software architecture making use of services, resources or infrastructure provided by multiple cloud vendors.

Multi-cloud: Motivation

Independence: Reduce the dependence from a single vendor

Flexibility: Increase your options

Risk: Mitigate plan in case of disaster

Hybrid: On-premises and off-premises

Extended features or capabilities

Tackle diverse security concerns

Cost benefit

Free allowances :D

Multi-cloud: Hazards

- Multi-customer data privacy concerns
- Policy conflicts
- Rival providers
- Incompatible APIs
- Increased attack surface
- Increased complexity
- Limited control over resources and data
- Assets ownership
- TRUST
- Management overburden

Multi-cloud: Setups

Two clouds merged together

Add a cloud to an existing cloud

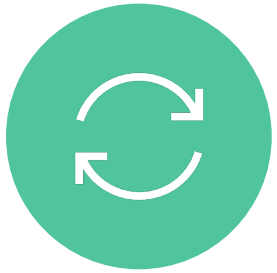
Multi-cloud: Trust

- Measures
  - Weighted probability trust
  - Service customisation
  - Third party multi cloud audit

Multi-cloud: Conclusion

INCREASED THE POOL OF SERVICES

CHOICE OF PRICING



INCREASED COMPLEXITY

INCREASED RISK

Multi-cloud: Questions

- **Questions? Thank you.**