Cloud Security with Benefits
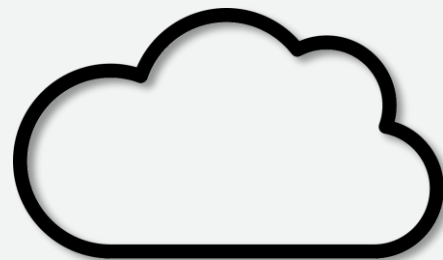
Aurelien Requiem, Solutions Architect

18 July 2019

Once upon a time…

Behold…

The Cloud

Shared responsibility model

Shared responsibility model

CUSTOMER	CUSTOMER DATA		
RESPONSIBILITY FOR SECURITY 'IN' THE CLOUD	PLATFORM, APPLICATIONS, IDENTITY & ACCESS MANAGEMENT		
	OPERATING SYSTEM, NETWORK & FIREWALL CONFIGURATION		
	CLIENT-SIDE DATA ENCRYPTION & DATA INTEGRITY AUTHENTICATION	SERVER-SIDE ENCRYPTION (FILE SYSTEM AND/OR DATA)	NETWORKING TRAFFIC PROTECTION (ENCRYPTION, INTEGRITY, IDENTITY)

Security IN the Cloud

Managed by **customers**

AWS	SOFTWARE			
RESPONSIBILITY FOR SECURITY 'OF' THE CLOUD	COMPUTE	STORAGE	DATABASE	NETWORKING
	HARDWARE/AWS GLOBAL INFRASTRUCTURE			
	REGIONS	AVAILABILITY ZONES	EDGE LOCATIONS	

Security OF the Cloud

Managed by **AWS**

Shared responsibility model

AWS Well-Architected

Learn, measure, and build using architectural best practices

AWS Architecture Center | This is My Architecture | AWS Answers | AWS Solutions | Case Studies | Cloud Security

Security IN the Cloud

Managed by **customers**

AWS Cloud Compliance

Assurance programs for finance, healthcare, government and more.

I'd like information about Compliance in the Cloud »

Compliance | Cloud Security | Assurance Programs | Resources | Latest News | Testimonials

AWS Artifact

No cost, self-service portal for on-demand access to AWS' compliance reports.

Start for Free with AWS Artifact

Artifact | Getting Started | FAQ | Documentation | Compliance | Security

https://aws.amazon.com/compliance/

https://aws.amazon.com/artifact/

Security OF the Cloud

Managed by **AWS**

Shared responsibility model

Identity	Detective control	Infrastructure security	Data protection	Incident response
AWS Control Tower	AWS CloudTrail	AWS Systems Manager	AWS Key Management Service (KMS)	AWS Config Rules
AWS Identity & Access Management (IAM)	AWS Config	AWS Shield	AWS CloudHSM	AWS Lambda
AWS Directory Service	Amazon CloudWatch	AWS WAF – Web Application Firewall	Amazon Macie	
AWS Organizations	Amazon GuardDuty	AWS Firewall Manager	AWS Certificate Manager + Private CA	
AWS Secrets Manager	Amazon VPC Flow Logs	Amazon Inspector	Server-Side Encryption	
AWS Single Sign-On	AWS Security Hub	Amazon Virtual Private Cloud (VPC)	Encryption SDK	
Amazon Cognito				

Cloud Security with benefits

Benefits for **your business**

- Increased security, at scale, cloud native
    - Certifications & Compliance
- Reduced operational costs (staff, licenses/fees, engineering)
- Team enablement
- "Your team built it? your team **runs** it!" (DevOps*)
- Security as customer selling point

Benefits for **your customers**

- Cloud vendor security, compliance, business continuity
- Data confidentiality (GDPR)
- Services availability
- Data loss prevention

But ultimately…

- Peace of mind

Benefits for **your teams**

- "You **built** it but would you run it?"

Benefits for **your teams**

- "You **built** it, you **secured** it, you **run** it" (DevSecOps)

Benefits for **your teams**

- DevSecOps

- Cloud native, integrated options

- Time and effort savings

- Feature rich solutions
    - DDoS protection
    - Single Sign-On
    - Zero knowledge

- Reduced risks of errors

Next steps

Next steps

- Security is top to bottom decision
- Get started today, security is an iterative process
- Empower technical teams to learn and do security
- Review early, review often
- One small step…

Security is a journey, not a destination.

Thank you

Aurelien Requiem, Solutions Architect