
AWS
re:Invent

ARC205

Automating security the AWS Well-Architected way with WeInvest

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Agenda

- Overview of the AWS Well-Architected Framework
- Design principles for security
- WeInvest company overview
- Automation design patterns at WeInvest
- Labs / code and session resources



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What is the AWS Well-Architected Framework?



Pillars

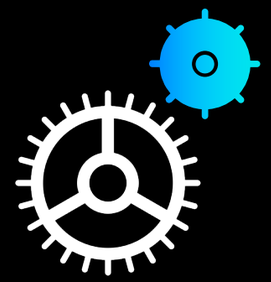


Design principles



Questions

Pillars of the AWS Well-Architected Framework



Operational excellence



Security



Reliability



Performance efficiency



Cost optimization

Design principles for security

- Implement a strong identity foundation
- Enable traceability
- Apply security at all layers
- Automate security best practices
- Protect data in transit and at rest
- Keep people away from data
- Prepare for security events



Design principles for security

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The importance of security at WeInvest



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Company overview

Brief

- B2B2C Fintech that builds next-gen digital wealth platforms
- Helps Financial institutions better engage and serve investors
- Launched first bank-led robo-advisory in Singapore

Clients

RETAIL BANK	RETAIL BANK	RETAIL BANK	ASSET MANAGER	BROKERAGE
OCBC Bank	Siam Commercial Bank	Kasikorn Bank	Lighthouse Canton	Mubasher Financial
Singapore	Thailand	Thailand	Singapore	GCC

6 countries
Prospects and presence

USD 150 million
AUM transacted

40,000
Investors served

Products

GROWWEALTH

Self-service advisory and execution

ADVISEWEALTH

Advisor-led wealth advisory



STRATWEALTH

Investment strategy management

WEINVEST

WeInvest: Security best practices

- IAM role-based access and custom policy controls
- Layer security using AWS and third-party services
- Encrypt data at rest using storage encryption and column-level encryption for databases
- Encrypt data in transit using TLS + digital signature for data in transit
- Automation of security activity where possible



WEINVEST

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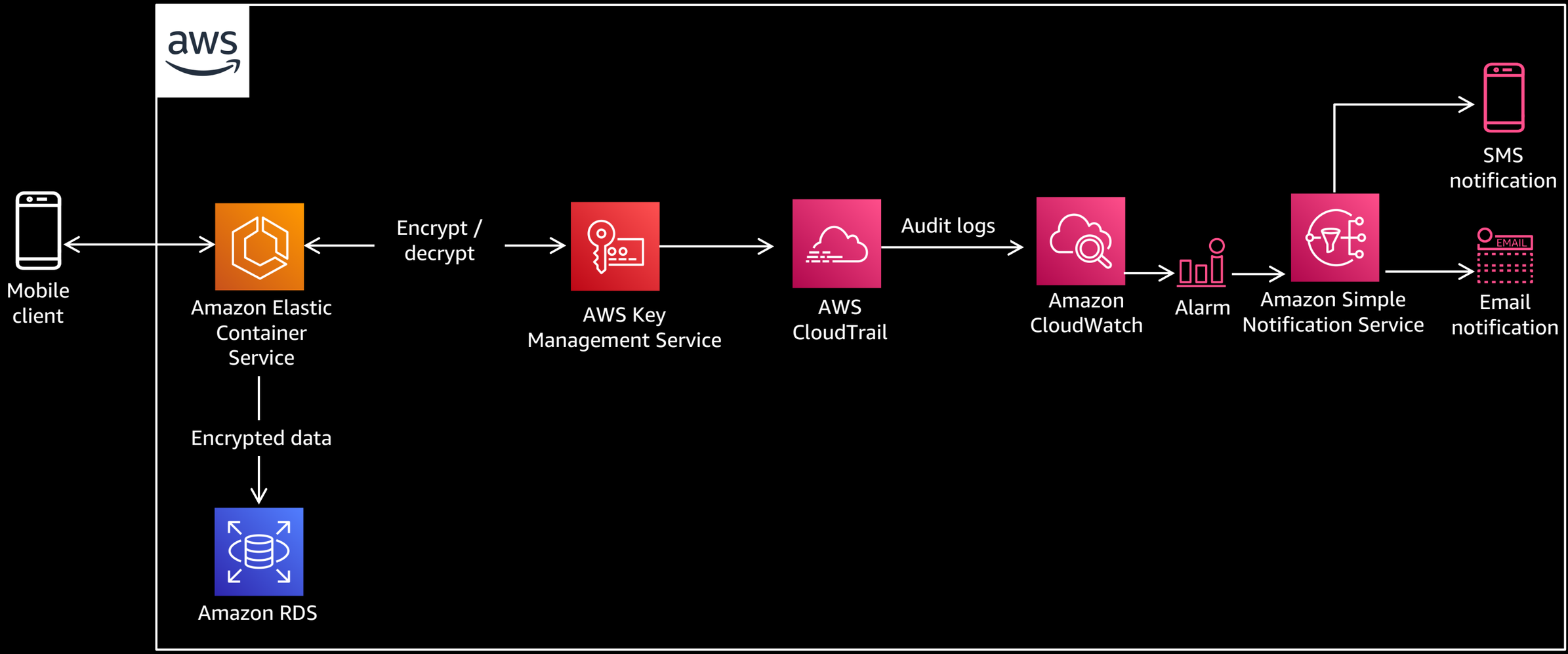
Automated security design patterns

1. Monitoring of cryptographic activity
2. Reporting irregular activity through CloudTrail events
3. Automating patching of instances using Amazon EC2 Image Builder
4. Config rules to perform continuous compliance



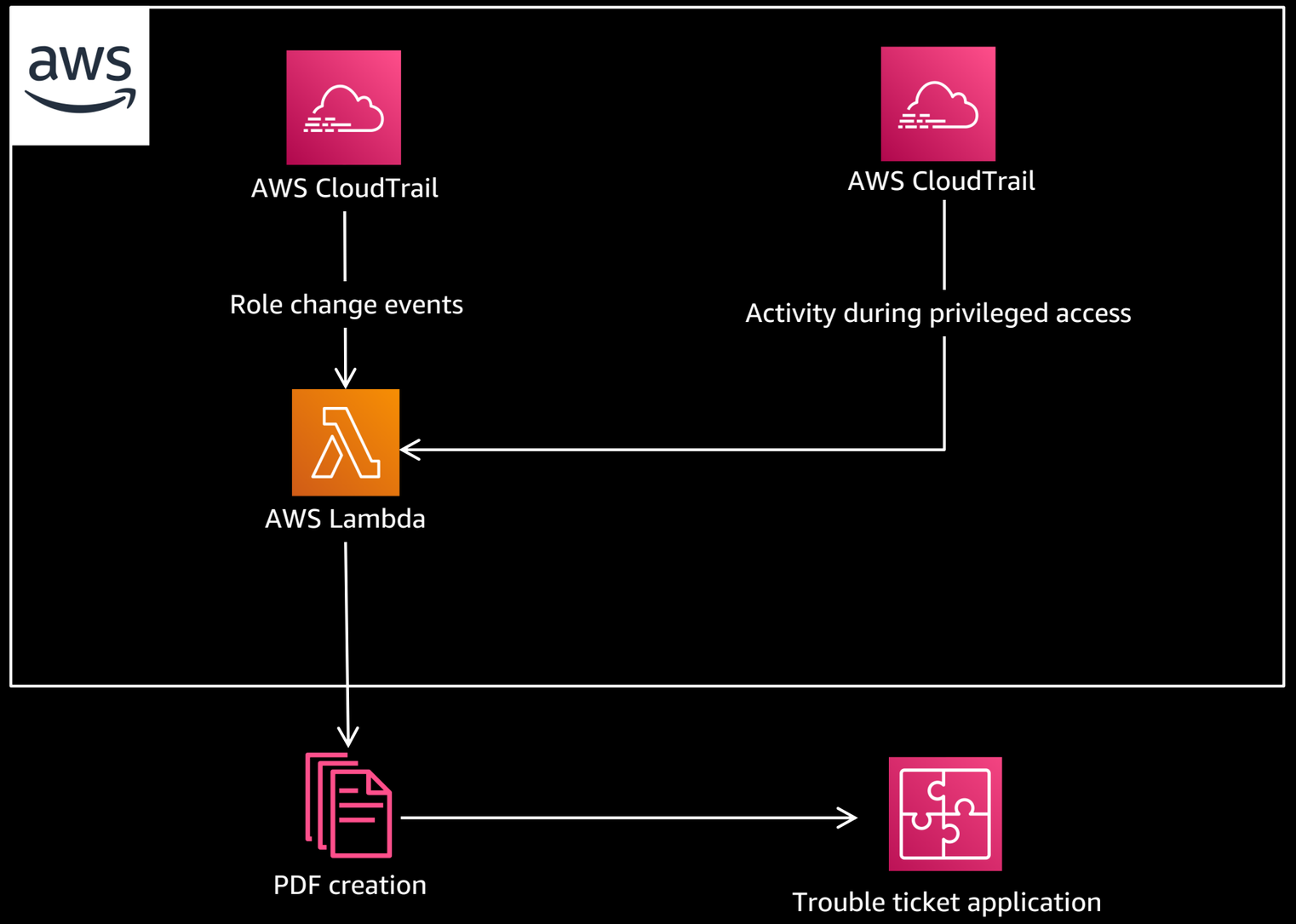
Automated security design pattern

1. MONITORING OF CRYPTOGRAPHIC ACTIVITY



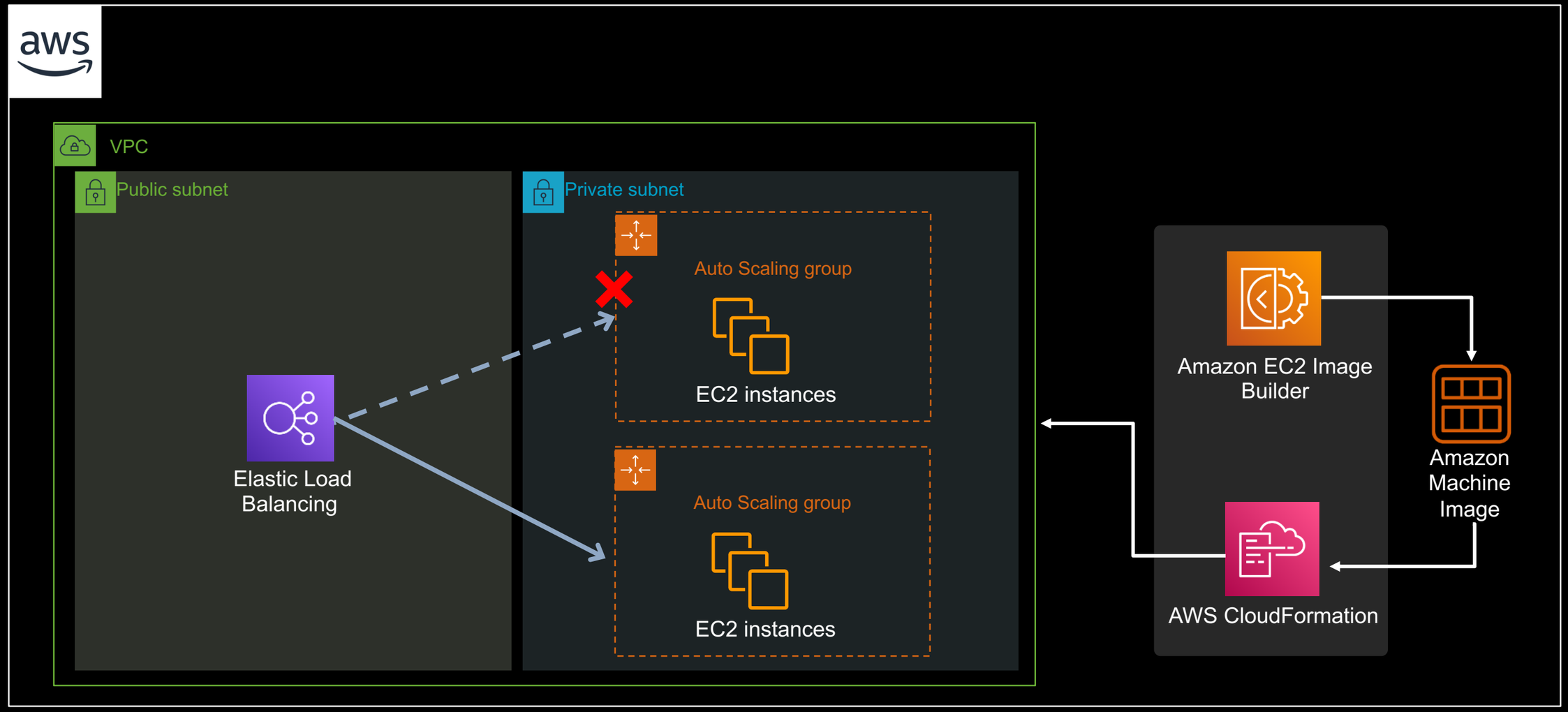
Automated security design pattern

2. REPORTING IRREGULAR ACTIVITY THROUGH CLOUDTRAIL EVENTS



Automated security design pattern

3. AUTOMATING PATCHING OF INSTANCES USING AMAZON EC2 IMAGE BUILDER



Automated security design pattern

4. CONFIG RULES TO PERFORM CONTINUOUS COMPLIANCE

- Originally used to ensure Amazon S3 public access was blocked
- Now expanded to include the use of conformance packs
- Packs aligned with the AWS Well-Architected Framework pillars
- Packs available in GitHub
- Labs available to demonstrate deployment and configuration

Resources



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Code giveaways and resources!

- Download the Well-Architected Framework Whitepaper – https://d1.awsstatic.com/whitepapers/architecture/AWS_Well-Architected_Framework.pdf
- Check out our Well-Architected Labs, which partner with this session – https://bit.ly/3fPdw69
- Conformance pack documentation – https://docs.aws.amazon.com/config/latest/developerguide/conformance-packs.html
- Well-Architected Partner Program – https://aws.amazon.com/partners/well-architected-program/

Thank you!



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