AWS Essential Training for Developers

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AWS Well-Architected Framework



The AWS Well-Architected Framework has six pillars with **key design principles** that help you realize the value propositions of the cloud.

You will find the **key design principles** and the value propositions of the cloud on the AWS Certified Cloud Practitioner (CLF

Operational Excellence

- Infrastructure as code
- Many, small changes
- Design for failure
- · Learn from failure
- Quickly make changes to operational procedures

Security

- · Use identity management
- Use traceability
- Apply security everywhere
- · Automate security audits
- · Secure data at rest or in transit
- · Limit exposure of sensitive data
- · Practice for security events

Reliability

- Automatically recover from failure for reliability and high availability
- Test recovery
- Stop guessing capacity
- Implement elasticity in the cloud versus on-premises
- Scale horizontally for scalability
- Automate change

Performance Efficiency

- Have mechanical sympathy
- Use managed services
- Use serverless architectures
- Decouple components instead of monoliths
- Think parallel
- Run experiments for agility
- Global reach within minutes

Cost Optimization

- Save on IT capital and use economies of scale
- Have a budget
- Pay-as-you-go consumption
- Measure usage for right sizing
- Tag expenditures

Sustainability

- · Maximize efficiency
- Know your environmental impact
- Use managed services
- Set goals