

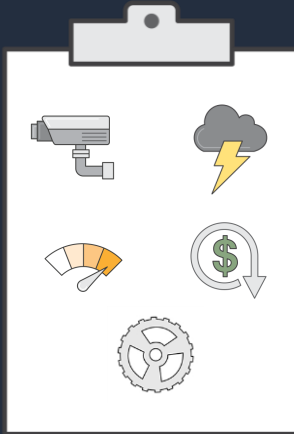


AWS Well-Architected

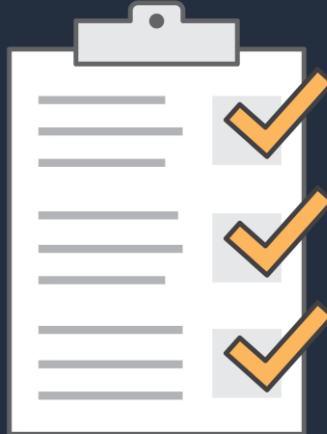
<https://aws.amazon.com/well-architected/>

Rodney Lester
Reliability Tech Lead and Tech
Leads Leader
AWS Well-Architected

What is the AWS Well-Architected Framework?



Pillars



Design Principles



Questions

Why would I want to apply the AWS Well-Architected Framework?



Build and
deploy faster



Lower or
mitigate risks



Make informed
decisions



Learn AWS
best practices

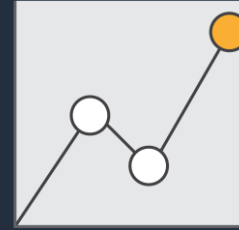
A Mechanism for your Cloud Journey



Learn



Measure

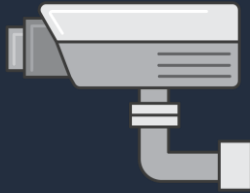


Improve

Pillars of AWS Well-Architected



Operational
Excellence



Security



Reliability

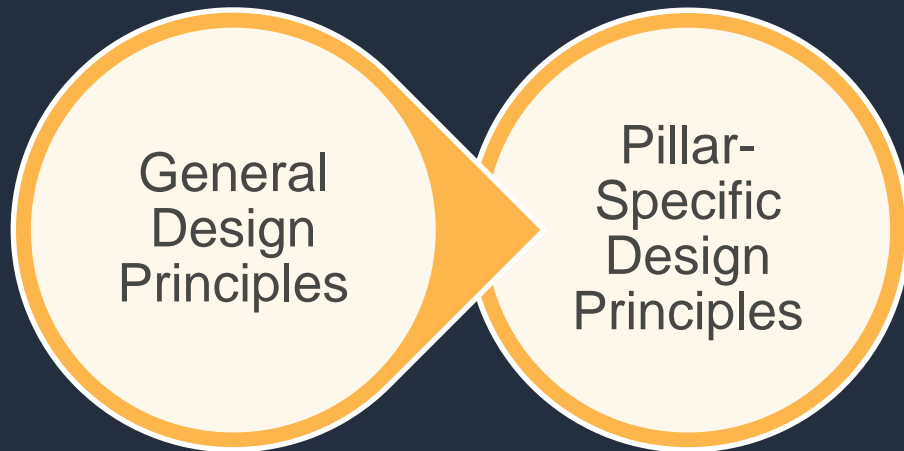


Performance
Efficiency



Cost
Optimization

Design Principles



Automate responses to security events: Monitor and automatically trigger responses to event-driven, or condition-driven, alerts.

General Design Principles

Stop guessing your capacity needs



Test systems at production scale



Automate to make architectural experimentation easier



Allow for evolutionary architectures



Drive architectures using data



Improve through game days



Design Principles for Operational Excellence

Perform operations as code



Annotate documentation



Make frequent, small, reversible changes



Refine operations procedures frequently



Anticipate failure



Learn from all operational failures



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 Reliability

Test recovery procedures



Automatically recover from failure



Scale horizontally to increase aggregate system availability



Stop guessing capacity



Manage change in automation



Design Principles for Performance Efficiency

Democratize advanced technologies



Go global in minutes



Use serverless architectures



Experiment more often



Mechanical sympathy



Design Principles for Cost Optimization

Adopt a consumption model



Measure overall efficiency



Stop spending money on data center operations



Analyze and attribute expenditure



Use managed services to reduce cost of ownership



AWS



Well-Architected Tool

Features

- Define workloads
- Perform reviews
 - Helpful resources
 - Assign priorities to pillars
- Results
 - Improvement Plan
 - Generate PDF Reports
 - Dashboard
 - Save milestones

Customer Use Cases

Q: Learning best practices for the cloud

- How do I architect for the cloud?
- Being constrained by on-premises assumptions
- So many resources, where to start?
- How do I know if I have done something wrong?

A: Learning best practices for the cloud

- Learn AWS Best Practice
- Transition to cloud native
- Sign-post resources/services
- Identify improvements
- Inform future architectures

Q: Technology governance

- Ready to go into production?
- Are my teams following best practice?
- Consistent measurement?
- Burn down risks?

A: Technology governance



Operations



Security



Reliability



Performance



Cost



Review
Process



Consistent

Q: Portfolio management

- Where is my inventory of workloads?
- What decisions did I make in each?
- What risks are in each?
- How are risks changing over time?
- Where should I invest?
- Are there trends I can address holistically?
- Can I build mechanisms?

A: Portfolio management



Operations



Security



Reliability



Performance



Cost



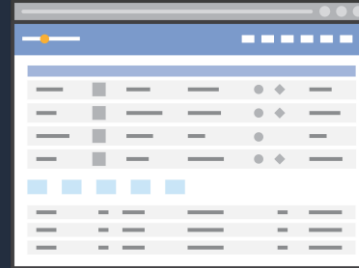
Technology Portfolio

Demonstration

Benefits of AWS Well-Architected



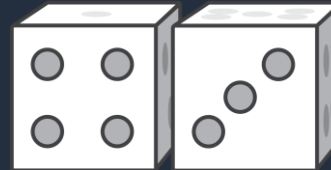
Think Cloud-Natively



Consistent Approach to Reviewing Architecture



Understand Potential Impact



Visibility of Risks

Customer Testimonial: Cox Automotive

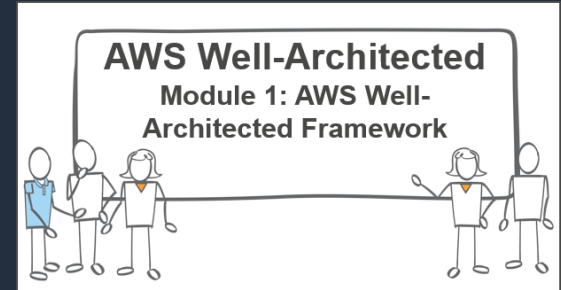
For More Information...



**AWS Well-Architected
Framework Whitepaper**



**Pillar Specific
Whitepapers,
Lens**

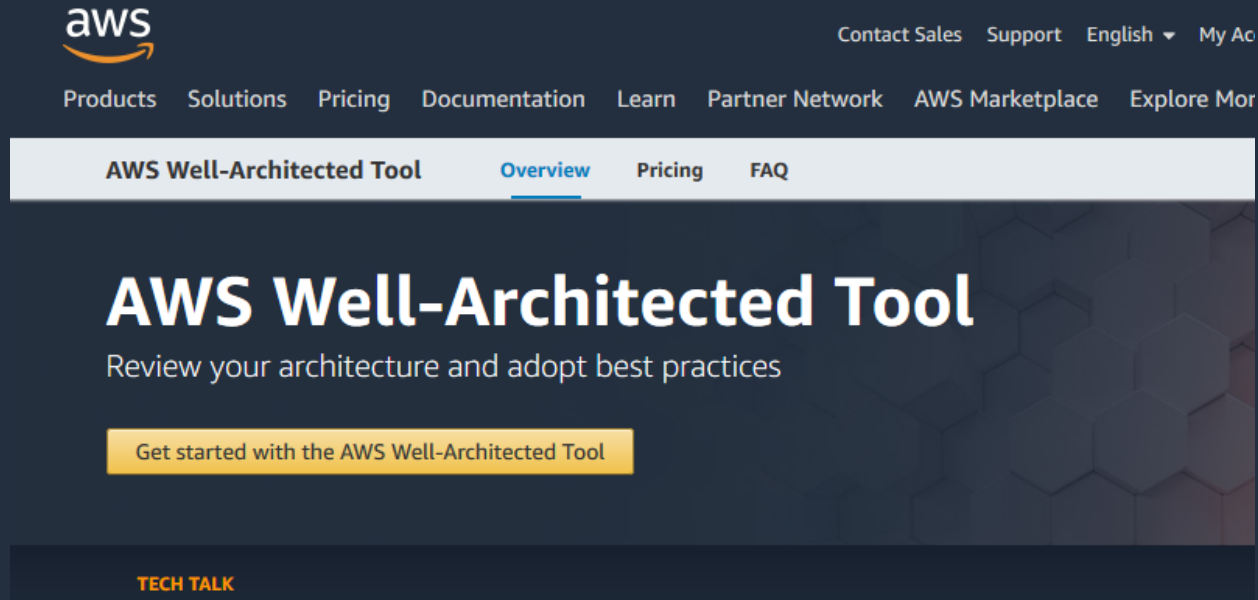


Free Online Training

<https://aws.amazon.com/well-architected/>



For More Information...



The screenshot shows the AWS Well-Architected Tool product page. At the top left is the AWS logo. To the right are links for 'Contact Sales', 'Support', 'English', and 'My Ac'. Below these are navigation links: 'Products', 'Solutions', 'Pricing', 'Documentation', 'Learn', 'Partner Network', 'AWS Marketplace', and 'Explore More'. A secondary navigation bar contains 'AWS Well-Architected Tool', 'Overview' (which is underlined), 'Pricing', and 'FAQ'. The main heading is 'AWS Well-Architected Tool' in large white font, followed by the subtitle 'Review your architecture and adopt best practices'. A yellow button with the text 'Get started with the AWS Well-Architected Tool' is positioned below the subtitle. At the bottom left of the page, there is a 'TECH TALK' label.

AWS Well-Architected Tool Product Page

<https://aws.amazon.com/well-architected-tool/>

