Are you Well-Architected?

Introduction to AWS Well-Architected

Dave Crumbacher

Solutions Architect
Amazon Web Services

davecrumbacher

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Agenda

1. Introduction to the framework
2. Structure and design of the framework
3. Performing a Well-Architected review
4. Tool demo and output
5. Additional resources

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When you look at the workloads your team is building, can you answer the question:

"Are you Well-Architected?"

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Why AWS Well-Architected Framework?

Build and deploy faster

Lower or mitigate risks

Make informed decisions

Learn AWS best practices

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AWS Well-Architected: A Mechanism for Your Cloud Journey

Learn

Measure

Improve

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What is the AWS Well-Architected Framework?

Pillars

Design principles

Questions

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AWS Well-Architected Lenses

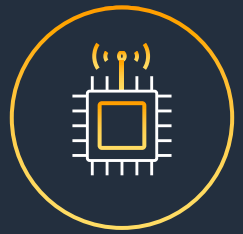
Serverless

Analytics

IoT

SaaS

Machine Learning



HPC

Financial Services

Custom

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aws

Structure and Design of the Well-Architected Framework

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Pillars of AWS Well-Architected

Operational Excellence

Security

Reliability

Performance Efficiency

Cost Optimization

Sustainability

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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

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Design Principles for Security Pillar

- 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

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Performing a Well-Architected Review

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Intent of Review

Not an audit

Working together to improve

Not architecture astronauts

Pragmatic, proven advice

Not a one-time check

Throughout lifecycle

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Learnings

Pre-launch only?

Earlier
is better

Make bad decisions?

Not considered
decisions

Findings?

Most workloads
can be improved

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Use cases

Learning best practices for the cloud

Technology governance

Portfolio management

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Define a Workload

People and Teams

Infrastructure and Services

Plans and Procedures

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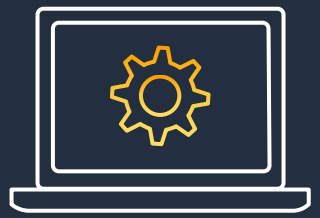
Key concepts

Identify key workloads



Identify workload sponsor

Identify pillar SMEs

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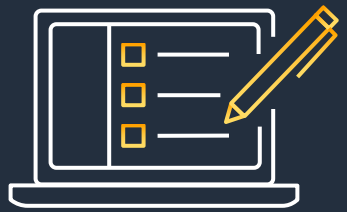
Three Phases to the Review

Prepare

- Define Workload
- Identify Sponsors
- Scope Workload

Review



- Review the Workload
- Record the Review
- Publish Report

Respond

- Prioritize HRIs
- Customer Review
- Treatment Plan

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Review Format Options

Self-Service Individual

- Done by individual team member
- Good for first review / learning
- Can be done iteratively
- Good for planning
- Use the W-A Tool

Self-Service as a Team

- Done with cross-functional team
- Good to prepare for AWS/Partner
- Requires time commitment
- Can be done iteratively
- Good for team learning
- Use the W-A Tool

AWS-Led Review

- Use the W-A Tool
- Share the results
- Best for critical workloads
- Good for deeper insight/expertise
- More limited overall availability

Partner-led Review

- Use the W-A Tool
- Share the results
- Partner credits for resolving HRIs
- Good for deeper insight/expertise
- Partners can give hands-on support

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Well-Architected Tool Demo

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

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Additional Resources

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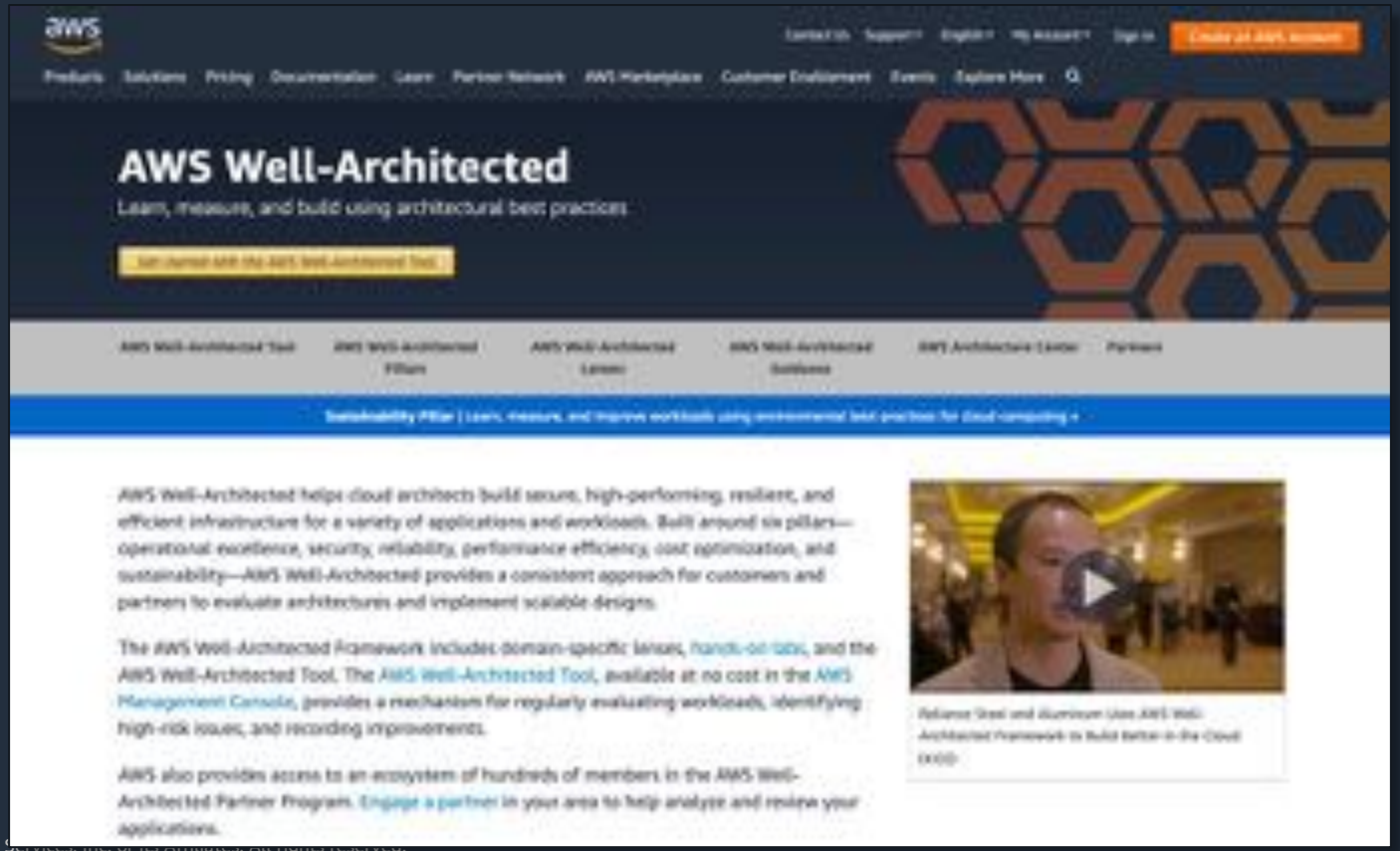
Well-Architected Main Website

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



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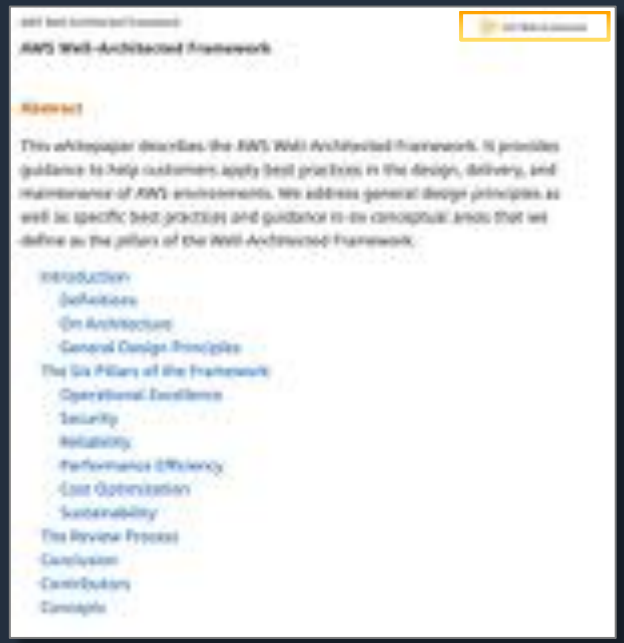
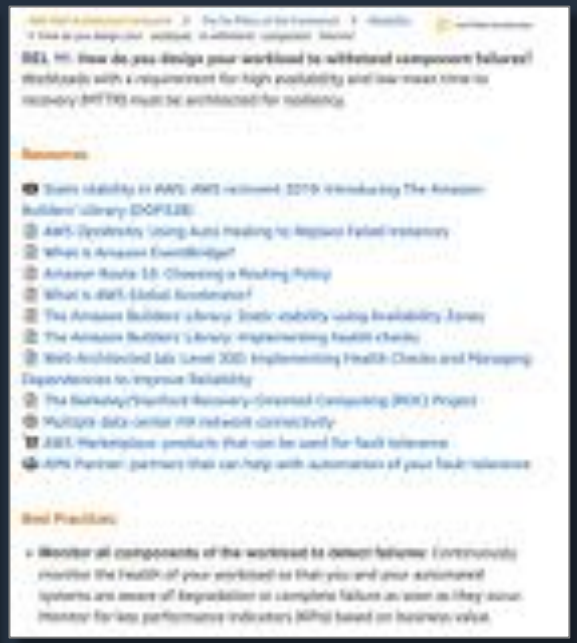
Well-Architected Content Website

https://wa.aws.amazon.com





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Well-Architected Labs

https://wellarchitectedlabs.com & https://github.com/awslabs/aws-well-architected-labs

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AWS Solutions Library

https://aws.amazon.com/solutions

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Free Training

https://explore.skillbuilder.aws/learn/course/internal/view/elearning/2045/aws-well-architected

The Framework

Operational Excellence

Security

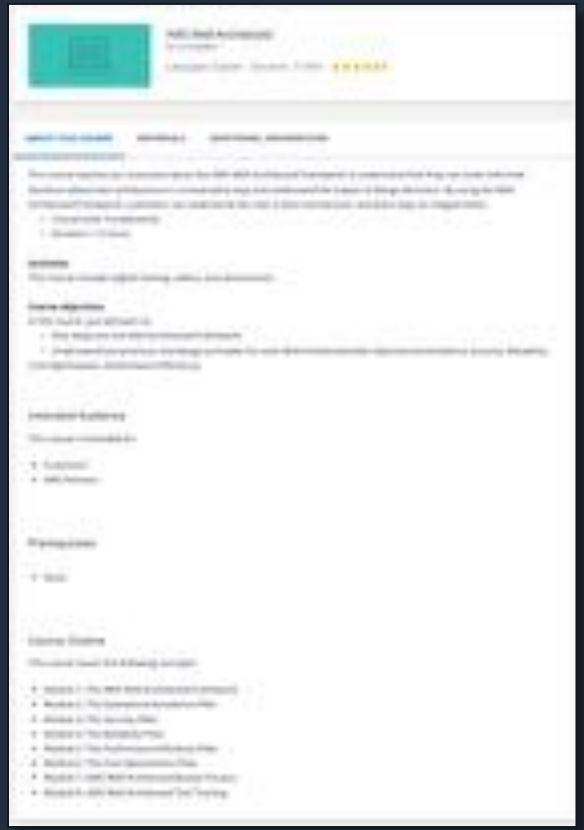
Reliability

Performance Efficiency

Cost Optimization

Well-Architected Review

AWS Well-Architected Tool



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