

White Papers & Architectures

Section Overview

- Well Architected Framework Whitepaper
- Well Architected Tool
- AWS Trusted Advisor
- Reference architectures resources (for real-world)
- Disaster Recovery on AWS Whitepaper

Well Architected Framework – General Guiding Principles

- [Well-Architected Framework](#)
- Stop guessing your capacity needs
- Test systems at production scale
- Automate to make architectural experimentation easier
- Allow for evolutionary architectures
- Design based on changing requirements
- Drive architectures using data
- Improve through game days
- Simulate applications for flash sale days

Well Architected Framework – 6 Pillars

1. Operational Excellence
2. Security
3. Reliability
4. Performance Efficiency
5. Cost Optimization
6. Sustainability

These pillars are not meant to be balanced or traded off — they work in synergy.

AWS Well-Architected Tool

- Free tool to review your architectures against the 6 pillars of the Well-Architected Framework and adopt architectural best practices.

How does it work?

- Select your workload and answer questions.
- Review your answers against the 6 pillars.
- Obtain advice:
 - Watch explanatory videos
 - Access documentation
 - Generate a report
 - View results in a dashboard

Link

- [AWS Well-Architected Tool](#)
- [Blog post](#)

Trusted Advisor

- No installation required – high-level AWS account assessment
- Analyzes your AWS accounts and provides recommendations on 6 categories:
 - Cost Optimization
 - Performance
 - Security
 - Fault Tolerance
 - Service Limits
 - Operational Excellence

Availability

- Full set of checks available with Business & Enterprise Support plans
- Programmatic access via AWS Support API

More Architecture Examples

Common Architectural Patterns

- **Classic:** EC2, ELB, RDS, ElastiCache, etc.
- **Serverless:** S3, Lambda, DynamoDB, CloudFront, API Gateway, etc.

Explore More

- [AWS Architecture Center](#)
- [AWS Solutions Library](#)

Exam Review & Tips

State of Learning Checkpoint

- Review of progress in the learning journey toward the AWS Solutions Architect – Associate certification.

Link

- [AWS Certified Solutions Architect – Associate](#)

Practice Makes Perfect

- If you're new to AWS, take time to practice using the course material before attempting the exam.
- AWS recommends having one or more years of hands-on experience before taking the exam.
- Practice is key to success.
- If the content feels overwhelming, review it again to reinforce your understanding.

Proceed by Elimination

- Most exam questions are scenario-based.
- Eliminate answers you know are incorrect.
- Among remaining options, choose the one that makes the most sense.
- There are very few trick questions.
- Avoid overthinking.
- If a solution seems feasible but overly complicated, it's likely incorrect.

Skim the AWS Whitepapers

- Recommended AWS Whitepapers:
 - Architecting for the Cloud: AWS Best Practices
 - AWS Well-Architected Framework
 - [AWS Disaster Recovery](#)
- All the key concepts have been covered in the course.
- Reviewing whitepapers of interest is always a good idea.

Read Each Service's FAQ

- FAQ = Frequently Asked Questions
- Example: [VPC FAQ](#)

Why Read the FAQs?

- FAQs cover many questions similar to those in the exam.
- They help reinforce and confirm your understanding of AWS services.

Get into the AWS Community

- Participate in the course Q&A: help others and discuss topics.
- Review questions asked by other students.
- Take the practice test in this section.

Additional Ways to Engage

- Read online forums and blogs.
- Attend local meetups to connect with other AWS engineers.
- Watch AWS re:Invent videos on YouTube.

How Will the Exam Work?

- Register online at [aws.training](#)
- Exam fee: 150 USD
- Provide one identity document (ID, Passport – check email for details)
- No notes, no pen, no speaking allowed during the exam

Exam Format

- 65 questions in 130 minutes
- Use the “Flag” feature to mark questions for review
- Optionally review all questions and answers at the end

Scoring

- Passing score: 720 out of 1000
- Result within 5 days (usually sooner)
- You will receive your overall score via email a few days later
- You won't be told which questions were right or wrong
- Retake possible after 14 days if you fail

Your AWS Certification Journey

Foundational

- Knowledge-based certification for foundational understanding of AWS Cloud.
- No prior experience required.

Associate

- Role-based certifications that demonstrate your knowledge and skills on AWS.
- Builds credibility as an AWS Cloud professional.
- Prior cloud or strong on-premises IT experience recommended.

Professional

- Role-based certifications validating advanced skills and knowledge.
- Focus on designing secure, optimized, and modern applications and automating processes.
- 2 years of AWS Cloud experience recommended.

Specialty

- Deep dive into strategic areas.
- Positions you as a trusted advisor to stakeholders or customers.
- Refer to the specific exam guides for recommended experience.

AWS Certification Paths – Architecture

Solutions Architect

- Design, develop, and manage cloud infrastructure and assets
- Collaborate with DevOps teams to migrate applications to the cloud

Application Architect

- Design key aspects of application architecture including:
 - User Interface
 - Middleware
 - Infrastructure
- Ensure systems are enterprise-wide, scalable, reliable, and manageable

[Certification Paths PDF](#)

AWS Certification Paths – Operations

Systems Administrator

- Install, upgrade, and maintain computer components and software
- Integrate automation processes

Cloud Engineer

- Implement and operate networked computing infrastructure
- Implement security systems to ensure data safety

AWS Certification Paths – DevOps

Test Engineer

- Embed testing and quality best practices from design to release
- Ensure quality throughout the software product lifecycle

Cloud DevOps Engineer

- Design, deploy, and operate large-scale global hybrid cloud environments
- Promote end-to-end automated CI/CD DevOps pipelines

DevSecOps Engineer

- Accelerate enterprise cloud adoption
- Enable rapid and stable delivery using CI/CD principles and technologies

AWS Certification Paths – Security

Cloud Security Engineer

- Design computer security architecture
- Develop detailed cybersecurity designs
- Execute and track the performance of security measures to protect information

Cloud Security Architect

- Design and implement enterprise cloud solutions
- Apply governance to identify, communicate, and minimize business and technical risks

AWS Certification Paths – Development & Networking

Software Development Engineer

- Develop, construct, and maintain software across platforms and devices

Network Engineer

- Design and implement computer and information networks
- Includes LANs, WANs, intranets, extranets, etc.

AWS Certification Paths – Data Analytics & AI/ML

Cloud Data Engineer

- Automate the collection and processing of structured/semi-structured data
- Monitor data pipeline performance

Machine Learning Engineer

- Research, build, and design AI systems to automate predictive models
- Design machine learning systems, models, and architectures

AWS Certification Paths – AI/ML

Prompt Engineer

- Design, test, and refine text prompts to optimize AI language model performance

Machine Learning Ops Engineer

- Build and maintain AI/ML platforms and infrastructure
- Design, implement, and support AI/ML model operations and deployment infrastructure

Data Scientist

- Develop and maintain AI/ML models to solve business problems

- Train, fine-tune, and evaluate model performance

Congratulations!

You've reached the end of the AWS Solutions Architect – Associate preparation journey.

Congratulations!

- Congrats on finishing the course!
- I hope you will pass the exam without a hitch.

After the Exam

- If you haven't already, consider leaving a review.
- If you passed, feel free to share your success:
 - Post in the course Q&A to help and motivate other students
 - Share your tips
 - Post on LinkedIn and tag the instructor

Final Thought

- I hope you learned how to use AWS effectively and will become a great AWS Solutions Architect.