

Certification Prep Guide Series:

How to Become an AWS Certified Architect

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This Certification Prep Guide provides an overview of the current AWS Certified Solutions Architect – Associate certification and offers helpful tips that you can use when preparing for your AWS Architect certification exam.

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Why get certified as an AWS Architect?

If you're looking to advance your career in IT, there are few better ways than an AWS certification. Among AWS certifications, <u>Architect Associate</u> is by far the most in demand. In fact, in Global Knowledge's IT Skills and Salary Report, <u>AWS Architect Associate is routinely one of the top-paying certifications</u> (including non-AWS certifications), with average salary north of \$120,000—not too shabby for someone looking to move onward and upward.

Unlike other certifications that focus primarily on one technology (i.e. Hadoop, MySQL, etc.), AWS certifications may cover a couple dozen AWS services. If you're taking an AWS certification exam, you're expected to know a bit about a lot. The "jack of all trades" with knowledge about storage, networking and processing are set up for success.

Being prepared for the topic matter isn't enough for test takers—they also need a clear plan of how to take the test. How many questions are there? How much time are you given? Are you allowed to view questions more than once?

This certification prep guide will give candidates everything they need to ramp up both the technical and logistical knowledge needed to pass the AWS Certified Architect - Associate exam.

What is the AWS Certified Solutions Architect - Associate certification?

Achieving an AWS Certified Solutions Architect - Associate certification validates your understanding of the following concepts:

- Design and deploy scalable, highly available and fault-tolerant systems on AWS.
- Lift and shift of an existing on-premises application to AWS.
- Ingress and egress of data to and from AWS.
- Select the appropriate AWS service based on data, compute, database or security requirements.
- Identify appropriate use of AWS architectural best practices.
- Estimate AWS costs and identifying cost control mechanisms.

Who should take the AWS Architect Associate exam?

Individuals who design cloud infrastructures and reference architectures or deploy systems and applications should take the AWS Architect exam. Generally speaking, solutions or enterprise architects, systems engineers or developers are the prime candidates.

How will becoming an AWS Certified Architect impact your job and career?

Why should you get certified? In addition to annually ranking as a top-paying certification, with salaries eclipsing \$120,000, the AWS Solutions Architect (Associate) credential is widely respected in the industry. Like many providers of certification tests, AWS mixes a good deal of practical knowledge as well as theoretical—both of which you'll gain in <u>Global Knowledge AWS certification</u> training—into their exams. Doing so makes the tests more difficult to pass, but more credible and better tests of real-world, "from-the-trenches" ability to come into an organization and start making a real impact.

AWS Certified Solutions Architect - Associate exam guide

The first thing to realize about AWS is that they genuinely want you and your company to succeed. And towards that end, they are both transparent about the exam content, and proactive about providing materials and systems that will help you prepare.

Preparation should begin at the <u>AWS Architect Associate exam page</u>. Here, you'll find lots of useful info, including:

- Test duration: 130 minutes
- Number of questions: 55-60 questions
- Test format: Multiple choice. <u>Here's a sample of the types of questions you can expect on the Architect Associate exam.</u>
- Exam cost: \$150 for first certification, \$75 for recertification.
- Recertification requirements: Because of the fast-moving nature of AWS, they require recertification every two years.
- Exam content: For every certification they offer, AWS provides an "Exam Blueprint" which lays out, in excruciating detail, the exact content, relative weights, and suggested reading (i.e. white papers) for every topic you'll be tested on. Reviewing the one for AWS Architecture, you'll see that it covers databases, networking, storage, security, and a dozen or so other high-level topics. Having taken (and passed) every certification AWS has to offer, I can say with confidence that Architecture exams cover the widest number of disciplines and services. Preparing is essential, and the exam blueprint should be stop No. 1 in your preparation journey. Once you've used it to identify the areas you may need help with, you can review the provided white papers (and other resources provided here) to brush up on those technologies and concepts.
- Is there a penalty for failing the real test? Like all companies providing certification, AWS requires test takers to wait a bit if they fail the test. The first time you fail, you must wait two weeks (commonly referred to as a "cooldown" period). There is no limit on exam attempts until the test taker has passed.
- Is the test open book? All tests are closed book and closed Internet. After your clock starts on your test, the only notes you get to review are the ones in your head.
- Where does the real test take place? All AWS certifications are proctored at PSI test taking facilities—typically a local community college. You'll need to arrive at least 15 minutes before your appointed time, show a valid ID, leave your cell phone and all other electronics in a locker, and be escorted to a computer where the proctor will open your test. The only materials you're given are a small (typically 8.5 x 11 inch) dry erase whiteboard and a pen for the whiteboard. Register for your exams here.
 - NOTE: If you plan on attending AWS' <u>yearly re:Invent conference</u> in November, you'll find all tests offered here as well.
- Does AWS offer any kind of formal test preparation? Yes. There is a half day instructor-led live class focused entirely on preparing for the exam (also offered for half a dozen other AWS classes). In this class, we dissect several dozen questions you may find on the exam, teaching students how to fish out the important details, throw out red herrings (which we call "distractors"), and zoom in on the right answer. Global Knowledge offers <u>AWS Certification Exam Readiness Workshop: AWS Certified Solutions Architect Associate</u> (using the exact materials AWS provides) as an add-on to any three-day course you take. The prep course is \$300.
- Is there an FAQ which covers questions about all AWS exams? Yup, <u>you'll</u> find that here.

How to prepare for the AWS Architect certification

Technical prep is covered almost entirely by the aforementioned <u>Exam Blueprint</u>. Use it to bone up on concepts and technologies. If you feel you need further preparation, there are several options.

- Instructor-led live training: This is always the best option if you can afford it. Global Knowledge offers an Architecting on AWS course, and we use the same materials and labs that AWS creates and uses for their own training. Like myself, nearly all of our instructors (95%) have decades of hands-on systems design experience, and can help students with even the tricky, "from-the-trenches" questions. We're not "just trainers" who read you slides—we're hands-on practitioners who can go into detail about implementation concerns and gotchas. Since Global Knowledge is an authorized training partner, students can be guaranteed they are learning the latest content directly from AWS. If you're stuck at the office and can't make it out for a three-day course, Global Knowledge offers virtual training so you can essentially attend from any location convenient for you. If there's a group that needs the same course, it's worth talking to a Global Knowledge Training Advisor to arrange a private training session at your company site or neutral location. Having flexible training options makes it easier for you to learn.
- AWS Certification Prep Toolkit: Get all the tools and training you need in one place with our exclusive AWS Cert Prep Toolkits. Each Toolkit includes an authorized training course, an Exam Readiness Workshop and an exam voucher. Purchase the AWS Certification Prep Toolkit: Solutions Architect Associate and set yourself up for exam success.
- Well-Architected framework white paper: This collection of five white papers, which AWS diligently keeps up to date, details common best practices curated from thousands of customer interactions. AWS considers the collection so important, many of the Architect Associate exam questions are based off of it. The white papers are required reading for anyone building their first couple of systems on AWS. Even if you've been using AWS for a while, it's highly recommended that you at least peruse that white paper before taking the exam.
- Online video courses: If you're looking to complement instructor-led training with some online video courses, there are a few less expensive resources that dive into specific topic areas, though without the instructor support. You'll find up-to-date certification preparation courses offered via a variety of channels including Udemy, Cloud Academy, and Linux Academy. These courses generally cost about \$30 to \$150 per class. The downside is that if you get stuck on a topic or concept, you're on your own.
- AWS YouTube channel: By putting up every re:Invent presentation (within 1-2 weeks after the conference, usually), and by organizing topics efficiently, you'll find the <u>AWS YouTube channel</u> loaded with info-rich, marketing-light, great presentations that help you with everything from intro to advanced information on every service and concept they cover.
- AWS certification prep book: <u>AWS now offers an official study guide</u> which appears to be high quality and current.

- Practice exam: AWS offers an Architect Associate practice exam for \$20. The practice test doesn't have a two-week cooldown period if you fail and can even be taken virtually. It'll give you a sense of what areas require more study before you take the actual exam.
- Rich's links: I share this set of links with every AWS class I teach for Global Knowledge. It contains dozens of links (organized by various topics) that I've either found in my own travels, or other instructors or students have alerted me to. You'll find several links that will help you prep for the test.

AWS Architect exam: Tips & tricks

Although technical knowledge is required to pass the exam, walking in without knowledge of "how to take the test" is a recipe for failure. In addition to the advice and resources mentioned above, I also recommend the following tips and tricks for taking the exam:

• Take the test in "waves": Every AWS test lets you go back and review previous questions. You can use this to your advantage by planning to take the test in three "waves."

First wave: Anything you can answer in 10 seconds or less—complete no-brainers that you're 100% sure are correct. Example: S3 is a:

- 1. Character in Star Wars
- 2. Breed of American waterfowl
- 3. Object storage mechanism in AWS

Go all the way through the test and make sure you answer all the "gimmes" first.

Second wave: Give yourself about 30 seconds for these questions.

Third wave: The last wave will be a final double-check for any tougher questions.

Taking the test in waves not only ensures you get all the way through, and gets points for all the easy questions, it can help inform an answer you were on the fence about. For example, maybe you can't distinguish between two possible answers in a question. But on a later question, you're sure that only one answer is correct, and if that answer is correct, then the earlier question could only have one of those two possible answers.

• Know your AWS history: The fast pace of AWS presents a lot of challenges in regards to keeping materials and certification tests up to date. (This is yet another reason why instructor-led training is so important—your instructor can pivot if a slide is out of date.) As a result, in nearly every AWS certification exam I've taken (and I've taken them all), I could point to 2 to 5 questions that had no single correct answer due to recent change in AWS. Since I've used AWS for years, I can backtrack through the months and remember, "oh yeah, three months ago, only answer (E) would be correct." Without that history and

- callback, you could get frustrated and your score could get penalized.
- Get hands-on: AWS offers a fairly generous <u>free tier</u> for nearly every service they provide. The EC2 free tier provides a free t2.micro instance for a full year—this would allow you to build a "side project" website for your kid's soccer team, your church, your hobbies, etc. If your work hasn't given you the opportunity to use AWS, you can leverage this free tier to get hands on with each service the exam covers. Just make absolutely, positively sure you understand the limits of the free tier and you set up <u>billing alarms</u> to alert you when a bill has gone above a given dollar amount.
- Everyone needs to review the basics: Even if you're an AWS guru, you should at least read the Well-Architected framework and review the Exam Blueprint (more details on both above)—you're almost guaranteed to find a couple areas where you're not the guru you thought you were.
- Read "The Everything Store" by Brad Stone: This book covers Amazon's early history, and about 15 to 20% of the book details how and why they built AWS. The context it provides about Amazon's ethos (i.e. their focus on customers, on low prices, on cutting costs, etc.) could help you narrow down some of the tougher questions you may run into. At the very least, it will make you the king or queen of AWS water cooler talk.

How do you know if you pass?

Fortunately, you'll immediately find out your results from your test. In addition to results displayed on the computer screen, you'll receive an email to the designated address set up in your AWS Certification Account profile. Within five days, your account will have a transcript of your results under the "Achieved Certification" tab. You can expect to receive an e-certificate, access to logos, digital badging, transcript sharing and additional benefits, like being able to purchase branded certification swag. *Score!*

What happens if you don't pass the exam?

If you don't pass (fingers crossed this doesn't happen), you'll enter what the certification world calls a "cooldown" period, which is a passage of time you have to wait before re-taking the exam. When you fail the exam, you must re-register and again pay the \$150 exam fee.

How to maintain your AWS Architect certification

AWS Associate-level certifications are valid for two years. When approaching your two-year mark, it's required that you get recertified to maintain validity. The recertification exam is not the same as the original exam (generally speaking, it's easier), but follows the same format. You can take a recertification exam up to one year after the original certification expires.

The other option is to study and prepare for the Professional-level certification within the same role-based track. For example, if you want to achieve the Professional level of the AWS Architect certification, you'll need to prepare for <u>AWS Certified Architect - Professional</u>. To visualize this, <u>view the AWS Certification Track</u>.

Continuous hands-on practice and experience through your day-to-day job, as well as advanced level training courses and additional prep work, will help you get where you need to be.

Next steps after you obtain your AWS Architect certification

With the ongoing advancements of AWS technology, maintaining skills will be imperative to efficiently operate AWS systems and be effective in your job role. If you want to further your skillset in this area or even get ready for the Professional-level certification, there's an Advanced Architecting on AWS course.

Once you pass the certification, to get maximum exposure, you'll want to immediately <u>load your certificate into your LinkedIn Profile</u> (don't forget to include your actual certificate number—LinkedIn refers to this as a "License Number").

If you're looking to continue down a certification path, check out all of <u>AWS</u> certification training offered by Global Knowledge and view our <u>AWS Certification</u> <u>Map</u> to chart your next steps.

About the Author

Rich Morrow

Rich Morrow is a 20-year open-source technology veteran who enjoys coding and teaching as much as writing and speaking. His current passions are cloud technologies (mainly AWS and Google Cloud Platform) and big data (Hadoop/Spark and NoSQL). He spends about half of his work life traveling the world training the Fortune 500 on their high-level value props as well as low-level technical implementation and operation. The other half of his work life revolves around speaking, writing and analyst engagements around IoT, cloud, big data, mobile and DevOps/agile methodologies. He served as one of the top 5 analysts for GigaOM, and now publishes his works through O'Reilly Media, Venture Beat, Global Knowledge, and other channels. Read more about Rich's articles, courses, and experience on his LinkedIn page: https://www.linkedin.com/in/cloudguy