

HOW TO PASS AWS CERTIFICATIONS

by LinuxAcademy.com

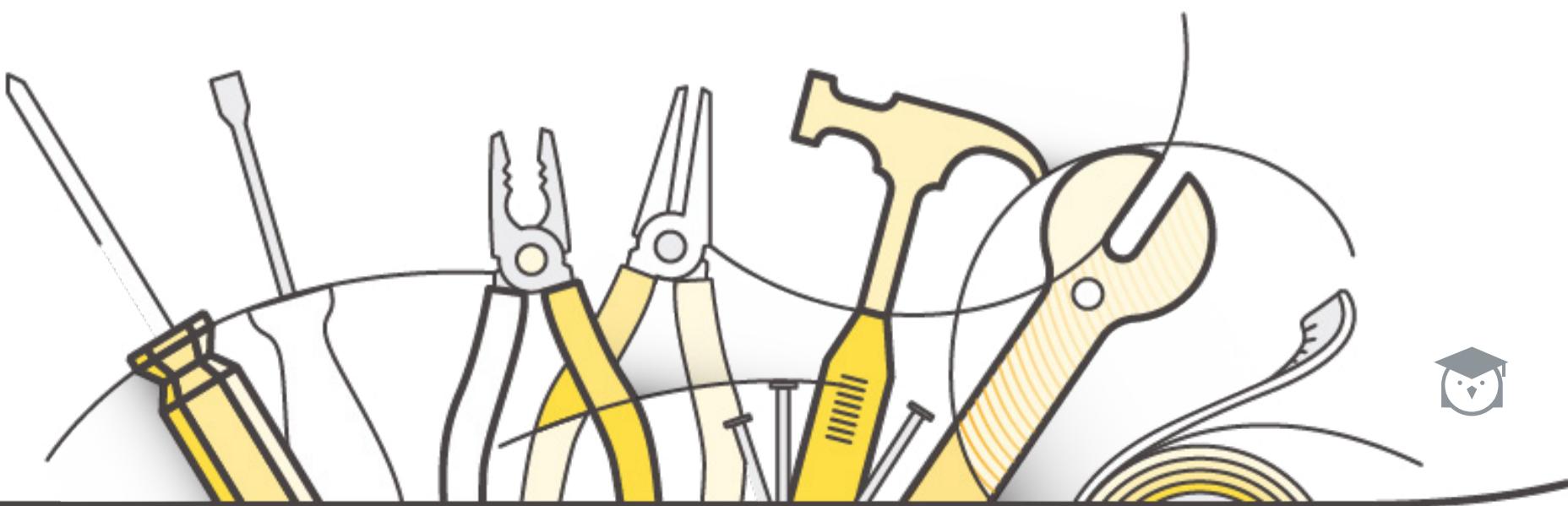


THIRD EDITION

You've heard about Amazon Web Services certifications, like how the average salary for someone holding at least one AWS certification is in the 6 digits, or how large and small organizations are hiring certified engineers over non-certified engineers, and so now you want to get certified...but you have no idea where to begin. The good news is that this ebook will tell you exactly where to begin, how to study, and how to take the exam itself.

WITH ALL OF THIS SAID, WHY SHOULD YOU TRUST THIS EBOOK TO GUIDE YOU IN THE RIGHT DIRECTION?

This ebook was written by AWS certified experts who, combined, hold all currently available AWS certifications (including the associate and professional certifications), and who have trained tens of thousands of students over the past 4 years. While it's hard to estimate exactly how many students have successfully passed certification exams during those 4 years (because AWS does not give us that data) - we have to ask students for it - we know that this number ranges in the tens of thousands based on reported passes.



We've trained engineers at organizations like Rackspace, Media Temple, Linode, MailChimp, Accenture, 2nd Watch, Stelligent, Mirantis, and the list goes on. We've even trained individuals from Amazon Web Services on how to pass their own organization's exams!

“ Got hired by AWS! I really want to say thanks... The resources here and the testing definitely helped play a role during my interviews and I cannot say thank you enough. **Curtis Rissi**

“ I've successfully passed the last of the “big five” and joined the elite club. Big thanks to Linux Academy for helping me throughout this journey! **Lucian M**

“ Thanks to the Linux Academy course materials I passed my AWS SysOps Associate exam yesterday. The official 3 day classroom course that I also attended didn't cover anywhere near everything you need to know and the Linux Academy course not only filled the gaps but was way better in the overlapping subject areas too. **Simon Page**

With this experience, we have answered countless questions around “how do I get certified in the least amount of time possible?” “which certification should I start with first?” “how long will it take me to learn everything I need to know if I have zero AWS experience?” and that is precisely why we wrote this ebook. This is going to provide you answers to all of these questions in one place, instead of having to look it up and wasting time while you should be getting AWS experience.



Before we get to it, keep in mind that we're always glad to answer your questions if you have any. Feel free to reach out on [LinkedIn](#), [Twitter](#), [Facebook](#), or even through [our website](#) if you have any questions, but please do us a favor and read through the entire book before you do, because chances are we are going to answer those questions in here. :-)

WHAT ARE THE AWS CERTIFICATION EXAMS?



- **AWS Certified Solutions Architect** - Associate Level
- **AWS Certified Solutions Architect** - Professional Level
- **AWS Certified Developer** - Associate Level
- **AWS Certified SysOps Administrator** - Associate Level
- **AWS Certified DevOps Engineer** - Professional Level
- **AWS Certified Advanced Networking** - Specialty
- **AWS Certified Big Data** - Specialty



AWS Certifications are currently only multiple choice, where the questions can vary in length and difficulty, and the number of answers can also vary. You could get a question with 4 potential answers where you have to pick 1 - 3 answers, or you could get more than 4 potential answers with 1 or more correct answers you need to choose from. Take a look at this example:

Your web application front end consists of multiple EC2 instances behind an Elastic Load Balancer. You configured ELB to perform health checks on these EC2 instances. If an instance fails to pass health checks, which statement will be true?

- A. The instance is replaced automatically by the ELB.
- B. The instance gets terminated automatically by the ELB.
- C. The ELB stops sending traffic to the instance that failed its health check.
- D. The instance gets quarantined by the ELB for root cause analysis.

Because the exam does not require you to perform any activities in the console, it can be very tempting to look for exam dumps or to only practice memorizing practice exams, but we'll discuss later in this ebook why that is a terrible idea, and why hands-on training is still the best way to go.

THE AWS CSA - ASSOCIATE LEVEL EXAM

The AWS Certified Solutions Architect - Associate Level exam is one of the most popular because it acts as a starting point for many professionals looking to dive into the world of AWS certifications.



THIS CERTIFICATION EXAM FOCUSES ON TESTING TECHNICAL EXPERTISE AROUND THE FOLLOWING:

- Designing and deploying scalable, highly available, and fault tolerant systems on the AWS platform
- Understanding many of the most popular AWS services and tools in order to leverage their use and understand costs
- Understanding AWS architectural best practices
- Understanding AWS security best practices
- Knowledge of migrating existing on-premises applications to AWS

This is the associate-level certification with the widest breadth of AWS services coverage. That's one of the reasons for its popularity - instead of being super specific to one area or domain of platform, it has a wide overview, which means that training for it will give you a fantastic introduction to what the AWS platform is capable of.

Amazon Web Services has given some guidelines of the “prime candidate” who is eligible for taking and passing this exam. Let’s take a look at the key qualities they’ve outlined.



Amazon Web Service says a good candidate for this exam has:

1. One or more years of hands-on experience designing available, cost efficient, fault tolerant, and scalable distributed systems on AWS
2. In-depth knowledge of at least one high-level programming language
3. Ability to identify and define requirements for an AWS-based application
4. Experience with deploying hybrid systems with on-premises and AWS components
5. The capability to provide best practices for building secure and reliable applications on the AWS platform

HOWEVER, THESE ARE NOT TOTALLY ACCURATE

We've seen a countless number of people take and pass that certification with only a few months of training and no prior experience. There is also no way for Amazon Web Services to check whether you have one or more years of hands-on experience, or if you have in-depth knowledge of a high-level programming language. However, having all of those skills would certainly not hurt your chances of passing the exam.

Just like all other associate level exams, this exam is formatted as a multiple choice, multiple answer test. You have 80 minutes to complete the exam, there are 60 questions, and it costs \$150 to take it.



Check out these [sample questions](#) to give you an idea of what you could expect from the real exam, and [here is the exam blueprint](#) which gives you more information about the exam (such as domains covered, a break down of grading, and other helpful information).

AWS CERTIFIED SOLUTIONS ARCHITECT PROFESSIONAL LEVEL EXAM

The AWS Certified Solutions Architect - Professional Level (AWS CSAP) steps it up quite a bit. Professional level exams are much more challenging than associate level exams. Not only are you expected to know a lot more about the platform and what its services are capable of, but you also have far more questions - 80 of them - with 170 minutes (almost 3 hours) to complete the exam. Even if you know the material covered pretty well, you are fighting against your own mental distractions and fatigue, because you are going to need all of that time to complete the exam with no break. This exam focuses around these concepts:

- Architecting and deploying enterprise-scale operations on AWS
- Understanding costs and implementing cost control strategies
- Choosing the best AWS solution given any range of requirements
- Designing and deploying elastic, highly available, fault tolerant, and reliable applications on AWS
- Deploying and migrating complex multi-tier applications on AWS



As you can see, even the verbiage steps it up a notch. On top of that, the candidate eligibility overview is even more strict:

1. Must have achieved the AWS Certified Solutions Architect - Associate level exam
2. Must have two or more years of hands-on experience designing and deploying cloud architecture on AWS
3. Must have the ability to make architecture recommendations following best practices based on application requirements
4. Capabilities to provide best practices guidance on the architectural design across multiple applications, projects, or the enterprise

[Here is a sample](#) of the type of question you could see on the real exam.

You are building a website that will retrieve and display highly sensitive information to users. The amount of traffic the site will receive is known and not expected to fluctuate. The site will leverage SSL to protect the communication between the clients and the web servers. Due to the nature of the site you are very concerned about the security of your SSL private key and want to ensure that the key cannot be accidentally or intentionally moved outside your environment. Additionally, while the data the site will display is stored on an encrypted EBS volume, you are also concerned that the web servers' logs might contain some sensitive information; therefore, the logs must be stored so that they can only be decrypted by employees of your company. Which of these architectures meets all of the requirements?

- A) Use Elastic Load Balancing to distribute traffic to a set of web servers. To protect the SSL private key, upload the key to the load balancer and configure the load balancer to offload the SSL traffic. Write your web server logs to an ephemeral volume that has been encrypted using a randomly generated AES key.
- B) Use Elastic Load Balancing to distribute traffic to a set of web servers. Use TCP load balancing on the load balancer and configure your web servers to retrieve the private key from a private Amazon S3 bucket on boot. Write your web server logs to a private Amazon S3 bucket using Amazon S3 server-side encryption.
- C) Use Elastic Load Balancing to distribute traffic to a set of web servers, configure the load balancer to perform TCP load balancing, use an AWS CloudHSM to perform the SSL transactions, and write your web server logs to a private Amazon S3 bucket using Amazon S3 server-side encryption.
- D) Use Elastic Load Balancing to distribute traffic to a set of web servers. Configure the load balancer to perform TCP load balancing, use an AWS CloudHSM to perform the SSL transactions, and write your web server logs to an ephemeral volume that has been encrypted using a randomly generated AES key.



If you compare it to the previous certification sample, you'll notice a few things...

1. The questions are more "involved" - they give you a lot more information in an attempt to overload you with knowledge (some of which may not even be relevant to the answer[s]).
2. The answers are also more involved.
3. Some of the answers may not be the best way of solving the given issue in AWS, and so you have to pick the best solution out of what they give you, not what's necessarily the best solution on the platform.
4. The scenarios to solve are more complex than in the associate level.

So like we said earlier, not only do you have to combat your own mental fatigue and distractions, but the questions and answers are more complex. They really want you to know your stuff in order for you to pass the exam, and you can expect this for all professional level certification exams, as well as for the specialty level exams.



AWS CERTIFIED DEVELOPER ASSOCIATE LEVEL EXAM

The AWS Certified Developer - Associate Level (AWS CDA) is arguably the easiest of all AWS exams. The reason for this is because it doesn't require that you have as deep of a knowledge around AWS services, and the scope of services covered is also smaller than with the AWS CSA exam. This exam, instead, focuses on how applications and code interact with the AWS platform. It does not test you on your ability to program, but instead on your ability to understand how code would interact with an AWS service.

For example, what are limitations faced when interacting with the AWS APIs? How can you use [AWS SDKs](#)? What limitations are there? How can you write code that optimizes performance of services? Another important part of the certification exam is security. How can you make secure calls between your application and AWS? How can you transfer data in a secure and reliable manner?



Here is what AWS lists as the exam concepts you should understand for the exam:

1. Picking the right AWS services for the application
2. Leveraging AWS SDKs to interact with AWS services from your application
3. Writing code that optimizes performance of AWS services used by your application
4. Code-level application security (IAM roles, credentials, encryption, etc.)

This is the candidate overview for eligibility:

1. One or more years of hands-on experience designing and maintaining an AWS-based application
2. In-depth knowledge of at least one high-level programming language
3. Understanding of core AWS services, uses, and basic architecture best practices
4. Proficiency in designing, developing, and deploying cloud-based solutions using AWS
5. Experience with developing and maintaining applications written for Amazon S3, Amazon DynamoDB, Amazon SQS, Amazon SNS, Amazon SWF, AWS Elastic Beanstalk, and AWS CloudFormation

Check out [these sample questions](#) you could expect along with the [exam blueprint](#). This is arguably the easiest of the Associate Level exams. Some people start with it for that reason, or also because it is more relevant to their day-to-day job. Or, they will start with the CSA first, move on to the CDA, and then go for the SysOps Administrator.



AWS CERTIFIED SYSOPS ADMINISTRATOR ASSOCIATE LEVEL

The AWS Certified SysOps Administrator - Associate Level exam is the last of the associate level exams to cover. This exam is a bit more specific to deploying and managing infrastructure. We're talking about understanding how to make infrastructure elastic (can scale up and down depending on demand) with a heavy focus around high availability, fault tolerance, and cost effectiveness.

THIS IS ARGUABLY THE HARDEST OF THE AWS ASSOCIATE LEVEL EXAMS, WHICH IS WHY A LOT OF PEOPLE TAKE THE OTHER TWO FIRST.

Not only do you need to understand monitoring at a deeper level, but you need to be able to implement the most effective and secure solutions possible given a scenario and following best practices. It's not enough to just deploy an application on AWS - as a SysOps Administrator, that's where the fun begins. How can you ensure the infrastructure and application(s) are secure, fast, reliable, and optimized for cost? Ensuring fault tolerance requires a strong understanding of key AWS services, as well as how to implement backup and disaster recovery processes.



Here are concepts you should understand for this exam:

1. Deploying, managing, and operating scalable, highly available, and fault tolerant systems on AWS
2. Migrating an existing on-premises application to AWS
3. Implementing and controlling the flow of data to and from AWS
4. Selecting the appropriate AWS service based on compute, data, or security requirements
5. Identifying appropriate use of AWS operational best practices
6. Estimating AWS usage costs and identifying operational cost control mechanisms

This is the candidate overview for eligibility:

1. One or more years of hands-on experience operating AWS-based applications
2. Experience provisioning, operating, and maintaining systems running on AWS
3. Ability to identify and gather requirements to define a solution to be built and operated on AWS
4. Capabilities to provide AWS operations and deployment guidance and best practices throughout the lifecycle of a project

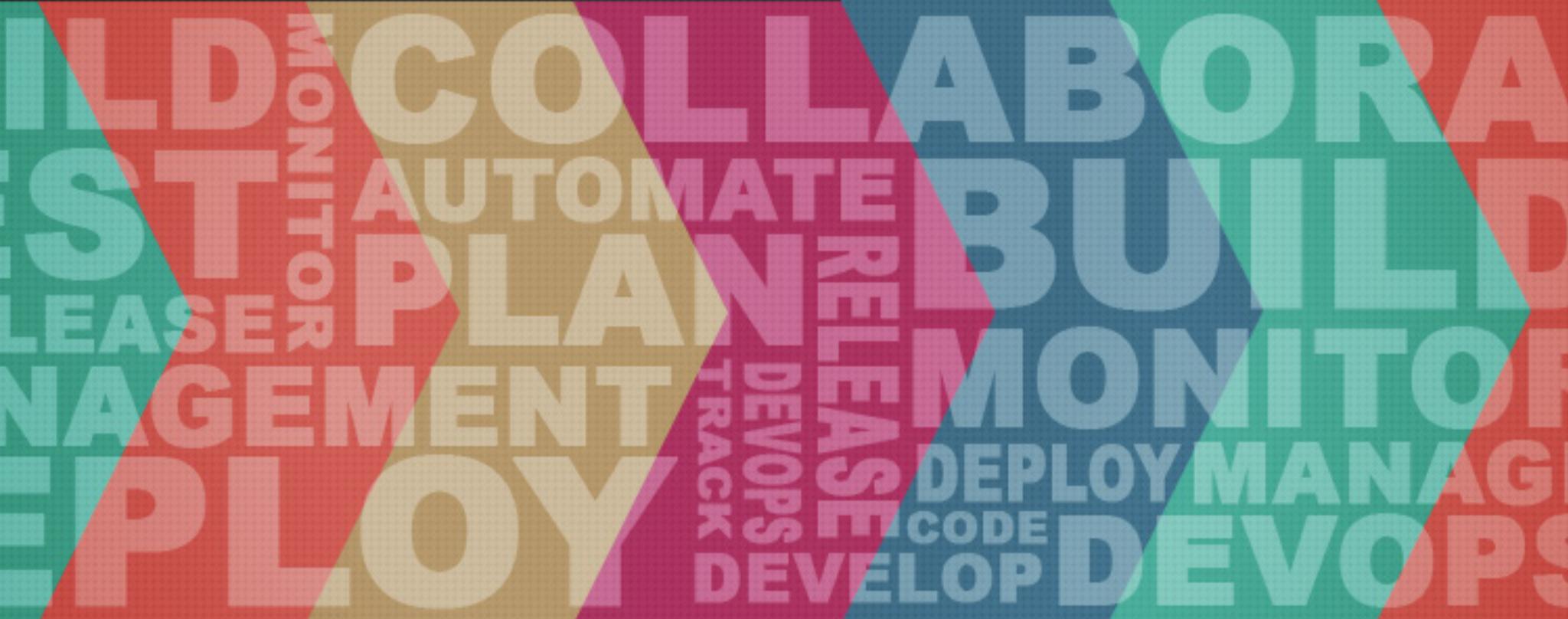
Check out [these sample questions](#) you could expect along with the [exam blueprint](#).

You maintain an application on AWS to provide development and test platforms for your developers. Currently both environments consist of an m1.small EC2 instance. Your developers notice performance degradation as they increase network load in the test environment.

How would you mitigate these performance issues in the test environment?

- A. Upgrade the m1.small to a larger instance type
- B. Add an additional ENI to the test instance
- C. Use the EBS optimized option to offload EBS traffic
- D. Configure Amazon Cloudwatch to provision more network bandwidth when network utilization exceeds 80%





AWS CERTIFIED DEVOPS ENGINEER PROFESSIONAL LEVEL

The AWS Certified DevOps Engineer - Professional Level exam is the second professional level certification exam, and its focus is radically different from the AWS CSA professional exam. The topic of DevOps is a big one which we won't go into detail here, but if you're not familiar with what DevOps stands for, take a look at these posts:

1. [WHAT IS DEVOPS](#)
2. [STEPPING INTO DEVOPS: THE DEVOPS TOOLCHAIN](#)

**WHEN IT COMES TO THIS CERTIFICATION EXAM,
THOUGH, HERE'S WHAT YOU NEED TO KNOW IF
YOU ARE INTERESTED IN TAKING IT...**



This exam focuses heavily on deployments, monitoring & logging, and managing processes around distributed applications. This means you should be very knowledgeable in the areas of:

1. Implementing and managing continuous deployment pipelines on AWS
2. Deploying self-healing applications and infrastructures
3. Designing and implementing advanced logging and monitoring for applications and infrastructure
4. Reducing deployment time
5. Understanding key differences between AWS services (especially CloudFormation, Elastic Beanstalk, and OpsWorks)
6. Understanding key differences between deployment methods, and how to implement them
7. How to protect resources

NOW... WHAT ABOUT THE SPECIALTY CERTIFICATIONS?

AWS announced the following new specialty certifications in 2016:

- **AWS Certified Advanced Networking**
- **AWS Certified Big Data**
- **AWS Certified Security** (cancelled for now)

The security certification was cancelled after AWS announced they were going to re-visit that certification exam.



The other two specialty certification exams are now out of beta, which means they are generally available to take for \$300. But what are these certification exams, and how are they different from the other AWS certification exams?

The specialty certification exams act very much like the professional exams, in that they are 3 hours long and much more advanced than associate level exams. In fact, the candidate eligibility “requirement” is 5 years with the specialty certification exams, whereas even the professional level only mentions 2 or more years of experience.

For the Networking Specialty exam, you must be very knowledgeable in the area of designing and implementing large scale AWS and hybrid network architectures, which means you need to be very familiar with networking tools and services in AWS, as well as how to automate networking tasks for both security and functionality.

The Big Data Specialty exam focuses on testing the ability to analyze complex Big Data using AWS services and architectures. This also includes setting up automation around data analysis, finding the most cost effective and scalable architecture, and a strong understanding of the data lifecycle.



WHAT SALARY TO EXPECT BY HOLDING AN AWS CERTIFICATION

According to a [Global Knowledge 2017 survey](#), professionals with the AWS Certified Solutions Architect - Associate level certification have an average salary of \$119,233.

Certification	2017 Average Salary
AWS Certified Solutions Architect - Associate	\$119,233
AWS Certified Solutions Architect – Professional	\$116,838
AWS Certified Developer – Associate	\$116,456
AWS Certified SysOps Administrator – Associate	\$111,966
AWS Certified DevOps Engineer	\$108,315

All five AWS certifications (not counting the specialty certifications since they are so new) have above market salaries with the average being \$114,561. All five have above \$100,000 per year on average. These stats, for the record, are for the U.S. and Canada regions.

WHILE THIS DOESN'T GUARANTEE YOU WILL MAKE THESE SALARIES SINCE THEY ALSO DEPEND ON OTHER FACTORS, THEY ARE GOOD INDICATORS OF WHAT IS POSSIBLE.

Also note that all of these certifications did not have an equal number of respondents. For example, the AWS Certified DevOps Engineer had fewer respondents than the AWS Certified Solutions Architect - Associate level, which could explain the difference in average salary.



WHICH CERTIFICATION SHOULD YOU START WITH?

There are two answers to this question. The first is the answer we often give to students who do not have a preference and are simply looking for guidance on which certification to start with. This is our most common answer. The second answer is one we give when students have a clear end goal, and need to pick a certification that most closely resembles what they do on a day-to-day basis.

If you're simply looking to get started with AWS certifications because your boss told you to get certified, or you've heard that they can help you get a better job or a better salary, then we recommend the AWS CSA. As noted previously, this is often the starting point for many individuals (and organizations looking to have certified experts on staff), because it is supposed to prove that the individual has a strong grasp of a wide range of AWS services and best practices. As the name implies, it focuses on testing one's ability to architect applications and infrastructures on Amazon Web Services, which is something many organizations are looking for.

The other benefit of taking this certification exam is that a lot of the concepts carry over to other certifications as well. The three associate level exams, obviously, aren't the exact same - but they do have some similarities, and so you can look at



the CSA exam as laying the foundations for other exams. The same could be said of the other associate level exams since they all overlap to some degree, though, so this isn't unique to the CSA.

If, instead, you are looking to take a certification exam to help you with a specific job function, then the answer might be different. For example, if you are a developer, and you need to learn more about how applications interact with AWS services, you could start with the AWS CDA instead of first taking the CSA and then taking the CDA. Or, if you are needing to learn more about continuous integration and continuous deployments, and how to setup complex pipelines on AWS, then the AWS Certified DevOps Engineer makes the most sense. Because you have to have the Certified Developer or Certified SysOps in order to even take the DevOps Engineer, the fastest path to the DevOps Engineer would not be to take the CSA first.

Let's look at one more example: if you already have a strong knowledge of AWS and its core services, but you need to learn more about optimizing your AWS environment for maximum performance and cost benefits, then the SysOps might make more sense, especially if you then plan on going for the DevOps Engineer exam. However, as noted previously, this is arguably the hardest of the three Associate Level exams, so we would not recommend starting with it.



HONESTLY, THOUGH, DON'T OVERTHINK THIS PART.

If you're just looking to get one AWS certification and you're on the fence about which to start with, go for the AWS CSA. Otherwise, consider why you are wanting a certification and look over their scopes in order to make an informed decision.



HOW DO YOU GET STARTED IF YOU HAVE NO PRIOR EXPERIENCE?

Assuming that you've already decided which certification you want to start with (and if you haven't, read the previous chapters), it's now time to get started. Studying for certification exams takes time and a lot of focus, so knowing where to start is crucial.

If you have no prior experience with AWS, but you do have IT experience, you will likely pick it up faster. If you have no AWS or IT experience at all, then it will take you more time, but that's alright. Take it one step at a time.

WE RECEIVE A LOT OF QUESTIONS LIKE THESE

Question: I have no development experience, will I struggle with the AWS CDA?

Answer: Luckily, the AWS CDA exam doesn't actually have any programming questions, so having a development background isn't required. However, understanding how code interacts with APIs, understanding what APIs are in the first place, and understanding why you would need something like a queue, can all help you grasp the concepts faster. Again, though, if you have [the right training](#) you can pass even if you are not a coding ninja. We see it all the time.



WATCH VIDEO AT

bit.ly/aws-prereqs



Question: I know nothing about high availability, fault tolerance, or scalability. Will I fail the SysOps exam?

Answer: Many people view the SysOps exam as the toughest of the associate level exams, so our recommendation would be to start with the AWS CSA (which covers High Availability, Fault Tolerance, Scalability, and more) and then take the SysOps exam.

Question: I have no DevOps experience, so should I learn that for 6-12 months before attempting the AWS DevOps Professional exam?

Answer: That certainly would help, but it is not absolutely required. As long as you have some understanding of what code and infrastructure deployments are, then the right training can help you understand different deployment methods, when to use which (and why), and which AWS services are better for which deployment scenarios. This will give you a strong foundation for the exam. After that, you can focus on security, monitoring, and logging concepts to seal the deal.



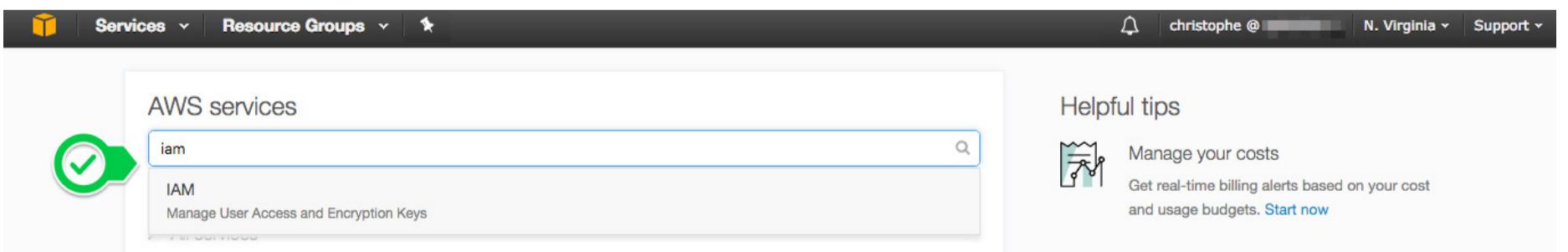
WITH THAT OUT OF THE WAY, LET'S GET BACK TO IT

First things first, go ahead and [create an AWS account](#). The signup process is self explanatory, and you will need to provide payment information. But don't worry, unless you use resources, you won't get charged anything. Even if you use some resources, AWS [provides a free tier](#), and so as long as you stick to that free tier, you won't get charged anything.

We've all heard of horror stories where someone turned on resources ([like EC2 instances, for example](#)), and they forgot to turn them off, which resulted in a few hundred dollars of charges. AWS is usually quite understanding of this, and if it ever happens to you, contact them so they can take care of the charges for you. However, don't rely on this - instead, learn the best practices so you can protect yourself from it happening in the first place.

We're about to share some of these best practices, but keep in mind that this list is intended to give you a starting point, not to be all-inclusive. Including everything would take far too long, and that's where the training comes in.

Right after signing up, head over to IAM...



The screenshot shows the AWS Management Console interface. At the top, there is a navigation bar with links for Services, Resource Groups, and a user icon for 'christophe @ [REDACTED]'. On the far right of the navigation bar are links for 'N. Virginia' and 'Support'. Below the navigation bar, there is a search bar with the placeholder text 'AWS services'. A green arrow-shaped button with a checkmark is positioned to the left of the search bar. In the search results, the word 'iam' is typed into the search field, and a single result 'IAM' is listed below it, with the description 'Manage User Access and Encryption Keys'. To the right of the search results, there is a 'Helpful tips' section featuring a 'Manage your costs' card with a line graph icon and the text 'Get real-time billing alerts based on your cost and usage budgets. [Start now](#)'.



From there, you will see a “Security Status” section. You want to end up with all green check marks, and this is something we recommend you do right away.

The screenshot shows a “Security Status” section with a progress bar indicating “5 out of 5 complete.” Below the progress bar is a list of five items, each with a green checkmark and a downward arrow:

- Activate MFA on your root account
- Create individual IAM users
- Use groups to assign permissions
- Apply an IAM password policy
- Rotate your access keys

To the right of the list is a “Additional Information” section with links to IAM best practices, documentation, and other resources.

You can find out how to do that by reading the recommended documentation which pops up if you click on the downward arrows. You also have access to “Additional Information” right next to that, and this gives you information to help you get started. Documentation is a crucial piece of your studies. More on that later.

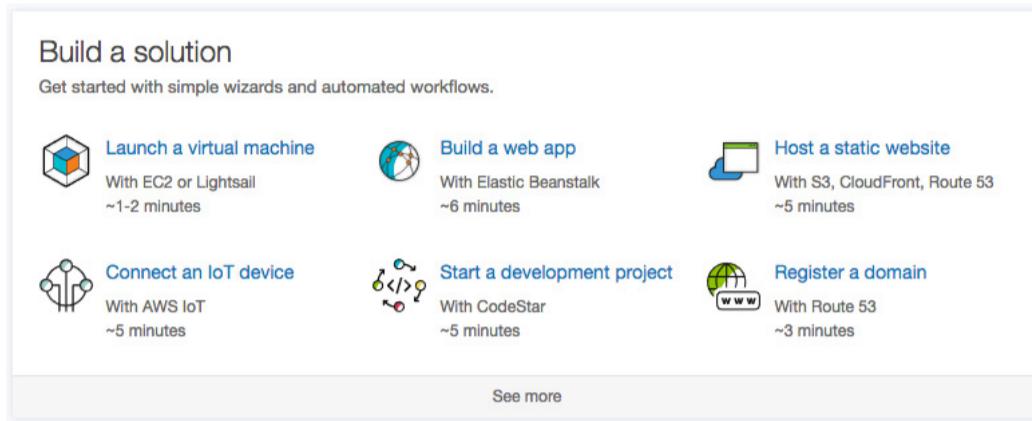
After that, you can go back to the main dashboard where you will find “Helpful Tips.” One such helpful tip is learning how to manage your costs. This is going to be your shield against racking up hundreds of dollars’ worth of expenses, because you are going to create billing alerts, which notify you once you reach your customized budget.

The screenshot shows a “Helpful tips” section with two items:

- Manage your costs**: Includes a chart icon and a description: “Get real-time billing alerts based on your cost and usage budgets.” A “Start now” button is present.
- Create an organization**: Includes a cube icon and a description: “Use AWS Organizations for policy-based management of multiple AWS accounts.” A “Start now” button is present.



After setting that up, you can once more go back to the main dashboard, where you will find wizards that help you get started.



We recommend that you go through as many of these as you can. They are short and they give you hands-on experience. Hands-on experience is a key word - it is something we absolutely believe makes a difference in whether you will pass certification exams or not. But even beyond that, it separates those who get “[paper certified](#)” and those who actually know what they are doing in AWS, and this is something that is easily distinguishable in a job interview. So going about it this way, even though it doesn’t seem like you are “studying” anything, gives you a base understanding of what AWS is, which is super important.

Once you’ve played around with AWS (and turned off/deleted all resources you don’t need anymore), feel free to explore more of the AWS console and various services.

Then, skip over the “How do you get started if you have prior experience” section and head over to the “Find Certification Training” section.



BUT WHERE DO I START IF I ALREADY HAVE EXPERIENCE?

If you have some prior AWS experience, even if it's not a whole lot, the process to getting certified is slightly different than if you have no prior experience at all. We say slightly because many of the same tips still apply, but you can save time by first assessing your skill set.

Instead of taking a certification course designed for a broad audience without taking into account your skill level, a platform like [Linux Academy](#) tailors training to you personally by finding areas where you need reinforcement, and then telling you exactly what training to take by recommending specific learning activities. There's no reason to sit through training on a topic you already know, so if you ace the Challenge, you can move on. Challenges and learning activities deploy a real AWS environment and give you access to it, which means you can play with resources and not worry about the cost.



Along with the lab environment, you get specific objectives, and you can achieve those objectives: by yourself, with the help of a written guide, or with the help of a video guide. Take those until you feel comfortable with the material being taught, and then go take the Challenge again. You will then be able to complete the parts you missed the first time which validates that you've bolstered your skills.

Complete the entire Quest related to the certification exam you are studying for, and you will be well on your way to taking the exam. From there, here is the last step:

FIND CERTIFICATION TRAINING

If you have no prior AWS experience, it's time to buckle down and [find certification training](#).

If you do have prior experience, and you've already assessed your skills, the certification training is up to you and your confidence level. It never hurts to go through a complete course if you have the time and you want to pick up tips and tricks here and there. Some students even take the opposite approach of taking a training course first, then going over to Linux Academy in order to find and solve their weak points (which is hard to do otherwise), and pick up badges along the way.



In any case, there are different kinds of training methods including online training, in-person bootcamps, and books.

THESE ALL HAVE DIFFERENT PROS AND CONS

Books are great, especially if you like holding one in your hands and flipping through its pages. The problem here is that AWS releases more changes than there are days per year. Even though the certification exams don't update that often, and therefore you are likely to find outdated questions & answers on them, learning something wrong and not knowing that it is wrong is setting yourself up for embarrassment during a job interview or meeting in front of your boss and peers.

In-person bootcamps are fantastic if you need in-person guidance, but they are often extremely expensive. Based on feedback we've heard, they also usually teach less than you can learn from online training since they are only a few days long (which is just not enough to cover everything), which brings me to the last mentioned option:

Online training is, in our opinion, the best option - especially if you had to choose just one. This is the most economical method, it provides 24/7 access, is self-paced, can get updated regularly (unlike books), and often provides some sort of support or community where you can ask questions.

Whichever option you end up choosing, we highly recommend



that you pick at least one. Otherwise, you are aiming in the dark and don't know where to go...there is no structure to your learning, and you don't even have a real way of knowing what's going to be on the exam outside of what the blueprints tell you (which isn't a whole lot compared to training created for that specific purpose). The right solution for you will depend on your budget and your learning style, but we hope this has helped you find that solution.

The last helpful tip we will leave here is that AWS publishes whitepapers, and they also have in-depth documentation. [These whitepapers](#) are documents that give information and solutions to scenarios. You can learn a lot by reading these, and you can learn things you wouldn't pick up from the documentation alone. The documentation itself, however, is crucial. We know it can be incredibly boring to read, but following along video lectures and hands-on labs with the documentation can help you retain information you wouldn't otherwise remember. It also gets updated as AWS releases new features, which can help you find what those are.

Once you've gone through training and you feel pretty confident, go assess your skills in order to find your weak points and get tailored training to solve them. Then, take a practice exam (explained in the next section), and you will finally be ready to take the real exam.

Let's take some time to recap...



IF YOU HAVE NO PRIOR AWS EXPERIENCE

- Sign up for an AWS account and poke around in the console.
- Sign up for hand-on training.
- Read whitepapers and relevant parts of the AWS documentation.
- Assess your skills in order to find weak points and solve them.

This combination is the fastest, most economical, and best way to pass an AWS Certification exam while maximizing how much you learn.

IF YOU DO HAVE PRIOR AWS EXPERIENCE

- Assess your current skill set to figure out what you need to learn.
- Brush up with whitepapers and relevant parts of the AWS docs.
- Work with hands-on training or a side project.

These things will ensure you fill in any gaps you might be missing while getting you in the right mindset for the exam.



GETTING READY BEFORE THE EXAM

PRACTICE EXAMS

Once you've completed your training, before jumping into the real exam, it's a great idea to take a practice exam.

AWS offers their own practice exam, but it is very limited and does not provide you with the correct answers because some of those questions could appear on the real exam. This is a great way to determine where you are, though we've found the AWS practice exams to be a little bit tougher than the actual exams. So if you don't do so well on the practice exam, don't despair. You can sign up for their practice exam in the same way you sign up for the real exam (explained in the next section), except the practice exam is online.

If you signed up for online training we mentioned earlier, your training provider should have a practice exam and quizzes available for you to take. Go through those but keep in mind that memorizing answers is not the right way to go. Instead, make sure you understand why an answer is the correct answer. Practice and train until you get consistent passing scores, and then you'll be ready to move on to the next section...



HOW DO YOU BOOK AN EXAM?

You register for all of these exams by going to the [AWS Certification Portal](#), and then signing in or creating a new account to schedule your exam.

The exam itself has to be taken at a testing center through the PSI testing vendor. There are hundreds of these locations across the globe, so you have to find the one closest to where you live.

GIVE YOURSELF TIME TO STUDY

If you have zero prior AWS experience and you schedule your exam for a month after you start studying with only evening hours to study, you are setting yourself up for failure. Be realistic enough that you don't skimp out on studying, but at the same time don't schedule it so far out in advance that you aren't feeling the pressure to spend time studying.

To give you an example, [the Linux Academy AWS Certified Solution Architect - Associate level course](#) is just under 19 hours of content, including hands-on labs, quizzes, the practice exam, and video content. This doesn't include the time it takes to read through recommended whitepapers, extra practice, taking notes, studying note cards, or going through



the content multiple times to make sure you have a firm understanding. Take that into account, then also calculate how much time you will be able to devote to studying every day, account for days when you have to skip studying for whatever reason (life happens), and that will give you a better estimate of when you will be ready to take the exam. The night before the exam, try to do something very relaxing. Go get a massage, for example.

If you have prior experience, though, and you [take the assessment path](#), you will save a lot more time and will be ready to take the exam sooner.

FINISH STUDYING 3 DAYS BEFORE THE EXAM

This will give you the time to review, and also to take a breath. Studying for an exam can be stressful, and AWS exams are no exception. By giving your brain the chance to de-stress, you will increase its ability to make sense of everything you learned and it will, as a result, make it easier for you to recall information on the day of the exam.

CONFUSED? ASK QUESTIONS!

If you haven't already, [join a community](#) of other individuals who are also going through the same thing you are. They can help you stay motivated, and they can also help answer questions.



ON THE DAY OF THE EXAM

IT'S OKAY IF YOU DON'T PASS THIS TIME

Remember that this is only an exam. Everyone fails exams at one point or another, and there's no shame in that. You can always go back and take it again if you fail it the first time, and then you'll be able to focus on the areas you were weak in. Remember, you can also find your weak points through assessments before you go to take the exam.

GIVE YOURSELF TIME TO ARRIVE

There's nothing worse than being late for an exam. You are battling traffic, cursing at other cars, raising your blood pressure, and this is just not the kind of pressure you need before you go and sit for an exam. Arrive at least 15 minutes early, because you have to sign paperwork and empty your pockets anyway.

Once you've arrived at the testing center, the tips in the next section will help you make it through!



TAKING THE EXAM ITSELF

USE THE SCRATCH PAPER THEY GIVE YOU

Even if you don't think you'll need it, write things down. Don't use your mental capacity to remember things, instead, write it down so you can free your mind to focus on the question and answers.

CAN'T ANSWER QUICKLY? COME BACK TO IT

If you get stuck on a question, don't spend more than a minute or two trying to answer it. Instead, mark it for later review, and go back to it once you've blown through all the low hanging fruit. This helps for a few reasons:

- It ensures you have plenty of time to knock out all of the questions you're sure about.
- It doesn't bog down your mind with confusion and a lot of unnecessary information.
- Answering other questions might give you the answer to another question.



READ VERY CAREFULLY

There could be a one or two word difference in the question or answer which completely changes the answer. If you don't read carefully, you will likely miss easy questions...and that's just silly.

STAY FOCUSED

It's very easy to lose concentration (especially with professional or specialty level exams which are 3 hours long), but this will eat up a lot of your time and it will take you out of the zone you need to be in. If you find your mind wandering, rein it back in.

After the exam, you will receive your score immediately. If you passed, please share your achievement with us on LinkedIn ([Christophe Limpalair](#) and [Anthony James](#)) so that we can congratulate you! If you didn't pass, like I said earlier, it's not a big deal. Now you know exactly what caught you off guard and you can go back to study those specific bits. Schedule a re-take exam and go from there!

Regardless of the result, be sure to take it easy the rest of the day...you just spent a lot of time studying and taking a tough exam, so take some time off from all of that and spend time with your family and friends!



WHERE TO GO FROM THERE

Once you've gone through the process of studying for the certification and you've finally passed it, what do you do next? Great question - here are our recommendations:

ADD YOUR CERT TO YOUR **LINKEDIN PROFILE**

Even if you are not much for social media platforms, LinkedIn creates exposure for IT professionals. Many AWS folks are active on there, sharing great articles, job positions, and more. It can help you form relationships, and it can also increase your odds of landing a job since many organizations hiring look on LinkedIn for leads. A word of warning, though: once you start adding AWS certifications to your profile, you will start to get a lot of recruiters sending you messages...that may or may not be a good thing depending on your goals, so this is your heads up.

POST ABOUT YOUR ACHIEVEMENT

...and tag [Christophe](#) or [Anthony](#) so that we can not only congratulate you, but also endorse you for skills around the certification(s) you passed. We love to do this to help you out, and it also helps us reach other students who need guidance in taking certification exams, so it's a win win for you and us!



TELL YOUR BOSS WHEN YOU PASS

Whether your organization rewards you for passing a certification exam or not, the fact that you trained for one and passed it will tell your manager that you now have a wider skill set than you used to, and if she ever needs help with something AWS related, she might be more inclined to reach out to you for help.

This can also be important if you think others in your organization or team could benefit from taking the exam. If it's related to what you do at work, and if training for the exam has helped increase your efficiency, it could help others on the team. Letting your manager know of that could show them the value of rewarding employees who take that sort of initiative. Of course, this is a case by case basis, so use your best judgement here.

DO SOMETHING COOL ON AWS

So you have a certification, but do you have anything built on the platform to show off your practical skills? As we've mentioned, it's not enough to be paper certified. You need to be able to show off your skills in the console, via the CLI, or through the SDKs. What better way to do that than to build something you can display?

As you know by now, a lot of things can be built on the platform for not much money. You could easily host a simple application on an EC2 instance for less than \$20/month, and you could even turn it off when you don't need it in order to save money, then turn it back on when you're ready to show it off.



KEEP LEARNING

A certification is only the beginning. AWS has more feature updates than there are days in the year. If you think passing a certification means you can ignore those updates for a few years, you're going to let your skills rust away.

- Keep your skills polished by [reading](#) and [subscribing](#) to our blog. Read the [official AWS blog](#) and [subscribe to it](#).
- Listen to podcasts like [ScaleYourCode](#), the [official AWS podcast](#), or even the [our own podcast](#).
- Continue to [train](#) around AWS, and also venture into other cloud domains.

Keep an eye on when you need to re-certify since the exams do expire after 2 years. You're obviously not required to re-certify, but it may be something to consider in order to keep your skills up-to-date.



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ABOUT THE AUTHORS



Christophe Limpalair [in](#) [tw](#)

Frustrated by the cost and inefficiency of the current educational system, Christophe started a podcast called ScaleYourCode to interview experts on current industry trends. He quickly found his passion in creating content and helping people. After working with Linux Academy on a sponsorship, Christophe realized that it was a platform leading the future of education and joined the team. With a focus on AWS, he created training courses that have helped thousands of individuals at large and small organizations, and he also helped develop and refine parts of Linux Academy's hands-on labs platform. With the launch of the newest Linux Academy platform, he lead development of the initial content and now serves as the Vice President of Marketing. Outside of work, he loves spending time with his wife, playing video games, and mountain biking.



Anthony James [in](#) [tw](#)

Anthony is the Founder and CEO of Linux Academy. He founded Linux Academy in 2012 to help him pass a Linux certification exam after struggling to learn through traditional training methods. Next thing he knew, the site was helping tens of thousands of students pass certifications and improve their careers. Now, with the recent launch of Linux Academy's new hands-on, Anthony is leading the organization towards making training even more efficient than it ever has been through the use of technology. Outside of business and technology, Anthony is a family man with a beautiful, caring wife, and two adorable boys. He enjoys Brazilian Jiu-Jitsu, riding his motorcycle, and Mexican food.



Special thanks to [Davis Engeler](#) for designing the eBook and to
[Phil Zona](#) for editing. You've helped make the book awesome!

