Linux Academy

How To Pass

AWS Certifications

Third Edition

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INTRODUCTION

You've heard about Amazon Web Services Certifications- the potential of a 6-figure salary and the immediate recognition it holds, but you're not sure how to get started. This eBook is designed to show you where to begin, how to study, and how to pass the exam.

This eBook was written by AWS certified experts who, combined, hold every currently available AWS certification, and have trained hundreds of thousands of students. Not only will our experts help you get AWS certified, they will teach you how to use AWS in real scenarios, for the real job you want to get.

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 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**

In this eBook we've compiled answers to the most frequently asked questions. From "how do I get certified in the least amount of time possible?" to "how long will it take me to learn everything I need to know if I have zero AWS experience?" This handy guide will be your new best friend for navigating the AWS Certifications space.

While you'll find tons of helpful information here, just know that we also have a team of people happy to hear from you, and help you out for specific questions as well! Feel free to reach out on **LinkedIn**, **Twitter**, **FaceBook**, or through our **website** if you have any questions after reading through the entire eBook. We also post tutorials and tips videos on our YouTube channel, so be sure to subscribe.

WHICH AWS CERTIFICATION SHOULD YOU GET FIRST?

There are currently 6 AWS certification exams, and 5 specialty AWS certification exams for a total of 11 AWS Certifications (although there are more certifications currently in the works), so how do you know which one to start with? Let's start by looking at all of the 11 certification exams:

- AWS Certified Cloud Practitioner
- AWS Certified Solutions Architect – Associate Level (AWS CSA)
- AWS Certified Solutions Architect – Professional Level (AWS CSAP)
- AWS Certified Developer – Associate Level (AWS CDA)
- AWS Certified SysOps Administrator – Associate Level
- AWS Certified DevOps Engineer – Professional Level

There are also specialty AWS certifications:

- AWS Certified Advanced Networking
- AWS Certified Big Data
- AWS Certified Security
- AWS Certified Machine Learning
- AWS Certified Alexa Skill Builder – Specialty Exam (launched publicly on April 16th, 2019)

There are two answers to this question: the quick answer and the more thorough answer.

THE QUICK ANSWER

Start with the AWS Cloud Practitioner if you are not an engineer or if you're starting with zero cloud and IT knowledge. Otherwise, start with the AWS Certified Solutions Architect - Associate (AWS CSA-A).
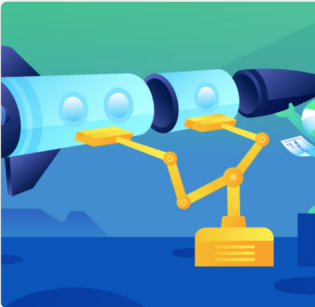
Here's a popular certification learning path when it comes to AWS certifications.

1. AWS Cloud Practitioner (if starting with no cloud knowledge or if not in engineering)
2. AWS Certified Solutions Architect – Associate (CSA) (the most popular AWS certification)
3. AWS Certified Developer – Associate (CDA) (great starting point for many developers; but not just for devs)
4. AWS Certified SysOps Administrator – Associate (SysOps)
5. AWS Certified DevOps Engineer – Professional
6. AWS Certified Solutions Architect – Professional (CSAP)
7. Specialty AWS Certifications

THE MORE THOROUGH ANSWER

The more thorough answer also has two separate answers. The first answer is the one we often give to people who do not have a preference and are simply looking for guidance on which AWS certification to start with. This is our most common answer. The second answer is one we give when people have a clear end goal and need to pick a certification which most closely resembles what they do on a day-to-day basis.

ANSWER #1: 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 Certified Solutions Architect (CSA)**.

COURSE

AWS Certified Solutions Architect – Associate Level

This course has been developed to provide you with the requisite knowledge to not only pass the AWS CSA certification exam but also gain the hands-on experience required to become a qualified AWS Solutions architect working in a real-world environment.

Intermediate | **View Course**

AWS Certified Solutions Architect - Associate Level course on Linux Academy

If that certification seems overwhelming because you have no understanding of the cloud or you aren't in an engineering-focused role, you could always consider the AWS Certified Cloud Practitioner first. The Cloud Practitioner was primarily designed for candidates in technical, managerial, sales, purchasing, or financial roles.

COURSE

AWS Certified Cloud Practitioner

For all those who want to learn these basics, this course has been designed with two main objectives in mind: (1) Prepare you to pass the AWS Certified Cloud Practitioner exam, and (2) learn the foundations of cloud computing and AWS, including its primary services, benefits, and use cases.

Beginner

View Course

AWS Certified Cloud Practitioner course on Linux Academy

The AWS CSA 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 design and deploy systems 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 AWS certifications as well. The three associate level exams aren't the exact same – but they do have some similarities, 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 as they all overlap to some degree, so this isn't unique to the CSA.

ANSWER #2: If instead, you are looking to take an AWS certification exam to help you with a specific job function, then the answer might be different. To figure out which AWS certification exam matches your job function we suggest reading through the rest of this eBook so you can get a better understanding of what each AWS certification exam covers.

Don't overthink this part. If you're just looking to get one AWS certification, and you don't have a specific goal in mind, go for the AWS CSA (Certified Solutions Architect).

Consider why you are wanting an AWS certification and align that with the certifications, as described in the rest of the book, to make an informed decision.

Regardless of which exam you start with, it can be very tempting to look for exam dumps or to only practice memorizing practice exams you find online. We'll discuss later why that is not the best approach and why **hands-on training is still the best way to go.**

THE MOST POPULAR AWS CERTIFICATION 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:

- 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
- Understand AWS architectural best practices
- Understand AWS security best practices
- Knowledge of migrating existing on-premises applications to AWS

This is the associate-level certification with the widest range of AWS services coverage. That's one of the reasons for its popularity – instead of being 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**.

What are the recommended pre-requisites?
Amazon Web Services describes the ideal candidate as having:

- Hands-on experience using compute, networking, storage, and database AWS services
- Hands-on experience with AWS deployment and management services
- Ability to identify and define technical requirements for an AWS-based application
- Ability to identify which AWS services meet a given technical requirement
- Knowledge of recommended best practices for building secure and reliable applications on the AWS platform

- An understanding of the basic architectural principles of building on the AWS Cloud

- An understanding of the AWS global infrastructure

- An understanding of network technologies as they relate to AWS

- An understanding of security features and tools that AWS provides and how they relate to traditional services

This isn't really required, though.

We've seen a countless number of people take and pass this 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. However, having all of those skills can only improve 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 130 minutes to complete the exam and it costs $150 to take – this is non-refundable, regardless of whether you pass the exam or not. That's why it's a good idea to have your company cover the cost if you can. Can't hurt to ask!

What is the format of the exams?
Here is a **sample of questions and answers** that 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.

3) **Company salespeople upload their sales figures daily. A Solutions Architect needs a durable storage solution for these documents that also protects against users accidentally deleting important documents.**

Which action will protect against unintended user actions?

A. Store data in an EBS volume and create snapshots once a week.
B. Store data in an S3 bucket and enable versioning.
C. Store data in two S3 buckets in different AWS regions.
D. Store data on EC2 instance storage.
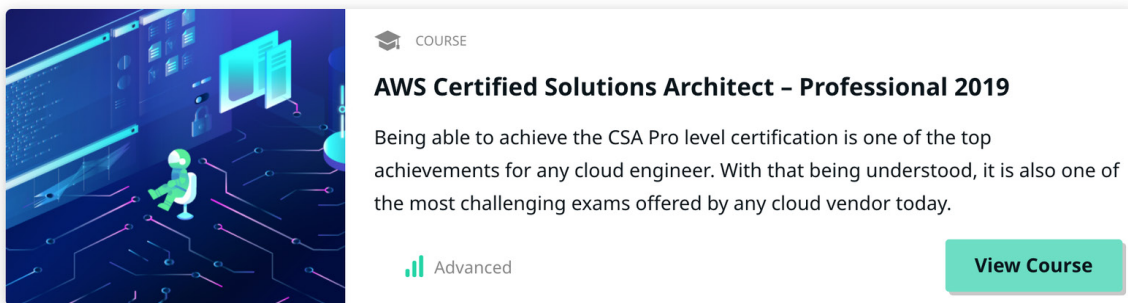
Example AWS CSA exam question - Linux Academy

AWS Certifications are currently only multiple choice, where questions can vary in length and difficulty, as well as the number of correct answers. 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.

WHICH IS THE HARDEST OF THE EXAMS?

This answer depends on who you ask, but the Specialty AWS certifications are typically regarded as the hardest of the bunch. Apart from the Specialty AWS certifications, most people would say that the AWS CSA Professional Level exam is the hardest, with the Certified DevOps Engineer second in line.

The **AWS Certified Solutions Architect – Professional Level (AWS CSAP)** steps it up quite a bit compared to the Associate level exam. 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 to answer 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.

COURSE

AWS Certified Solutions Architect – Professional 2019

Being able to achieve the CSA Pro level certification is one of the top achievements for any cloud engineer. With that being understood, it is also one of the most challenging exams offered by any cloud vendor today.

Advanced

View Course

AWS Certified Solutions Architect Professional course on Linux Academy

This exam focuses on these concepts:

- Design and deploy dynamically scalable, highly available, fault-tolerant, and reliable applications on AWS
- Select appropriate AWS services to design and deploy an application based on given requirements
- Migrate complex, multi-tier applications on AWS
- Design and deploy enterprise-wide scalable operations on AWS
- Implement cost-control strategies

The recommended knowledge is also more advanced:

1. Two or more years of hands-on experience designing and deploying cloud architecture on AWS

2. Ability to evaluate cloud application requirements and make architectural recommendations for implementation, deployment, and provisioning applications on AWS

3. Familiarity with AWS CLI, AWS APIs, AWS CloudFormation templates, the AWS Billing Console, and the AWS Management Console

4. Explain and apply the five pillars of the AWS Well-Architected Framework

5. Design a hybrid architecture using key AWS technologies (e.g., VPN, AWS Direct Connect)

6. Ability to provide best practice guidance on the architectural design across multiple applications and projects of the enterprise

7. Familiarity with a scripting language

8. Familiarity with Windows and Linux environments

9. Map business objectives to application/architecture requirements

10. Architect a continuous integration and deployment process

Up until October 11, 2018, AWS required you to pass an Associate level exam in their category before you could take a Professional exam. So to take the AWS CSA Professional exam, you would have had to take (and pass) the AWS CSA Associate exam. **This is no longer the case because they dropped that requirement – read more about what the community thinks, here!**

AWS Certified Solutions Architect Professional course on Linux Academy **Image source**
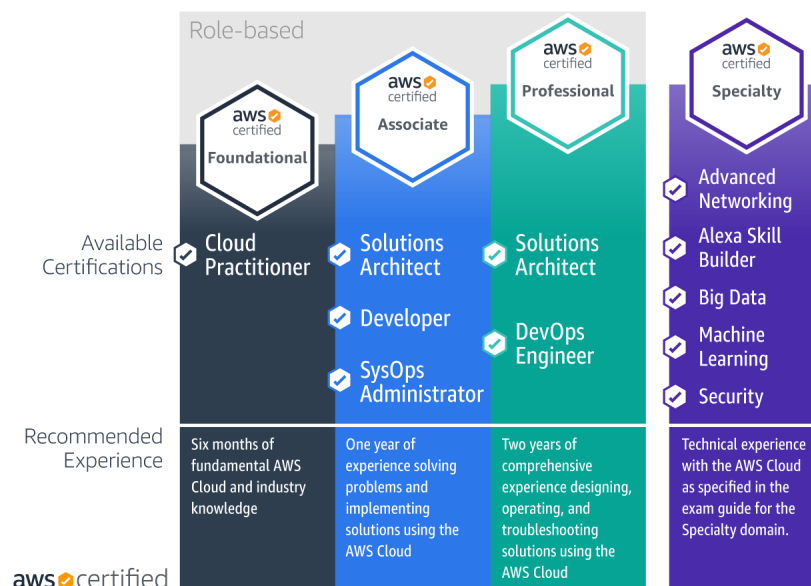
Here is a sample of the type of questions you could see on the real exam.
If you compare it to the previous certification sample, you'll notice a few things...

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, so you have to

    pick the best solution out of what they give you, not necessarily the best solution on the platform

    (though this can also happen with associate level exams, especially since they sometimes contain

    outdated information — cert exams don't get updated as frequently as the platform!)
4. The scenarios to solve are more complex than in the associate level.

So 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.

WHICH IS THE EASIEST AWS CERTIFICATION TO PASS?

The AWS Certified Cloud Practitioner is considered to be the easiest of the exams because it's the least technical and most high-level AWS certification exam of the bunch.

Next, most would say that 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 extensive knowledge around AWS services, and the scope of services covered is smaller than that of the AWS CSA exam. Update: more recent versions of this exam have stepped up the difficulty a bit.

COURSE

AWS Certified Developer – Associate Level

This course was developed to provide you with the requisite knowledge to not only pass the AWS CDA certification exam but also gain the hands-on experience required to become a qualified AWS Developer working in real-world AWS environments.

Intermediate

View Course

AWS Certified Developer Associate Level course on Linux Academy

This exam focuses on how applications and code interact with the AWS platform, and how to deploy & debug apps on AWS. It does not test 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 are the imitations around that? How can you write code that optimizes the 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:

- Demonstrate an understanding of core AWS services, uses, and basic AWS architecture best practices.
- Demonstrate proficiency in developing, deploying, and debugging cloud-based applications using AWS.

Recommended knowledge to take this exam is as follows:

- In-depth knowledge of at least one high-level programming language
- Understanding of core AWS services, uses, and basic AWS architecture best practices
- Proficiency in developing, deploying, and debugging cloud-based applications using AWS
- Ability to use the AWS service APIs, AWS CLI, and SDKs to write applications
- Ability to identify key features of AWS services
- Understanding of the AWS shared responsibility model
- Understanding of application lifecycle management
- Ability to use a CI/CD pipeline to deploy applications on AWS
- Ability to use or interact with AWS services
- Ability to apply a basic understanding of cloud-native applications to write code
- Ability to write code using AWS security best practices (e.g., not using secret and access keys in the code, instead using IAM roles)
- Ability to author, maintain, and debug code modules on AWS
- Proficiency writing code for serverless applications
- Understanding of the use of containers in the development process

Here is **the exam blueprint** for this certification exam.

DETAILS ABOUT THE OTHER EXAMS

The SysOps Administrator exam
The **AWS Certified SysOps Administrator – Associate Level exam** is the last of the associate level exams to cover. This exam is more specific to deploying and managing infrastructure.

COURSE

AWS Certified SysOps Administrator – Associate Level

This course has been developed to provide you with the requisite knowledge to not only pass the AWS SysOps Administrator certification exam but also gain the hands-on experience required to become a qualified AWS Systems Operator working in a real-world environment.

Intermediate

View Course

AWS SysOps Administrator - Associate Level course on Linux Academy

We're talking about understanding how to make infrastructure elastic (can scale up and down depending on demand) with a heavy focus on high availability, fault tolerance, and cost-effectiveness. 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, 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 knowing how to implement backup and disaster recovery processes.

Here are concepts you should understand for this exam:

- Deploy, manage, and operate scalable, highly available, and fault-tolerant systems on AWS

- Implement and control the flow of data to and from AWS

- Select the appropriate AWS service based on compute, data, or security requirements

- Identify appropriate use of AWS operational best practices

- Estimate AWS usage costs and identify operational cost control mechanisms

- Migrate on-premises workloads to AWS

The following experience is recommended for taking this exam:

- Minimum of 1 year hands-on experience with AWS

- Experience managing/operating systems on AWS

- Understanding of the AWS tenets – architecting for the cloud

- Hands-on experience with the AWS CLI and SDKs/API tools

- Understanding of network technologies as they relate to AWS

- Understanding of security concepts with hands-on experience in implementing security controls and compliance requirements

Here is a **sample of questions** you could expect, and here is the **exam blueprint**.

The DevOps Engineer
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.

AWS Certified DevOps Professional course on Linux Academy

The topic of DevOps is a big one (we won't go into detail here), but if you're not familiar with what DevOps stands for, take a look at these posts:

- **What is DevOps?**

- **Stepping into DevOps: The DevOps Toolchain**

When it comes to this certification exam here's what you need to know:

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:

- Implement and manage continuous delivery systems and methodologies on AWS

- Implement and automate security controls, governance processes, and compliance validation

- Define and deploy monitoring, metrics, and logging systems on AWS

- Implement systems that are highly available, scalable, and self-healing on the AWS platform

- Design, manage, and maintain tools to automate operational processes

The following experience is recommended for taking this exam:

- Implement and manage continuous delivery systems and methodologies on AWS
- Implement and automate security controls, governance processes, and compliance validation
- Define and deploy monitoring, metrics, and logging systems on AWS
- Implement systems that are highly available, scalable, and self-healing on the AWS platform
- Design, manage, and maintain tools to automate operational processesaExperience developing code in at least one high-level programming language
- Experience building highly automated infrastructures
- Experience administering operating systems
- Understanding of modern development and operations processes and methodologies

Here is the **exam blueprint** and a list of **example questions**.

WHAT ARE THE SPECIALTY CERTS?

AWS announced the following new specialty certifications in 2016:

- **AWS Certified Advanced Networking – Specialty**
- **AWS Certified Big Data – Specialty**
- **AWS Certified Security – Specialty**
- AWS Certified Machine Learning
- AWS Certified Alexa Skill Builder

These exams 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 AWS certification exams act very much like the Professional exams, in that they are 3 hours long and more advanced than Associate level exams. In fact, the candidate eligibility "requirement" is 5 years, 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 areas of designing and implementing large-scale AWS and hybrid network architectures. 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. Be knowledgable in setting up automation around data analysis, finding the most cost-effective and scalable architecture, and a have a strong understanding of the data lifecycle.

The Security Specialty exam tests your technical expertise in securing the AWS platform. The AWS Certified Machine Learning exam is different from the Big Data exam and validates technical expertise in building, training, optimizing and deploying machine learning models using AWS. This exam is primarily for data science roles.

The AWS Certified Alexa Skill Builder exam launched in April 2019, and aims to confirm that you can build and publish Amazon Alexa skills. Now that there are over 100-million Alexa-enabled devices across the globe, more and more businesses are going to try and take advantage of this fairly new platform. Amazon can use this new certification to continue expanding its Alexa ecosystem, while developers can use this AWS certification in order to make their skill set more competitive.

HOW QUICKLY CAN I GET AWS CERTIFIED?

The answer to this question depends on a number of factors:

1. How much IT experience do you have?
2. How much AWS experience do you have?
3. How much time can you dedicate per week to studying?
4. How quickly do you learn new things?
5. How good of a test-taker are you?

There are more factors, but those are some to consider. While it's impossible to give an exact period of time, we've seen users with zero AWS experience become certified in under 3 months, while others take 6 months or longer. The amount of time available for studying, as well as learning speed, are personal and will determine your certification timeline.

For perspective, the **AWS Certified Cloud Practitioner course** on Linux Academy is about 8 hours long. If you can dedicate 3 hours of studying per week, it would take you about 3 weeks to go through the material alone. Then, factor in practice, studying notes, taking quizzes and practice exams, and Hands-On Labs etc, In this example, it would take a minimum of a month before you you would be ready to take the exam.

If you can dedicate closer to 8 hours per week, you might be ready to take the exam as soon as 3 weeks. The greater the to ability to commit to the material, the quicker you can reach your goals.

The AWS Certified Solutions Architect - Associate level course is over 27 hours long, covering multiple topics and has proven to be harder for students to pass. Even if you study for 8 hours a week, conservatively, you would need 4 weeks with the material, which becomes closer to 2 months before most students would be prepared to take the exam.

While you might be tempted to look for shorter courses or training because you think it will shorten the amount of time it takes for you to get certified, **we strongly advise against this.** Truly understanding how AWS works takes time and practice. There are no shortcuts.

Memorizing concepts won't help you build a strong AWS career. We care about the long-term success of our students, and taking the best course for YOU is more important than taking the quickest course. Check out our article on how **We Hire Real AWS Solutions Architects, Not Paper Certified Ones** for more on this topic.

WHAT SALARY CAN YOU 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.
All five AWS certifications (not counting the specialty certifications as they are newer) have **above market salaries (over 6 figures)** with the average being $114,561. (These stats are for the U.S. and Canada regions)

While this doesn't guarantee you will make these salaries, (since it also depends on

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

other factors) they are good indicators of your possible trajectory.

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 among them.

START STUDYING!

Now that you know which certification you want to start with, where do you go from here? How do you start studying? How do you stick to a studying schedule when life gets in the way?

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

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 more time, but that's alright. Take it one step at a time.

If you have no prior AWS or IT experience
As we discussed in a prior chapter, you may want to start with the AWS Certified Cloud Practitioner exam as this is the most beginner-friendly AWS certification. If needed, you can also start with the more basic **AWS Concepts** and **AWS Essentials** course. These two courses will give you the foundations you need to move on to the AWS Certified Cloud Practitioner exam. These two courses are optional, and if you feel confident enough, you attempt **training for the Cloud Practitioner exam** right away.

If you have no prior AWS experience, but you do have IT experience
Unless you are interested in getting the Certified Cloud Practitioner exam, you may want to jump directly into the AWS Certified Solutions Architect - Associate level exam.

It wouldn't hurt to get a solid foundation of how AWS works first with an **AWS Essentials course** first. This course will give you an overview of AWS with Hands-On Labs so you get practical experience in AWS environments. Once you've got the essentials down, move on to **training for the AWS CSA-A**.

That might seem like a big jump, but the right training will bridge the gap. We've seen countless students succeed in this path using our training.

WHERE DO YOU START IF YOU 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 moving past the more basic training.

Get **training for the AWS Certified Solutions Architect** and take that exam first. Unless, like we discussed previously, you want to go for another one of the exams first due to interest or job requirements, this is a great entry point. Your level of experience plus the training will help you succeed in passing the exam.

FINDING THE RIGHT CERTIFICATION TRAINING

Regardless of whether you have prior AWS experience or not, you probably noticed a similar pattern in the answers: you need to take training. Our certification training is affordable, flexible, and built with you in mind. At $150 or $300 per certification attempt, it only makes sense to prepare yourself with the best tools and support team available.

> "Ultimately, there's one investment that supersedes all aothers: Invest in yourself," Buffett says in a recent interview with Forbes. "Nobody can take away what you've got in yourself, and everybody has potential they haven't used yet."

We're here to help you find that untapped potential you have inside. Whether you achieve multiple certifications, or take a few courses to advance your skills, we want to help you learn in a way that makes sense, to you.

Getting a certification is an important end-goal, but it's not as important as the journey of getting that certification. The journey is where you really learn.

Alright, so how do you find the best certification training?

5 RESOURCES TO HELP YOU STUDY

There are 5 different kinds of training methods, and they all have different pros and cons.

1. Books
2. Online training
3. In-person training
4. Self study
5. AWS documentation and white papers

Books can be a great source of information and instruction, for subjects that require little to no updates. With AWS, release updates bring more changes than there are days in the year. Even though the certification exams themselves don't update with every new release, learning something wrong and not knowing that it is wrong leads to confusion and embarrassment when interviewing with a potential boss or colleague that is using the most updated materials.

Online training is, in our opinion, the best option - especially if you had to choose just one. This is the most economical method. Providing 24/7 access to self-paced learning, regular updates, and often some sort of support or community where you can ask questions, online learning has many advantages. If you choose Linux Academy, you'll also get access to Hands-On Labs that are deployed for you to complete real-world scenarios without having to pay for any of the resources used in the lab. You get practical experience as you study for the exam, which can translate directly to your current or future job.

In-person training can provide students with bootcamp-style guidance, but are often extremely expensive. Based on feedback from our students, it's difficult to force all of the training you could access online, into a few days in person. Where online courses are accessible to re-visit, take notes, re-watch etc, at a bootcamp you are given a large amount of information to acquire and maintain.

AWS documentation and white papers are documents that give information and solutions to scenarios. You can learn a lot by reading these, and you can learn things you may not pick up from the documentation alone. The documentation itself is crucial. We know it can be boring to read, but following along video lectures and hands-on labs, with the documentation, can help you retain information better. This documentation gets updated as AWS releases new features, which can be helpful.

Ultimately, the right solution for you will depend on your budget and your learning style, but we hope this has helped bring clarity and direction to your choice.

Let's take some time to recap...

Regardless of whether you have experience or not, you will want to:

- Identify which certification makes the most sense for you (read the first few chapters)

- Sign up for hands-on training that corresponds to the certification you want

- Read white papers and relevant parts of the AWS documentation

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

TIPS FOR GETTING READY LEADING UP TO THE EXAM

HOW DO YOU STICK TO YOUR STUDYING SCHEDULE WHEN LIFE GETS IN THE WAY?

It's inevitable. You set some time aside to plan exactly what your studying schedule will look like: you know when to schedule the exam for, you pump yourself up, you get started, and then life tears that schedule apart. Unfortunately, this is often where people drop out. Here are some ways you can build resiliency into your schedule to bounce back when life happens.

1. **Create a study group**

This is the equivalent of going to the gym by yourself versus having a workout partner. Let's be honest...are you more likely to stick to your workout routine every week if you have a partner, or if you go by yourself? Having a partner can hold you accountable and drastically increase your likelihood of sticking to your routine.

If you want to increase the likelihood of sticking to a studying schedule, create a study group. This could be with co-workers, a family member, or other students you find online. The Linux Academy community is very receptive to creating study groups, and a great place to start is in **our official Slack Community**. Introduce yourself and ask if there are others currently studying for the same exam.

2. **Set calendar reminders**

Ever heard the saying: "Out of sight, out of mind"? Keep your coursework top of mind by carving out time before you begin classes. If life throws something at you, you're already prepared and have a plan. Don't sweat it. Put studying on your calendar and if you find that

time is consistently not working, re-arrange. The courses you are taking have the ability to change your life, give them the seriousness of a schedule and if something comes up, re-schedule, don't let a study session fall off without replacing it.

Having your calendar already laid out ahead of time makes this easier because you've got a high-level overview.

Bad with calendars? We created Linux Academy's Course Scheduler feature to help keep you on track. Instead of doing the math yourself and planning it all out, our feature will calculate what content you need to study, and when, based on your availability. It basically molds to your schedule.

3. Don't go for long periods of time without studying - choose shorter, more frequent sessions over longer, more infrequent sessions.

A huge roadblock to studying or learning something is going long periods of time in between sessions.

This will lead to frustration and the feeling that you're not progressing forward.

Two-hour long sessions can also feel daunting to most people. What if, instead, you broke it up into 45-minute sessions and had multiple of those sprinkled throughout the week? Shorter sessions will provide plenty of time to learn, with minimal distractions.

Turn off notifications. Go into a quiet room with no TV and little noise. If you have kids or pets that may require your attention, ask your significant other (or family members) to watch over them during this time period. Try your best to stay completely focused during that short period of time.

Smaller chunks of time will feel more manageable and ensure you study more frequently, removing the roadblock of having to re-learn what you just learned.

PRACTICE, PRACTICE, PRACTICE

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 official practice exam, but it is very limited and does not provide you with the correct answers because some of the questions could appear on the real exam. This is a good way to determine where you are in terms of preparedness, but we would not recommend relying only on their practice exam. We've also 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.

That's why we built practice exams on our Linux Academy platform that provide you with a simulation of what the real exam is like. We give you the same number of questions, the same time limit, and a large pool of questions so that you can take it multiple times without getting the same questions. We also include the correct answers with explanations so you can fill in your knowledge gaps.

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. To access our practice exams, you can simply **sign up for our 7-day free trial**.

Keep in mind that memorizing answers is not creating a pattern for real learning. Instead, make sure you understand **why** an answer is the correct answer. Practice and train until you get consistent passing scores.

Also spend time practicing with Hands-On Labs. Try various scenarios that you'd encounter in the real world, such as troubleshooting, architecture, finding the best solution to problems, etc… This is a critical part to understanding how to use AWS in the real world, beyond just answering multiple choice questions. It's not enough to just pass the exam, you have to know how to apply the skills on the job, and our Learn By Doing approach with Hands-On Labs gives you those skills.

Once you've practiced, you're 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 find the one closest to where you live.

GIVE YOURSELF ENOUGH TIME TO STUDY

If you have zero prior AWS experience and you schedule your exam for a few weeks after you start studying, with only a couple of hours to study a week, you're setting yourself up for failure. Find the balance between studying diligently in a time period that is not so soon that you aren't prepared, or so far out that you put off studying altogether. Only you can know the right amount of pressure to apply.

To give you an example, the Linux Academy AWS Certified Solution Architect - Associate level course is over 20 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 white papers, 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, accounting for days when you may have to skip studying (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, instead of cramming at the last minute.

Finish studying at least 3 days before the exam. This will give you time to review, and take a breather. Studying for any 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 resulting in better information recall on the day of the exam.

Some people disagree with this and prefer the pressure of cramming, so choose wisely what your approach will be ahead of time.

CONFUSED? ASK QUESTIONS!

If you haven't already, join a supportive community of students like the **Linux Academy Slack Community**. They can help you stay motivated, relate to your obstacles and can even help answer questions.

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 re-rake an exam if you don't pass the first time, and then you'll be able to focus on the areas you were weak in. Knowing this ahead of taking the exam will help you calm down and focus a bit more. You'll perform best in a relaxed, yet focused state. You've done the work and preparations, now's your chance to show your skills. You've got this.

GIVE YOURSELF PLENTY OF TIME TO ARRIVE AT THE TESTING CENTER

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

Once you've arrived at the testing center, the tips in the next section will help you the rest of the way!

TIPS FOR 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 waste your time or efforts attempting to remember concepts, statistics, or other facts. Instead, write down any important information, so you can free your mental space to focus on the question and answers.

We suggest the "brain download" be the first thing you do when you sit down for the exam, that way you can completely focus on the questions at hand.

CAN'T ANSWER QUICKLY? COME BACK TO IT LATER

If you get stuck on a question, don't spend more than a minute or two trying to answer it. Instead, mark it for review, and go back to it once you've blown through any 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 frees your mind from confusion and a lot of unnecessary information.
- Answering other questions might give you the answer to a previous 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 questions you would normally breeze through.

Here's an example: as you read a question you will likely start to think about the solution in your head. But, you missed an important clue — instead of a durable solution, the hidden clues mention speed and having a low cost solution. This could completely change your answer, but you missed the clues because you read too quickly and in the provided answers for you to choose from, there is an option for the durable solution, so you think "great, this must be the correct answer!"

Don't get tricked! Read carefully and be on the lookout for potential traps.

STAY FOCUSED, BUT KEEP AN EYE ON THE CLOCK

It's 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 wondering, rein it back in.

With that said, don't lose track of time. When you're in the zone, it's easy to forget the clock, and run out of time. Check periodically.

After the exam, you will receive your score immediately. If you passed, please share your achievement with us on LinkedIn (**Christophe Limpalair** and **Linux Academy**) 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!

If you didn't pass, focus on how you're going to improve for your next attempt. Schedule a re-take exam and dive back into study tools. Take notes of what caught you off guard on the exam as soon as you walk out of the testing center, and focus there.

YOU PASSED THE EXAM, NOW WHAT?

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

Add your certification to your LinkedIn profile
Even if you are not much for other social media platforms, LinkedIn brings great exposure for IT professionals. Many AWS folks are active there, share articles, job positions, and more. It can help you form relationships, and increase your odds of landing a job as many organizations look on LinkedIn for leads. Recruiters are always on the hunt for AWS professionals, so be prepared for an influx of messages specific to that need.

Post about your achievement
...and tag **Christophe** or **Linux Academy** so that we can not only congratulate you, but also endorse you for skills around the certification(s) you received. We proudly help students from training, all the way through landing their job in AWS, and no one can speak to the certification process better than you, our students! Share your stories with us, and don't forget to help out the newer students that would love to hear your tips and guidance.

Tell your boss when you pass
Whether your organization rewards you for passing a certification exam or not, the fact that you trained for and passed a prestigious exam will show your manager you are willing toas learn new skills and, should a an AWS position or project become available, you will be top of mind. 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, or if training for the exam has helped increase your efficiency, it could help others on the team. Managers are more inclined to reward employees who take that sort of initiative. Of course, this is case by case, so use your best judgement.

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 certified on paper. 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?

We are committed to accessible education, and a lot of things can be built on the platform inexpensively. For example: you could 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. To remain competitive, we suggest:

- Keep your skills polished by **reading and subscribing to our blog**. Read the **official AWS blog** and subscribe to it.
- Listen to podcasts like **Scale Your Code**, **Jupiter Broadcasting**, or the **official AWS 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's something to consider to keep your skills up-to-date.

YOU FAILED THE EXAM, NOW WHAT?

The first feeling you will likely have is frustration. Frustrated with yourself, the exam, training materials, etc. Own that emotion, and let it pass. Remember that failure is normal. Many students have taken more than one certification exam in their career, and plenty have failed exams. Did they let that stop them? Of course not! They trained more, using their failure as a road map and kept going.

The benefit now is that you've seen the live exam, and you have a much better idea of what areas you're lacking knowledge in, and what tripped you up. Now, you can focus your training on those specific areas and increase your odds of passing next time!

You are required to wait 14 days before you are eligible to retake the exam. There is no limit on exam attempts but for each attempt, you have to pay the full registration price. So again, keep your focus on the next exam, not the last.

COMMON QUESTIONS WE GET

As we wrap up this eBook, we wanted to provide you with common questions that we hear on a frequent basis.

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. However, we believe that the right training makes all the difference. Our student testimonies are proof that students from any range of backgrounds can find success in AWS.

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 would help, but it's not necessarily required. As long as you have an understanding of what code and infrastructure deployments are, then our training can help you further grasp different deployment methods, when to use which (and why), and which AWS services are best for different deployment scenarios. This will give you a strong foundation for the exam. After that, you can focus on security, monitoring, and logging

THAT'S IT! GO PASS SOME CERTIFICATION EXAMS!

We hope you have enjoyed this eBook and that it serves as a roadmap in preparing for and passing certification exams. We're excited to watch you take your career to the next level; whether switching to an IT career or simply looking to advance in your current role.

Don't hesitate to reach out if you ever have any questions or need help. We're here for you!

ABOUT THE AUTHORS

CHRISTOPHE LIMPALAIR

Frustrated by the cost and inefficiency of the current educational system, Christophe started a podcast called Scale Your Code 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. He now serves as the Vice President of Growth. Outside of work, he loves spending time with his wife, playing video games, and playing with his dog.

Linux Academy

Linux Academy was founded in 2012 to address a growing gap in cloud-based learning. Created by learners, for learners, our in-depth training will help you learn by doing, and grow by practicing in a safe environment. With hands-on labs and Training Architects that live out our values, we empower users new or experienced, and companies large or small, to hone their skills and change their lives.