Global Knowledge ®

How to Become a
Google Certified Professional
Cloud Architect

How to Become a Google Certified Professional Cloud Architect

This Certification Prep Guide provides an overview of the current Google Certified Professional Cloud Architect certification and offers helpful tips that you can use when preparing for your GCP certification exam.

Table of Contents

Why get certified as a Google Cloud Architect?

Cloud computing is here, and it is here to stay. As the computer industry transitions to the service-based model of delivering infrastructure, platforms and software (IaaS, PaaS, and SaaS, respectively), along with many variations on these themes, studies indicate continued acceleration of growth. A 2017 Gartner study shows that cloud technology growth will continue for the next five years.[1]

As a result, the skills for operating in the cloud will become more critical for companies to leverage.

Among the first group of skilled employees that companies will need is the cloud architect, who oversees an organization's cloud strategy. ([View all cloud job roles](#).) Areas of expertise for the cloud architect include:

- Cloud adoption plans
- Cloud application design
- Cloud management and monitoring
- Application architecture
- Deployment strategies

What is the Google Cloud Architect certification?

Google has created a track for IT professionals to certify as a cloud architect on the GCP platform. This certification program provides Google cloud professionals a way to demonstrate their skills. The assessment is based on a rigorous exam using industry standard methodology to determine whether a candidate meets Google's proficiency standards.

According to Google, a Google Certified Professional Cloud Architect "enables organizations to leverage Google Cloud technologies. With a thorough understanding of cloud architecture and Google Cloud Platform, this individual can design, develop, and manage robust, secure, scalable, highly available, and dynamic solutions to drive business objectives."[2]

Candidates who achieve the Google Cloud Architect certification will gain confidence in their ability, understanding and proficiency with the GCP environment. In the competitive cloud marketplace, certifications will be a differentiator and position individuals ahead of the game.

Who should take the Cloud Architect exam?

Individuals should pursue the Google Certified Professional Cloud Architect certification if they want to demonstrate their expertise and ability to design and develop Google Cloud architectures. It's ideal for solutions and/or enterprise architects, systems administrators or operations team members—or simply any individual who wants in on this particular area of IT and cloud (it is a booming industry after all!).

How will becoming a Google Certified Cloud Architect impact your job and career?

Certifications in the IT industry have a proven track record of providing value and confidence to employees, employers and customers, including:

- Demonstrated knowledge in a technology or product.
- Enhanced understanding of a technology or product.
- Differentiation from other candidates in a job application.
- Proof of continuous learning.
- Deepen understanding through preparation for a certification, even if you are familiar with the technology or product.
- Increased credibility for the professional and their organization.
- Increased opportunities for new tasks or career paths.

With these benefits (and more) in mind, a GCP Cloud Architect certification is no exception. A candidate that achieves certification as a Google Certified Professional Cloud Architect has proven their ability to leverage the GCP environment in many ways:

- Design and plan a cloud solution architecture.
- Manage and provision the cloud solution infrastructure.
- Design for security and compliance.
- Analyze and optimize technical and business processes.
- Manage implementations of cloud architecture.
- Ensure solution and operations reliability.

Now that you know what the GCP Cloud Architect certification is, it's time to learn more about the exam and create a plan for achieving the certification.

You will be under observation during the exam, usually with cameras or a live proctor that remains in the room during the test.

Google Cloud Architect exam guide

The GCP Cloud Architect certification exam objectively measures an individual's ability to demonstrate the critical job skills for the role. The exam is available in English and Japanese and there are no prerequisites. It must be taken in-person at a Kryterion testing center location.

- Format: Multiple choice and multiple select
- Duration: 2 hours
- Registration fee: USD $200

Register here for the Google Certified Professional Cloud Architect exam

When taking the exam, you must arrive at the testing center before the exam time with proof of identity (typically a driver's license or passport, but may vary depending on the country and testing center.) Contact the testing center the day before your exam to confirm what you must bring with you. No paper is permitted, and most centers require you to empty your pockets and leave everything in a locker during your exam session.

How to prepare for the Google Certified Cloud Architect certification

Hands-on instructor-led training and self-study are valuable and necessary for certification exam preparation.

Instructor-led training courses

Below are recommended training courses that will not only give you the hands-on skills to use Google Cloud in your everyday job, but also help you to prep for the GCP Cloud Architect certification exam. These courses are instructor-led and can be delivered virtually, so you can attend from your home or work, or in-person at an onsite group environment at your office.

Recommended courses

Google Cloud Fundamentals: Core Infrastructure

- One-day instructor-led course, introducing GCP and a chance to work with some of the functions and features of hands-on labs.
- Prerequisites:
  - Familiarity with application development, Linux operating systems, systems operations, and data analytics/machine learning concepts.

Architecting with Google Cloud Platform: Infrastructure

- Three-day instructor-led course, covering the key areas of the GCP platform to understand as you prepare for the exam, with plenty of hands-on labs for practice.
- Prerequisites:
  - Completion of Google Cloud Platform Fundamentals or equivalent experience.
  - Basic proficiency with command-line tools and Linux operating system environments.
  - Systems operations experience including deploying and managing applications, either on-premises or in a public cloud environment.
  - Familiarity with application development, Linux operating systems, systems operations, and data analytics/machine learning concepts.

Architecting with Google Cloud Platform: Design and Process

- Two-day instructor-led course; follow-on to the Infrastructure course.
- Prerequisites:
  - Completion of Architecting with Google Cloud Platform: Infrastructure or have equivalent experience.
  - Basic proficiency with command-line tools and Linux operating system environments.
  - Systems operations experience including deploying and managing applications, either on-premises or in a public cloud environment.

Other materials and references

When preparing for the GCP Cloud Architect certification, there is no substitute for spending time in the product. Formal training provides an excellent starting point for understanding GCP, but the concepts brought forth in those classes can be reinforced and deepened through time spent using the platform. Fortunately, there are many ways to spend time in GCP, exercising the product suite to perform tasks and meet specific goals as you prepare to take the exam.

Free trial of GCP

One of the first things to do as you prepare is to [sign up for the free trial of GCP](#). This is a 12-month trial that includes $300 of usage credit. Many GCP services have a free tier, but in your exploration, you may want to try out features that involve a fee or charge. The $300 credit provides you room to experiment and learn about the platform at no cost.

Tutorials

As you study, it is likely you will find an area of GCP where you want more practice. Often, you can spend more time in an area through a tutorial. Tutorials are provided as part of the GCP documentation. These guided, step-by-step examples are an opportunity to solve specific use-cases in the GCP environment. There are two groups of tutorials: those provided by Google, and others provided by the GCP community. Tutorials provided by Google are created and maintained by Google employees, and as such are known to be reviewed, edited and work with Google's environment. Tutorials from the community are from users, partners and others willing to share their expertise and ideas, but are not guaranteed by Google in terms of applicability and currency.

- Google-provided tutorials: https://cloud.google.com/docs/tutorials
- Community-provided tutorials: https://cloud.google.com/community/tutorials/

Recorded Google Cloud Next Sessions (videos)

Google Next is the biggest way for the Google community to connect during a four-day event full of breakout sessions, training and keynotes. It's a camaraderie of Google Cloud experts, gurus and fanatics. There are over [200 video-recorded sessions available on YouTube](#) from last year's event. During your preparation, if there are any areas where you feel you want more depth, such as with Cloud Storage, Datastore, Stackdriver and others, these videos might be helpful. Even after the exam, these are great resources for future reference.

Cloud Architect exam: Tips & tricks

There are no product-use questions

While spending time in the product is critical to prepare for the exam, there are no questions dedicated to specific usage of the product. For example, you will need to know when a VM is the best option for solving a particular customer need. You will

not, however, be expected to know all the options available when provisioning a VM in the GCP environment. As the test is geared toward an architect that must understand what solution works best for a given scenario, the questions are written to test that level of understanding.

Allocate time to prepare

This certification is not one in which you can study one afternoon and take the test the next morning. The design of the examination, and the skills and knowledge expected, mean that you will need to take the time necessary to understand the content and practice in the GCP environment prior to taking the exam.

Review and understand the case studies provided by Google

During the exam, you will be presented questions based on one of four possible customer situations. Take the time to review the case studies before you show up for the exam. Reviewing ahead of time provides testing benefits. For example, you can consider possible solutions on your own, and when presented with multiple choice questions around the same topics, you will be better able to find the best answer from those presented. Further, you can save time during the test by knowing about the customer and not spend exam time reading about and considering the customer.

Find and read [Google Cloud customer case studies here](#).

Review the exam guide

On the same page as the case studies is an exam guide. The wording of the exam guide might feel overwhelming, but the overall concepts provide clues as to how the exam is written and the types of questions you will encounter.

Storage option decision tree

One of the best ways to understand the many storage options is provided by a diagram from Google.

Find the [decision tree diagram and comparison chart here](#).

If you can fill out this chart on your own (and be able to provide example use cases for each), then questions on storage should be easier to answer during the exam.

How do you know if you pass?

GCP exams are designed to determine whether an individual meets a minimum passing standard. Therefore, you'll be notified on a simple pass or fail level. Numerical scores are not meaningful for those taking this exam because the tests are not designed to be diagnostic or assess you on a scale of ability.

Another item to note is that you won't receive feedback on the exams because Google Cloud doesn't want the information to be misleading. Since exams are not testing strengths and weaknesses, they don't see a reason to include feedback to

confuse you.

What happens if you don't pass the exam?

If you don't pass the certification exam, you can take it again after 14 days. If you don't pass the second time, you must wait 60 days before taking it a third time. If you don't pass the third attempt, you'll have to wait a year before trying again. Payment is required each time you take an exam. Trying to sidestep the retake policy by registering under a different name is a violation of the exam terms and conditions and will result in a denied or revoked certification.

How to maintain your Cloud Architect certification

All Google Cloud certifications are valid for two years from the date certified, unless the specific certification detail states otherwise. To maintain certification status, you will need to recertify.

Since Google Cloud technology constantly evolves, skills gaps are likely. To keep up with the pace of change, training courses, self-study and practice are imperative for skill maintenance.

Next steps after your complete the Cloud Architect certification

You've reached your goal of becoming a Google Cloud Certified Architect. Congratulations! Now, what's next? Whether you want to jump right into another GCP certification or spread your wings and take on another topic area, we've got you covered with our Google Cloud Certification Tracks and Learning Paths.

- Google Cloud Platform Certification Tracks

- Global Knowledge Cloud Learning Path: Google Cloud

Summary

Achieving the Google Certified Professional Cloud Architect certification is no simple feat. It involves learning about many facets of the GCP platform and developing an understanding as to what technology is the best for given situations. A cloud architect should be able to analyze a workload and determine whether it's best to use a compute engine VM instance, or if the use of containers in the Google Kubernetes Engine is a better fit for the workload in question. Would you use Cloud Functions or App Engine? To answer such questions, you must know something about each option, which means spending time learning about many parts of the environment. With some time, effort and focus, it is achievable, and as the cloud market grows, the value of this certification will only grow with it.

About the Author

David Ross

After receiving a degree in Curriculum and Instruction with a math minor from Texas A&M University, David Ross has gained almost 30 years of IT experience across a variety of products and technologies. He has been a math teacher, systems administrator, adjunct and full-time college professor, and spent over 15 years with IBM developing technical training materials. While at IBM, David presented sessions at multiple conferences and contributed to a Redbook on the TADDM product. David's recent accomplishments include certifying to teach Google, DASA, CCC and Docker classes, as well as consulting on Red Hat and IBM products. A father of three fine men, he awaits grandchildren with his wife of almost 30 years in Austin, Texas.

Footnotes

1. Gartner Says Worldwide Public Cloud Services Market to Grow 18 Percent in 2017

2. Google Cloud, Professional Cloud Architect