



Cisco Wireless Certification

Case Study Subject

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Cisco Certifications

CCNA, CCNP, and CCIE Wireless

“Never give up.”

Interest and Beginnings

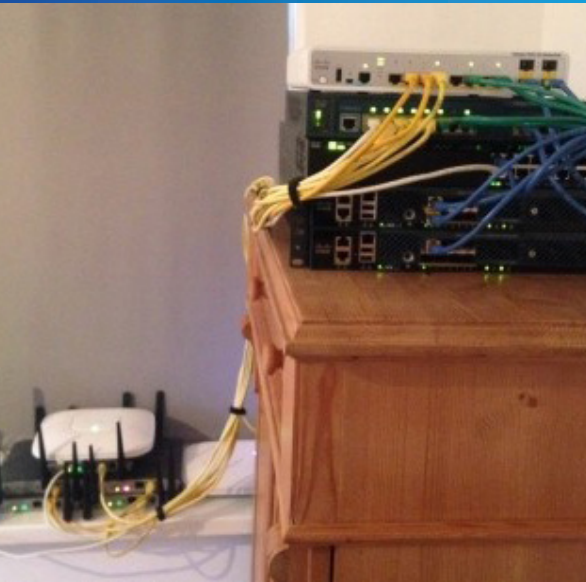
When I was young, I found the radio a magical thing. How in the world was it possible that I could hear somebody – who was located miles away – so clearly out of my own speakers? I had no clue how it worked, but it clearly got my attention. A few years later I discovered computers and dial-up connections, which I found magical as well. It did not take long before my parents bought our first PC, and a few years later I started my IT career.

Education and Internship

During my intermediate vocational education, I was first exposed to networking with the Cisco Networking Academy program using its curriculum and a piece of software called Cisco Packet Tracer. I also searched for a nearby Cisco partner that would offer me an internship with them in order to gain my first experience with production environments. I had passed my official CCNA Routing and Switching exam just a few days before I started this internship in January 2010, so I thought I would at least know the basics then, right? That was true until I deployed my first Cisco ASA firewall; that thing was totally different from the Cisco IOS boxes I was used to! It turned out that this “oh.. uuuhm...” feeling happened almost every time I ran into a new technology or product. The fun thing about working for a relatively small Cisco partner is that you can gain experience with a lot of technologies on a detailed level in a short amount of time in different roles, from engineer up to pre-sales.

Certifications and Further Education

I took the opportunity to chase the relevant certifications every time I worked with new technologies or products to combine my hands-on experience with theory and vice versa. When I finished my internship, I got a job offer and also started studying part-time for a bachelor's degree. I completed this study four years later in September of 2014, at which time I also began my CCNP Wireless studies with a final goal of CCIE Wireless certification in mind. I wanted to pursue CCIE because I saw it as a big challenge that would take my knowledge to the next level. Routing and switching are the core building blocks for all networks, but the company I worked for did not have the customers with networks that required CCIE R&S level knowledge. However, we worked on a lot of complex wireless-related projects that made CCIE Wireless an option for me to once again combine my studies with hands-on experience. It also reminded me of my fascination with the radio when I was younger (but this time I had the chance to learn how it actually worked!).



CCIE Wireless Certification

Preparation and Passing the Written Exam

I completed the CCNP Wireless track around January 2015, and then it was game time! I built a lab (pictured below), informed my girlfriend about the fact that I would have a minimal amount of spare time for at least one year, started hanging around the Cisco support forums, and I bought the IPexpert videos related to the CCIE Wireless course (version 2 at the time).

The first step was to clear the written exam, which I tried to really focus on; however, I found it handy to already have a lab set up so I could test certain concepts. To keep track of my progress, I made a detailed study plan based on all of the items in the blueprint. It took me four months and three attempts to clear the written, which was more than I had expected, but I was happy that I could move on to my lab exam preparations. I also created a study plan for the lab exam and started by going through every section of the exam topics with the IPexpert videos and my own lab. Ismael has recently made the transition to work as a network engineer in a large university medical system. Two of his current projects there are migrating clinics from one network design to another and providing the network connectivity for a new virtual machine environment.

Lab Exam

Around the time I passed my written exam, version 3 of the blueprint was announced. This gave me six months to pass the lab based on the old blueprint. I was in doubt. Did I have enough time for proper preparation? I was really in my flow and did not want to wait at least 6 months before new study materials would be published. Besides that, I also had no hands-on experience or lab equipment for converged access, which was one of the new big additions to the version 3 blueprint. I decided that I could limit my hours of sleep even a little more and that it should be possible to have two attempts for the version 2 blueprint before September 2015.

First Two Attempts

My first lab attempt was in June 2015, and it went pretty well except for the lack of proper time management. I made the stupid decision to jump between questions by grouping certain tasks based on the relevant equipment instead of finishing them one by one. Because of this I knew that I did not pass, but it turned out that I was pretty close based on the score report. I wanted a second try before the new blueprint went live, so I planned my second attempt for August 2015. With this attempt my time management was much better, and I finished before the end of the exam, which gave me time to reread every question and check my answers. I left with a pretty good feeling, but for some reason my score was even lower than my first attempt, which made me feel really upset about the whole situation. To this day I still don't know what I did wrong... maybe it had something to do with my lack of sleep.



Exam Updates, Next Attempts, and a PASS!

In September 2015 the new blueprint was announced, so I upgraded my lab with two 3650 switches, Prime, ISE, and I upgraded all of the equipment with new software releases. Because it took some time to catchup with all of the new upgrades and some changes in my daily job, my next attempt was in January 2016. I failed, took notice of my weak areas, and continued with my studies. One thing that kept me going was the fact that I passed the diagnostic section, so at least I knew I could troubleshoot. Around that same timeframe, I also met a guy on Twitter from Switzerland who was in the same position as I was. This was pretty helpful, because until that moment, I had no one to discuss certain topics with. My fourth attempt was in June 2016, and when I left the building in Brussels, I had a good feeling about it. But, sadly, it was again not enough for the configuration section of the exam. I knew I could do it, though, so I planned my fifth attempt as soon as possible (July 2016). This time everything felt right: I had a good night's sleep, felt sharp, could answer every question, and there was enough time for extensive re-reading of every question and checking the answers; but it was still CCIE, and I had a "good feeling" before with bad results. So when the link to my results was sent to me, I opened the link with a raised heartbeat. It was a pass! I felt relieved.

Present and Future Plans

It has now been two months since I passed the exam, and it is time for me to make new plans. I still work for the small Cisco partner; however, I don't do multiple projects for various customers anymore. I now collaborate with a colleague to maintain and develop the worldwide wireless infrastructure for an enterprise company. This role involves working with a range of settings from "regular" office locations to industrial environments and encounters situations ranging from BYOD to scanning in warehouses. Some of my day-to-day tasks include troubleshooting, conducting site surveys, performing upgrades, writing new standards, etc. Lately I have been busy with the worldwide ISE implementation for wired and wireless networks and will continue this for the upcoming months. After this project I want to tackle some complex wireless work again to maintain my wireless hands-on experience, which is crucial for every wireless CCIE.

Advice

Here is my advice to fellow Cisco certification candidates:

- Be aware of the fact that wireless depends on a lot of wired and security technologies. Your routing and switching and also security knowledge should be at least on a CCNP level with a lot of hands-on experience.
- Plan enough time and finances for at least three lab attempts.
- It takes a lot of time; don't try to rush, and make sure you don't forget to sleep.



- Start your day with the Cisco support forum and try to answer a few questions every day (if you don't know the answer, use your own lab environment to find out the answer).
- Besides the Cisco support and study forums, Twitter is also a good place to interact with people and learn.
- Use the Cisco Live recordings and presentations as additional study material.
- Never give up, and take the opportunity to learn every time you fail.

For More Information

To begin your exploration of Cisco CCIE Wireless certifications, visit https://learningnetwork.cisco.com/community/certifications/ccie_wireless