Cisco Certified Architect ™ Certification

You might be surprised, but many people have come to me to seek advice about the career in networking area. Yes, I know, I know. Who am I to give the advice, right? But despite the fact that I have only 10 years experience, that I don't have any computer related degree, and I have actually written down how I climbed the steps starting from the day I learned to spell 'Cisco' until where I stand today in my blog, I still get such question over the emails. So in order for me to save the energy to write the answer over and over again, and to save the bandwidth required to exchange the emails, please allow me to introduce the levels of networking engineers career I made that I called as "Network Engineer Technical Skill Transformation". Obviously the engineer won't transform to Camaro even if the Allspark aka cube did really exist. Please be warned that everything I write here is based on my own experience. If you don't like it, just try to do it your way and make your own levels! You don't have to agree or follow my levels. I won't give you any rewards or certifications even if you do. All I want to do is to provide some kind like brief information based on what I have been through and I have seen on my way to reach my current position. And it may be useful for those who want to start or move their career to networking area but still clueless about the path. To make it more fascinating, I tried to link the levels with the Cisco certification program. Level 1: Configurator The other name for this level is Config T engineer, where ones only know how to put the configuration without having deep understanding about the concept and the reason behind it. What it takes just the ability to copy paste the configuration from Cisco website to enable the protocols or features. If I may compare it with Cisco certification program, this level can be considered as CCNA. Level 2: Troubleshooter Those who don't know the concept won't be able to troubleshoot. At this level ones know how to configure the protocols/features, and the concept behind it in order to troubleshoot when there is any issue during implementation. If I may compare it with Cisco certification program, this level shall be the CCNP or other mid-level certifications. Level 3: Specialist At this level, the engineers are willing to focus on a particular area in networking. This is not a pure specialist role since most probably those still have to do the common routing and switching stuff, but now they are capable to work on other technology too where they put more focus to learn. I shall put CCIE at this level. Even those who have CCIE in Routing & Switching track can fall to this level since they put their focus on the scope of the track. Level 4: Designer After focusing on one particular area at the previous level, at this level ones must learn more general and broad knowledge again. The other name of this level is System Integrator, where it is required to possess the ability to combine different technology solutions, sometime it even requires to combine the products from different vendors. As a network designer, one must be able to build a complete infrastructure solution from routing and switching, security, voice, wireless etc. And it is normal for a designer to have the knowledge beyond networking: Server Operating System, Database, physical Data Center and so on. I don't think there is certification for this level. Well, CCDE may provide the foundation of the knowledge for this. But I would say it's like CCIE with project experiences to build a complete infrastructure. Level 5: Architect This is the next level of System Integrator, where ones know how to build a complete infrastructure, and understand the customer business requirements, and can make sure the technology and solution provided to answer the requirements incorporate the customer business model. From technical perspective, the architects understand hardware architecture and the way the protocols work in detail, in order to know the limitation of solution can be provided. They know the standard of the protocols and fully aware about different implementation from different vendors, so they are able to fully interop the products from multiple vendors. This is like a CCIE who likes to read the protocol standards, understand the hardware architecture, able to interop products from multiple vendors, and has extensive project experiences with important role in both technical and non-technical aspect. Level 6: Expert The last transformation is to the expert level, after being the architect with extensive project experience, capable to build a complex and complete infrastructure from different vendors, and understand customer business requirements and the linkage to the technology and solution provided. At this level, ones are getting specialized again. Having extensive experiences and broad knowledge, the experts now can focus on one or a few particular technology in order to contribute to the development of that technology. Experts communicate to each other to develop the standard of networking, translate a difficult concept into the words that can be understood by ordinary people, and share the knowledge and information to the others. At this level, the possession of any certification doesn't matter anymore. The most important is to have all what the Architect level has, with focus on one of few technology in deep detail, willing to contribute to the development of the technology, and share the knowledge and information to the others. I have to remind you again, the above levels are mine. And the linkage to the Cisco certification program is based on my own definition. I have actually written down these levels definition since few weeks ago in my other blog. Today, Cisco announced the new certification and the highest level ever called Cisco Certified Architect. If you look at the description of this certification, it's similar with my Architect level. You need at least 10 years experience. You need to apply and must be accepted to take the exam. The format is board exam, where you have to present your solution in front of several engineers, and must be able to change it on the fly based on the additional requirements on the board.

And there is a rumor flying around saying that the engineers who will sit there to test you are Cisco Distinguished Engineers :) I took my first CCIE when it was still two days exam. I enjoyed the last 2.5 hours dedicated for troubleshooting section. And I won't forget the time after the exam to explain to the proctor why I configured something the way I did it, sometime I even needed to draw in the white board to explain. The CCIE exam today, I believe, lack those two (troubleshooting and explaining the reason of the configuration) in order to claim as the highest level for network engineers to implement and deploy the solution. CCIE is not a design exam, and there is no design aspect tested in the lab. That's why Cisco then came up with CCDE. But still with this design exam, even I haven't taken it, but I feel like it's missing some designer knowledge. For example, there is no way to test the ability to capture the requirements from the initial meeting with the customer. Or the skills to lead the design workshop. And the CCDE exam for sure will not test the designer skill to adjust the solution if the customer modify or add additional requirements in the middle of the project. That's where Cisco Certified Architect can fill the gap. Still though, even you can pass the Cisco Certified Architect exam or get the 'Architect' as job title, I believe your life is not completed if you haven't transformed to the highest level. The expert level. This is something that everyone in this field must put his goal at. We all must aim to reach this level, to be recognized as those who help the world developing the technology. The expert level is something that must be earned. By Himawan Nugroho, CCIE #8171