Interview with First CCDE in World - Ryan Hicks

Ryan Hicks, CCDE #1 - (well, technically #20080001) is a Senior Network Architect at Calence / Insight Network Services. He specializes in designing, implementing, and troubleshooting highly complex and/or sensitive networks for customers spanning corporate, government, K12 and higher-education markets. Over the past 13 years, Ryan has passed **three CCIE labs** (CCIE #5924), holding certifications in Routing and Switching, SNA/IP Integration, and Security. He is also a MCSE with experience as a COBOL and C programmer and holds a Bachelors degree in Business Administration (focused on Information Technology at Colorado Technical University). Recently, Ryan earned the title as the worlds first CCDE (#20080001)   Note #1: He passed on his **first attempt**.   Note #2: He became the **first CCDE in the world!** Not resting on his CCDE accomplishment, he is now studying for the CCIE Service Provider and CCIE Voice labs, while also hosting Austins Network Engineer Users Group.   Several weeks ago we asked for your questions pertaining to Ryan's CCDE experience - and here are his answers. **Hey Ryan, Great job! What is your background in the IT industry? How much real-world experience do you have and what is your primary job function?**

  I have been in the IT industry since I graduated with my first Associates degree from a local community college in 1995. My degree was for programming, but I also studied their networking program, which at the time was Novel Netware. I have written a few small programs, but almost immediately went to work for Dell Computers doing server hardware support. During this time I learned a lot about hardware architectures specific to servers and achieved my Novel CNE and Microsoft MCSE (3.51) there. I got my first taste of Cisco networking at my next job. Following around the printer admin was boring, and when the Internet went down, I found myself wandering into the network room to see what was going on. The network folks were huddled around a Unix terminal trying to work on a router, but really didnt understand routing. I knew routing, but didnt know Cisco commands. Together we got it working and they moved me into their group. My first task was the configuration of a Cisco AS5300 for ISDN and analog dialin and dialout (via the remote reverse-telnet software). They gave me 3 days. Having never touched the stuff before and worried for my job I studied non-stop trying to get it to work. It took me a week and I had never learned more! After that I have done various jobs involving teaching, consulting, and network implementation. I have touched a great many of the available technologies from mainframe to 3G. Today I am a Senior Network Architect for Calence/Insight Networking. I do implementations as well as designs. I also mentor our other engineers as needed. **Well done on your accomplishment! My question is, what ratio would you say you require, ?experience vs. reading the book list? to pass the practical exam?**   The CCDE requires a significant knowledge base to draw from, requiring in a lot of case both book knowledge and experience. There are some things you are just not likely to learn in a book, and no one is likely to have tried everything. The key factor that differentiates the CCDE from other tests is that factual knowledge (no matter the source) is insufficient to pass the exam. Instead you must have the ability to creatively apply that knowledge to a unique situation. Critical thinking is as important as your ability to implement a best-practice design, since the customer (test) is likely to through business requirements into play that will cause you to deviate from a textbook design. **Hello Ryan, First? congratulations on your CCDE. I'd like to know what books you used to study. Also, do you have a recommended list of links from Cisco's website or any other website(s)?**   I read everything from Cisco Press that had the word design in the title and then some. During the initial phases of the beta process Cisco provided us with a draft blueprint and reading list. The reading list looked almost like any book having anything to do with Routing, Switching or service provider technologies that had ever been published. If I had to single out a favorite book it was Advanced IP Network Design. This book is currently out of print, because of its partial obsolescence. The same authors released Optimal Routing Design with a similar format and content streamlined a bit and updated. The thing I liked about these books was the why. I used the first one for my original CCIE back in 2000, and the updated one for the CCDE (written) in 2007. Understanding why you should do something or why something does or doesnt work is at the heart of how a network architect must think. You should be able to predict the behavior of protocols given a set of circumstances and that takes in-depth knowledge of those protocols, but more specifically their behaviors. Dont waste your time studying commands; instead study what kind of options a protocol has and how it does its job. **Hi Ryan, What has been your primary source of preparation to the practical CCDE exam? Thanks.**   Since the CCDE was beta and no one had really seen it, options were limited to self-study of the recommended books and my experience. I also attended the sessions at Cisco Live! in both 2007 and 2008. I also closely looked at the blueprints and asked myself what could they possibly ask me about network management in a design context. I read any postings from Russ White on the Cisco Learning Network, and studied the format of the sample test posted in the documents section of the Cisco Learning Network. **Ryan, what was harder, the CCIE lab or the CCDE? If its the lab, what lab was the hardest for you?**   Thats easy. I felt the CCDE was much harder. I had this desire to poke myself in the eye by the end of the test. The CCIE Lab has real equipment. Most questions you KNOW that you did it right or wrong almost instantly. I mean the route shows up at the other end or it doesnt, right? The CCDE questions can be open to interpretation. The authors have

attempted to limit the possible answers, but since very few people would build a network the same way given the same constraints one must assume there is more than one correct answer. The lack of ability to know when you did something right, compounded by the test almost telling you did the previous question wrong (since some questions may build on previous ones) may be disheartening. If you allow the test to bring down your energy or confidence or you start second guessing yourself, your may not make it. Its shard to ignore bad signs (real or imagined) and continue to answer each question like it is the first one. **Hello Ryan. Thanks for taking time to answer our questions! I[d like to know what certification you will go after next.** Well, I will answer that in past tense. My company is doing a lot more wireless work, which I have had to participate in as well. To that end we were asked to take a look at CCNA Wireless, so I did. But I want to look at CCIE Service provider and/or voice. I had taken the voice written in July 2007, but put preparations for that on hold due to CCDE and a new job. **What do you think the most valuable certification is to have (out of any vendor out there)?** At the moment CCDE unfortunately, the commercial recognition of the CCDE hasnt gotten to a high enough level to garner the pay and respect that CCIEs get (well outside the Cisco candidates community that is). Some of the most important ones to me, in no particular order are:CISSP: A measure of how well one understands security concepts, not implementation. CCIE: Technical competence installing and configuring hardware/software in their chosen track.The value of a given certification is based on how many there are, how hard they are to get, and what the candidates chosen field is. Obviously CCIE isnt going to mean anything to a Linux system engineers career. VMware is up and coming as a certification and data center virtualization is a hot technology. I see a lot of people jumping into that one, but I dont like the official training class requirement to get it, since I dont have time to attend every training class out there, especially if I already have experience in something. **What is the next certification you're going to tackle?** I will probably go for a different CCIE. I was going to help my wife by doing the VMware VCP with her, but I cant since I have not time/budget for the class at this time. Instead service provider is looking interesting, since we have a few ISPs as customers, and various local government entities use MPLS and optical technologies. **Ryan, Awesome job!!! Id like to know if people treat you differently. Also, did you know that you passed after you took the lab or did you think you failed?** Yes, I have noticed a bit of difference. Around my office nothing much changed. The announcement of my passing was met with congratulations for everyone, but everything else was business as usual. I guess that is because we have a pretty tight team as it is and we already draw off of each others skills. I have seen a bit more outside recognition which is nice, but different and taking a bit of adjustment on my part. I hope to handle it better than some others (locally) that I have seen in the lime light before, who strike me as arrogant and pretentious. I didnt think I passed the test the first try. We had a lot of great minds at the test, all of which I hold in high regard. I never could have guessed the outcome. I am extremely proud but humbled at the same time. After the high energy of the test wore off, I certainly felt the doubt that seemingly conflicting questions and answers created. **Ryan, Was the CCDE practical harder than you thought it would be?** Not really. I had every expectation that it would be very difficult. Fortunately the sample questions were a great introduction to the format of the real exam. Source from: http://ipexpert.ccieblog.com/2009/04/06/ryan-hicks-worlds-first-ccde-answers-your-questions/