

## A Sneak Peek at the CCIE R/S Lab

The recently announced changes to the [CCIE R/S written and lab exams](#) took effect this week. I recently had the chance to take the R/S lab again, as part of the Beta testing - so I decided to save up some observations and post them around the time the new exam has come out. Today I'll look at a variety of things about the lab exam, and make another post next week concentrating on the biggest change: The 2-hour troubleshooting section. You know, the strange thing is that many times over the years, I've wondered if they'd let me take the CCIE R/S Lab again - and not take away my CCIE number if I failed. It has certainly changed a lot since I took it back in 1995. I've always had the itch to try for another CCIE, but I think I've had a cumulative 3-4 weeks in the last 5 years without a book to work on (that's definitely not a complaint), and it obviously takes more than casual effort to prep for another CCIE lab. And getting a CCIE in your spare time pretty much changes your life until you get it done, and I've never wanted another CCIE bad enough to make that sacrifice. But, I just always thought it'd be interesting to sit the lab again. And then Maurilio asked a few of us Cisco Press CCIE authors, plus others I'm sure, to sit the lab and give it a test. And it was fun. OK, on to stuff you folks might care more about. I came to the exam with several specific items to keep an eye out for - things like the impact of adding a 2-hour troubleshooting section, how the config section would be different now that it's 5.5 hours instead of 7.5, and the supposedly-dreaded open-ended questions. But the biggest surprise was obvious from the first few minutes of lab time - they changed the user interface of what you see to access the lab, and as a result, there's no printed lab exercise book. The only paper for the lab is the note paper they give you to write on. In the old days, you got a lab booklet that you couldn't write on, but you could do the natural thing and pick up the book to look at the various lab requirements. I believe it's true that the book had some lab diagrams as well. Now you get a GUI interface from which you can pull up the many different lab diagrams, read the various lab exercises. My gut reaction was that I didn't like not having a book. After experiencing it, I thought the replacement GUI would have been reasonable if I had had time to practice with it. The good part of the GUI was that once I was used to it, I could navigate to the next topic for both troubleshooting and config easily. The GUI essentially indexed the main lab exercise tasks, which may be a bit more convenient than flipping pages in a booklet. Once I got used to it (20 minutes maybe), I stopped to ask myself if the user interface itself would slow me down compared to the paper booklet, and I decided that if the small bugs were removed (e.g., no back button on the browser to get to the docs), AND if I had a chance to practice before the lab (so that 20 minute learning curve wasn't part of the timed test), that it wouldn't have hurt. Otherwise, call it a 20 minute hit for the day, wild unscientific guess. (I did ask, and as of now, there is no tutorial available before the exam; if it's your first lab with this interface, you'll get to learn it concurrent with doing the troubleshooting. I'd suggest asking as many questions as you can about the user interface before starting the timer.) There were negatives to the GUI, but of course GUIs often have to do with personal preference. In this case, a few of my author friends and I were allowed to discuss amongst ourselves our impressions, and we all agreed that the navigation in the GUI was a bit of a problem. EG, to view a figure, you click, and a window pops, which is fine. However, you can't minimize the window so that the bigger window behind it, where you access the console windows, is hidden. You can re-size, and move, but not minimize. To see another figure, the figure shows up in the same window, so to view both - like a cabling reference and a different VLAN reference - you have to toggle back and forth, and never see both at once. Then, to see the console term emulator windows, you have to move the figure window to the side, and then drag it back to see it again. No minimize/pop-open toggle like with Windows. Each figure required a different window size/shape to see the whole figure, and all the figures showed up in this one window, so there was no ability to make it the right size and find a good place on the screen for it. Sorry for the ramble, but I wanted enough detail out to make a point: If I were taking it again to pass, I'd consider drawing a few of the figures for the config section, particularly the LAN layer 2 figure - both cabling and VLANs - on paper before even beginning to configure. (I would do this for the config section, but not for the t'shooting section.) Next, let me give you some idea on the whole "is it too much" issue. Most CCIE lab candidates that pass seem to do so with at least a little time to spare, and those that fail often run out of time, or don't have time to review. So, I came to the test asking myself "if I were truly prepared for the lab, could I have finished on time enough to review my work?" This question has a new twist, now that it's 3-part: open ended questions, then 2 hours of t'shooting, and then 5.5 hours config. (FYI, I didn't study except on the flight to Raleigh, and I don't stay current on everything so I could go fast enough to pass - so I estimated what "well prepared" meant.) The short answer is that I think that the troubleshooting section was attainable for a well-prepared candidate, and maybe a little too much (maybe shave 10% of the tasks to be fair), but the config section was too much by at least 20%. (My buddies co-authors thought roughly the same on config, and maybe that the t'shooting needed to be shaved more than my 10% guesstimate.) Sitting back contemplating the whole "is it too much" thing, I came to two conclusions: - 1) It was a Beta, and Cisco needs some experience with specific lab exams to figure out how much is too much. I'm sure they didn't write all new lab exams, so the trick is to figure out how to compress the former 7.5 hour lab into 5.5 hours. They want you to pass if you

know your stuff, and fail if you don't. They don't want you to fail if you truly know your stuff but they just gave you too much. From a systematic perspective, I think they'll get the right mix. (Granted, I'm sure some of you have contradictory experiences on this point!) 2) I wonder if Cisco considered that the shrinkage from 7.5 to 5.5 hours on the build section was like removing the final 2 hours - the hours in which you are most familiar with the lab - rather than removing the first two hours. By the end 3rd hour of the build section, I needed the figures less and less. From a sheer mechanics perspective, I worked faster. Call it 3 hours in the config section before I was somewhat comfortable with the topology. With a 5.5 hour build, that splits the unfamiliar/familiar time as 3/2.5 hours. The old 7.5 hours would have given a 3 /4.5 hour split, so it felt like I was losing 2 hours of very productive time. The next thing I was particularly curious about was the open-ended question section. Frankly, I'm a Dr. Jekyll/Mr. Hyde on this one. Wendell the cert guy looked at my open ended questions, and asked himself: "If I was truly prepared for the lab, would these questions be a problem?" Absolutely not. As a guy who has an interest in seeing Cisco certs thrive, I see the open-ended questions for what Cisco claims them to be - a cheating prevention tool. However, Wendell the imaginary CCIE R/S lab candidate says that the whole idea scares me to death, and may be too unfair to use as a cheating prevention tool. If I had been taking the lab on my nickel for real, rather than just kicking the tires, I would've been psyched out by the open-ended questions. You could get an unlucky draw of questions and get sent home. For real CCIE R/S candidates, I think this means that you don't get ready for 70% of the topics, and go take the lab to experience it - you may not get past the questions. However, from what I saw, and from other discussions, I think if you're ready for all aspects of the lab, you'll be ready for the open-ended stuff. It's just a little scary. Last thing for today: general difficulty. I tried to imagine myself as a well-prepared candidate, but not over the top - you know, if I took the classes, did labs from a few lab books, read Doyle/Halabi/etc, practiced a lot for speed, then the lab I got was not too difficult. In fact, I did not see a single item that I viewed as a "trick" - no wording that made me do function X using methods no one in their right mind would try. Everything I saw was detailed - it required mastery of a lot of topics - but it was all stuff that you might come across as something you'd really use in the real world. Really. That was a nice surprise. The difficulty level comes from seeing the requirements, mentally putting it all together, deciding what to configure, configuring, t'shooting to make sure it works, and doing that 5X faster than you would have to do in real life. But it was refreshing to not see anything that looked like tricks just to make sure you knew how to make one parm on one command do its thing. One more note on the difficulty level: I think if you prepared with the traditional tools - books, classes, lab books, lots of hands-on practice, and understood it, that the difficulty level was very fair and reasonable. OK, that's it for today. Next time, I'll look at the Troubleshooting section in particular. From: <http://www.networkworld.com/community/node/46561> By Wendell