

Become CCIE with Simulator FAQ

Should I use emulator like dynamips or buy real lab? Well, it depends. Dynamips is an emulator that somehow "tricks" the real IOS image so it will boot and run on standard PC. So far it can run IOS for 7200 routers, 3600, 3700 and 2600 series. So if you need to practice features outside those IOS, then you can't do it with dynamips and must go with real lab.

What does exactly dynamips lack of? Performance, even it doesn't matter for CCIE practice lab, features that must be run in hardware such as certain QoS, and all the features outside the supported IOS for example L2 and switching features from a normal 3550 or 3560 switch. And we need to be aware that if there is any issue, we need to be able to identify if the issue is from wrong config, IOS bugs, or bug from the dynamips itself. With real lab, it's just wrong config and IOS bugs.

Which CCIE track do you think can be done with emulator only? For Service Provider track, you can practice almost 100% of the topic. The focus of the lab is on SP infrastructure so personally I don't think you need to spend much time to practice L2 switch features. For Routing & Switching I think dynamips can still be used to cover almost 90%. Despite it has support Ethernet module but it still can't be used to test real L2 switch features such as VTP and STP. But all L3 features from 3550/3560 switch can be tested or will have the same behavior just as if we use normal router. For Security track the emulator can be used to test IOS FW, IOS IPS, VPN between routers and security features in routers (NAT, ACL, RTBH etc). But more than half of the features for this track require Firewall, VPN, IDS and Cisco Secure ACS. For the rest of tracks, I would say the emulator won't help that much. Check the CCIE lab blueprint and CCIE lab equipments to give you the idea.

What would I miss from the real lab? Using real lab we would be able to test all the features required in CCIE lab, real router with real performance, capable to test hardware-dependent features, ability to sell it back when we are done and last but not least, the noise I guess. I used to sleep next to my lab for months so sometime I feel that I can still hear the noise inside my head until now.

What would be your suggestion to cover the lacks from dynamips? There are several options. You may invest and buy a complete real lab. The challenge to have real lab is we need to replicate as close as possible to the lab equipments. It means, it can be expensive. But the good thing is, if our lab is still in decent condition after we are done, we may be able to sell it again (to another CCIE candidates) without losing a penny at all. Another option is to rent an online rack. It has advantage since we can connect to it as long we have Internet and we don't need to invest big pile of money in the beginning, but obviously the money won't go back after we are done. The option that you may want to consider is using dynamips to practice and cover as many features as possible (such as R&S and Security) then go to online rack rental a couple of weeks before the exam. For track like security, you may want to invest in Firewall and VPN hardware, then connect them to dynamips. To practice IDS and for final preparation before taking the exam, you can use online rack for several days. List down all your options then make the pros and cons from each of them before you decide.

Do you know people who passed using dynamips only? Yes, I know many people have passed CCIE lab using dynamips/emulator. In fact, for my third lab which is Service Provider track I practiced only using the emulator similar like dynamips. And no, I won't tell you what it is nor I would discuss about it in this blog.

Do you think the people who passed using dynamips/emulator only are not real CCIE, since they never touch real routers? No, there is no such thing. Passing CCIE lab just means you pass a lab exam. What makes a difference later on is your experience and expertise in real life. So someone may pass CCIE using only emulator and never touch the real routers, and he is still a CCIE. Later on he can gain experience and expertise with real routers. That's what matter at the end of the day.

Will you teach me how to configure dynamips/other emulator? No. RTFM. Googling.

Will you send IOS for me to use in emulator? No. It's actually illegal to run IOS software without license, but for practice lab at home I don't think Cisco would bother chasing you. But I won't send any IOS.

How to find info if I have issue with dynamips? Again, RTFM and googling. And you should join the forum and become active member to discuss it. As I mentioned above, if there is any issue when you practice CCIE with emulator, it may come from wrong config, IOS bugs or bug in dynamips. So by becoming active member in the forum, and if you are willing to use the emulator heavily, you can contribute if you think the issue is from dynamips itself. Help the community to maintain and develop this wonderful emulator.

So should I use emulator or buy real lab to practice CCIE? ????!@#%&* Scroll up and read again from beginning.