

Report 3: Final Assessment

Please complete all fields.

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Company:	Cisco Systems
Department/Team:	ASA Dev-US
Project Name:	Avatar - Next Generation Firewall – Network Security

1. How did you like working for this company?

- The tasks assigned to me for an intern role is really appreciated. I felt that the work that I have been doing is important and would create an impact on the production codebase.
- I had gotten an internship after my undergrad and worked for Cisco Systems for a total of three years. I felt home being here for the summer internship and would love to come back if given the opportunity.
- I felt happy working for this company and satisfied when I was able to finish up the assigned tasks.

2. Did you complete your project goals?

- Yes, I have completed my project goals.
- I was able to grasp the concepts of Umbrella Connector such as fail-open, local-domain bypass, umbrella-traffic, umbrella-config, registration, DNScrypt, multi-context, EDNS (datapath), existing Inspect DNS policies, along with dependent features such as handling network issues, NAT, VPN, and syslog messages.
- After gaining knowledge, I worked on getting the test scripts for the above features and integrated them with Continuous Integration Manager (CIM), Continuous Integration/Continuous Development (CICD) framework for full automation.

3. What experience did you gain?

- I have gained so much experience as part of this summer internship ranging from technical – code revision, code testing, automation, debugging, and non-technical - communication with peers, teamwork, team building, formal communication – oral and writing.
- I was exposed to many networking technologies such as routing, switching, network troubleshooting, and security technologies such as Adaptive Security Appliance, Firepower Threat Defense, and Umbrella cloud connector.
- I also gained many platform and usage of tools knowledge such as using PyCharm GUI for test framework, pyATS- library for an automated testing system, Script Development Tool -SDT, installing and managing containers.
- Furthermore, I gained knowledge by setting up a network in the lab involving switches, ASA, cabling, and maintenance of lab for the team.

4. In what ways do you feel you were well prepared for this job?

- I have worked with Cisco for almost around three years in Server Virtualization team. This work experience has helped me a lot in the first initial days of work.
- I have also completed certification courses like Cisco Certified Network Professional-CCNP, which has helped me in understanding the existing lab topology with ease.
- I have taken courses relating to systems, such as CS402 Operating Systems by Bill Cheng, which has guided me on how to approach programming for any systems relating to multi-threading, tokens, mutex, virtual file system, threads, processes, kshell, interrupt handling, shadow objects, and other kernel concepts.

5. In what ways do you feel you could have been better prepared?

- My learnings from CCNP Routing and Switching and three years of work experience with Cisco were well put to practical use in my summer internship.
- My knowledge about network security was only at basics before joining the team. Since I was put in the security domain, I think any Network security course from USC would have helped me to ramp up with the team quickly.

6. Other comments?

- My manager Jingnan Yao believes the fact that feedback doesn't have to be exchanged. when we sit for a 1:1 meeting. Jingnan actively participated in almost all of the day to day scrum meeting and there was more room for me to receive or share feedback. She has always been a "mom", to the team members, something I really appreciate about her. One of the things I admire about her is the positive impact she has and how it transitions to the team members as well.
- I don't have anything to list about things that didn't go well, as everything was well-taken care from onboarding to exit formalities.