

SCALE FOR PROJECT BGP AT DOORS OF AUTONOMOUS SYSTEMS IS SIMPLE (/PROJECTS/BGP-AT-DOORS-OF-AUTONOMOUS-SYSTEMS-IS-SIMPLE)

You should evaluate 3 students in this team



Git repository

`git@vogsphere.42paris.fr:vogsphere/intra-uuid-91827d88-934e-41d9-9`

Introduction

Please comply with the following rules:

- Remain polite, courteous, respectful and constructive throughout the evaluation process. The well-being of the community depends on it.
- Identify with the student or group whose work is evaluated the possible dysfunctions in their project. Take the time to discuss and debate the problems that may have been identified.
- You must consider that there might be some differences in how your peers might have understood the project's instructions and the scope of its functionalities. Always keep an open mind and grade them as honestly as possible. The pedagogy is useful only and only if the peer-evaluation is done seriously.


Guidelines

- Only grade the work that was turned in the Git repository of the evaluated student or group.
- Double-check that the Git repository belongs to the student(s). Ensure that the project is the one expected. Also, check that 'git clone' is used in an empty folder.
- Check carefully that no malicious aliases was used to fool you and make you evaluate something that is not the content of the official repository.
- To avoid any surprises and if applicable, review together any scripts used to facilitate the grading (scripts for testing or automation).
- If you have not completed the assignment you are going to evaluate, you have to read the entire subject prior to starting the evaluation process.

- Use the available flags to report an empty repository, a non-functioning program, a Norm error, cheating, and so forth.

In these cases, the evaluation process ends and the final grade is 0, or -42 in case of cheating. However, except for cheating, students are strongly encouraged to review together the work that was turned in, in order to identify any mistakes that shouldn't be repeated in the future.

Attachments

 subject.pdf (<https://cdn.intra.42.fr/pdf/pdf/68399/en.subject.pdf>)

Preliminaries

If cheating is suspected, the evaluation stops here. Use the "Cheat" flag to report it. Take this decision calmly, wisely, and please, use this button with caution.

Preliminary tests

- Defense can only happen if the evaluated student or group is present. This way everybody learns by sharing knowledge with each other.
- If no work has been submitted (or wrong files, wrong directory, or wrong filenames), the grade is 0, and the evaluation process ends.
- For this project, you have to clone their Git repository on their station.

Consignes générales

General guidelines

- During the defense, whenever you need help to verify a point, someone from the group being evaluated should be able to help you..
- Check that all the files needed to configure the application are stored in the folders P1, P2 and P3. These folders must be located in the root of the repository.
- Run GNS3 now.

Mandatory part

The project consists in setting up several infrastructures with different constraints. Make sure that all of the following points are met.

Project overview

- A person from the group being evaluated should explain simply:
 - The basic functioning of GNS3.
 - The global operation and the interest of BGP.
 - The differences between layer 2 and layer 3 in a network.

Part 1 - Theory

- A person from the group being evaluated should explain simply:
 - What is a packet routing software.
 - What is the BGPD service requested in the subject.
 - What is the OSPFD service requested in the topic.
 - What is the routing engine service requested in the topic.
 - What is Busybox asked in the subject. If something does not work as expected, the evaluation stops here.

Part 1 - Practice

- A person from the group being evaluated should simply show you with explanations:
 - How to set up the docker images requested in the topic. A small explanation of each image is expected.
 - How to import docker images into GNS3.
 - How to activate these imported machines in GNS3.
 - How to access these machines in GNS3.
 - Show that the services requested by the subject are active in these active machines. If something does not work as expected, the evaluation stops here.

Part 2 - Theory

- A person from the group being evaluated should explain simply:
 - What is a VXLAN and the differences with a VLAN.
 - What is a switch encountered in the subject.
 - What is a bridge encountered in the subject.
 - The differences between broadcast and multicast.
 - The expected operation of the topology indicated in the subject. If something does not work as expected, the evaluation stops here.

Part 2 - Practice - static

- A person from the group being evaluated should simply show you with explanations:
 - The configuration files to set up this part.
 - How to import project 2 into GNS3.
 - How to run these imported machines in GNS3.
 - How to configure all the machines planned in the topology of the subject.
 - Everything must work properly. A simple ping must be used as indicated in the subject. A packet inspection is mandatory. A return close to the example given in the subject is expected here.
 - The VXLAN ID must be set to 10. If something does not work as expected, the evaluation stops here.

Part 2 - Practice - group

- A person from the group being evaluated should simply show you with explanations:
 - The configuration files to set up this part.
 - How to configure all the machines planned in the topology of the subject..
 - Everything must work properly. A simple ping must be used as indicated in the subject. A packet inspection is mandatory. A return close to the example given in the subject is expected here.
 - The VXLAN ID must be set to 10.
 - The differences between this second subpart and the one required before. What are the advantages? If something does not work as expected, the evaluation stops here.

Part 3 - Theory

- A person from the group being evaluated should explain simply:
 - What is BGP-EVPN requested in the subject.
 - The principle of road reflection requested in the subject.
 - What VTEP means as seen in the subject.
 - What VNI means as seen in the subject.
 - The difference between type 2 and type 3 roads seen in the subject.
 - The expected operation of the topology indicated in the subject. If something does not work as expected, the evaluation stops here.

Part 3 - Practice

- A person from the group being evaluated should simply show you with explanations:
 - The configuration files to set up this part.
 - How to import project 3 into GNS3.
 - How to run these imported machines in GNS3.
 - How to configure all the machines in the subject topology.
 - How to disable all HOST machines in GNS3.
 - No type 2 roads should exist. Only type 3 roads should be shown.
 - The learning process is well done on the VTEPs. We will have to start up a single host machine and verify that it is well recognized by our VTEPs. No IP address must be configured on this freshly activated host. A type 2 route must be visible when this host is activated.
 - Now enable all host machines and configure IP addresses on each.
 - Everything must work properly. A simple ping must be used as indicated in the subject. A packet inspection is mandatory. A return close to the example given in the subject is expected here.
 - The VXLAN ID must be set to 10.
 - Packets using the OSPF protocol are visible. If something does not work as expected, the evaluation stops here.

Ratings

Don't forget to check the flag corresponding to the defense

Conclusion

Leave a comment on this evaluation

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