Network Automation Project

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1 Network Configuration

Consider the network in Figure 1. The owner of AS X deployed RIP in their network. The owner of AS Y deployed OSPF in their network. Make the necessary configuration so that the networks in the two ASes can communicate with each other. You will have to:

- Make an address plan for each of the AS.
- Deploy RIP in AS X.
- Deploy OSPF in AS Y.
- Deploy eBGP and iBGP wherever needed.
- Validate the configuration.

Do not forget during the configuration phase to *write* the configuration of the routers. You can then find the router configurations in your project directory. You can also edit your configurations by directly writing in these files and reloading your routers.

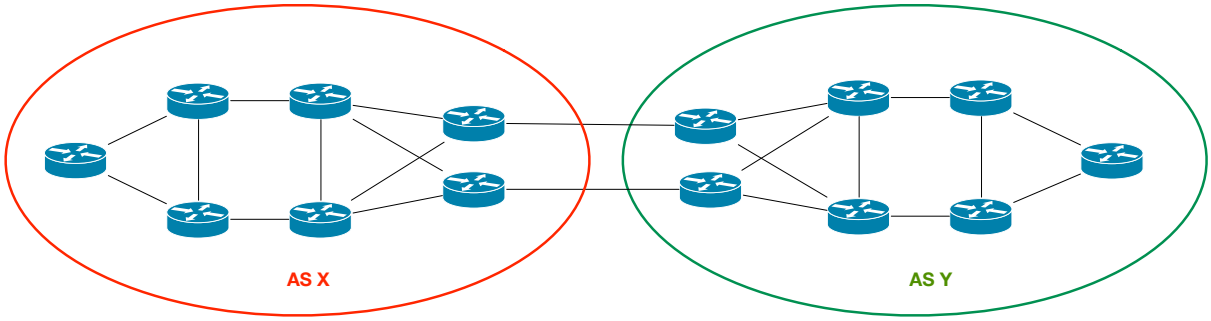

Figure 1: Network setup

2 Network Intent

Manual network configuration is cumbersome and error-prone. Nowadays, network operators describe their network configuration intents using tools. Such intents are processed by external software in order to generate the router configurations that meet their needs.

Your goal is to define a json or xml structure that describes your network intents, and develop software that will generate the cisco configurations using your intent file as an input.

Using the configurations obtained in the first part of the project, define what needs to be put in the intent file in order to automate the network configuration.

3 Network Automation