Network Configuration Generator

The primary purpose of the proposed tool is to generate configurations for switches and routers. In order to do this, it will be necessary to analyze a network diagram and break it into various objects each with specific properties. In the diagram below, there are 13 router objects. Each router has properties such as interfaces, speeds, qos info and ip addresses. There are other types of objects such as external peer routers, cell towers, and access equipment, each with their own properties.

While generating configurations is the primary objective, some other nice features to add would include these abilities:

- Generate and output a diagram.
- Read in the tables from CSV files.
- Integrate with python scripts for extensibility.
- Connect to an existing router and deploy the configuration.
- A GUI to add devices.

Last year a team of students built ROUTEGEN, a web application built using meteor.js, which could be used/modified by the new team to enhance the capabilities. A demo of routegen can be seen on youtube at https://www.youtube.com/watch?v=-QRTONCcA-8
It is not a requirement to use the existing code or even the look and feel, but there are some elements of the routegen code that would allow the new team to focus more on the capabilities needed in the second version of this application.

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