

## 19 - STUDENT - ReFlow - Statistics on Internet Traffic

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Internet traffic statistics can provide valuable information to network analysts and researchers about the traffic, technologies and main characteristics of today's networks. For many years Internet2 maintained a public website with statistics about the traffic in the Abilene network. This site was called weekly reports. Although the statistics made available by Internet2 were limited to the particularities of the Abilene network, the weekly report was referenced in many research works published at top conferences and journals. These works typically used Internet2's weekly reports as a source of information on general Internet traffic. In 2010 Internet2 discontinued their weekly reports project and, hence, we have identified the need for a new public repository containing such kind of information.

During TNC 2013 we had the opportunity to present our project as a student poster, which proposed to recreate the Internet2's weekly reports. Our proposal received a very positive feedback from the TNC community and general public, and it called the attention of many network operators that were willing to collaborate with us. Therefore, we have been implementing what was previously proposed and in this year's poster we want to present the stable version of our system called ReFlow (an acronym of "report on flows"). In short, ReFlow receives as input NetFlow data (or similar) and compute traffic statistics from it. The processing of NetFlow data can be done in either ours or the collaborator's side. At the end, we only keep a report file (JSON format) with the statistics that are stored in a database. No sensitive information is used (e.g., IP addresses). The statistics in our database are accessible via a public website.

In this poster we will provide insights on how ReFlow operates as well as what is the information we have already collected from collaborators since 2013 (real statistics about Internet traffic). These statistics are already available in ReFlow's website and were calculated based on traffic measurements provided by operators from many locations in Europe and South America: DeiC from Denmark andCESNET from Czech Republic (both contacts from TNC 2013), and RNP from Brazil. Therefore, the goal of this poster is twofold: (a) we want to demonstrate the implemented system to the general public, showing how it works and results so far; and (b) we want to publicize the project to operators that might potentially become our collaborators, i.e., providing us with traffic data.