Comparison between MRTG and Tool

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***Abstract*—This is a report comparing MRTG and developed tool for Assignment 1 for Applied Network Management.**

I. INTRODUCTION

Multi Router Traffic Grapher (MRTG) is a free software for monitoring and measuring the traffic load on network links. It allows the user to see the traffic load on a network over a specific period of time in graphical format. It was developed by Tobias Oetiker and Dave Rand to monitor router traffic, but has developed into a tool that can create graphs and statistics for almost anything. It generates HTML pages with images containing .png extensions that shows graphical visuals and comparison of the traffic on the web page. The tool allows us to see hourly, weekly, monthly, and yearly graphs. MRTG uses Simple Network Management Protocol (SNMP) to pool data and use the obtained data to visualize in the form of graphs.

Generally, MRTG is installed on Linux systems by executing the following command:

sudo apt-get install mrtg

II. REPLICATED TOOL

Similar to MRTG, a tool using SNMP, RRD is developed as part of the Applied Network Management Course. This tool uses perl scripting language as the backend, PHP and HTML as frontend tools, and MySql to store data. Perl uses SNMP and RRD. Using perl, SNMP data is fetched from respective devices, and the traffic data is stored in RRD databases. The same data is fetched by the frontend tools to visualize the data in the form of graphs. The graphs are displayed in a webpage, which is a part of tool developed.

III. COMPARISONS BETWEEN MRTG AND TOOL

The interfaces filtered by MRTG and the tool developed for each device were exactly the same. The traffic observed by MRTG and tool are almost similar. There are slight variations and can be seen in the screenshots given below for a device provided at the laboratory of the university with the IP address – 192.168.184.25; Port – 1161, Community – testanm1. Figure 1 shows the graph for interface 11 produced by the developed tool. Figure 2 shows the graph for interface 11 produced by MRTG

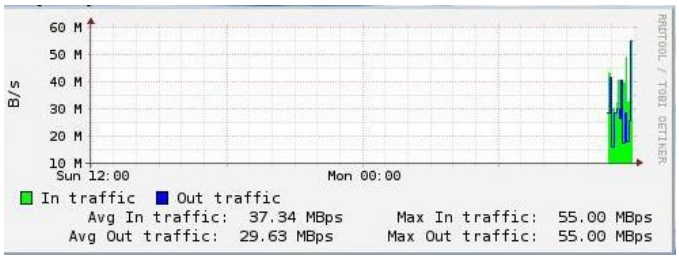

Fig. 1 Statistics for interface 11 produced by the tool developed

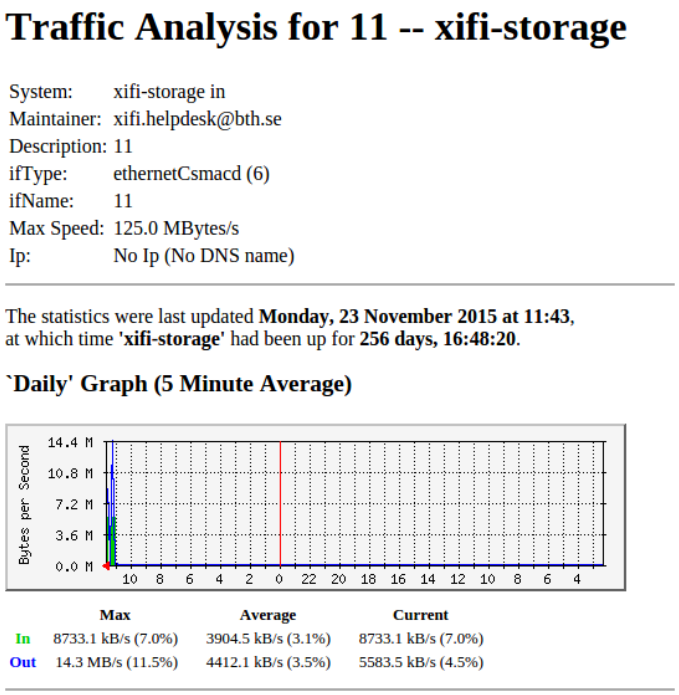

Fig. 2 Statistics for interface 11 produced by MRTG