NAME

iperfsum – Summarize per second data from a libpcap packet capture file

SYNOPSIS

iperfsum [**−V --version -d --debug -h --help -v --verbose**]
[**−f | --filter** *filter_expression*] **−r | --file** *capture_file*

DESCRIPTION

iperfsum prints a per second summary of network activity as seen in a packet capture file. Output includes Date/Time, Packets, Bytes, Throughput(kbps), and Re-transmitted packets (only payload carrying packets).

Bytes and throughput are calculated using the frame size which includes the usually present 14 byte Ethernet header.

Re-transmitted packets are counted when data-carrying TCP (only) packets are seen more than once. Packets are identified with a key that consists of srcIP-srcPort_dstIP-DstPort:SequenceNumber. The first packet is not counted, but the final (presumably successfully delivered and ACKed) re-transmitted packet is counted. Keep this in mind when analyzing results.

When looking at received data non-zero re-transmitted packet counts suggest that duplicate packets were received.

Header lines are printed before the per second summary and include: the input file name, filter_expression, TCP client-server-directions seen, and the capture start date and time. The intention is to use the headers to label analysis plots and possibly to compare the sender / reciever file data to be sure that they are for the same iperf test run.

The primary purpose of the program is to analyze packets captured as part of an iperf test. The primary downside of using it to look at per second summary data for general traffic is that the header lines listing all of the TCP client-server-directions and the packet count for each could be a very long line if many hosts were involved. For iperf analysis this would be a single TCP session-direction.

Optionally, a complete list of the packets is printed (--verbose).

OPTIONS

−r, **−−file** *filename.tcpd*
> The input file. For now, only uncompressed libpcap files can be read. This argument is required.

−f, **−−filter** *'filter***expression'**
> Process only packets matching the libpcap filter expression.

−v, **−−verbose**
> Print a summary line for each packet in the capture file.

−V, **−−version**
> Print the version number and exit.

−h, **−−help**
> Print a short options summary.

SEE ALSO

tcpdump(1), pcap(3PCAP), pcap-filter(7), pcap-tstamp(7), iperf-anal.R (included in the distribution)

AUTHOR

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The current version is available from:

https://www.github.com/meekj/iperfsum

BUGS

The only time bin width is currently one second. Options for smaller bin sizes should be provided.

IPv6 testing was limited, at least one assumption was made that might fail in the future.

Reading of gzipped packet capture files is not yet supported.

Reading of pcap-ng files is not yet supported.