

The sys admin's daily grind: Speedometer

Speeding in the Sticks

Thanks to LTE, state-of-the-art Internet technology has now made its way into Charly's quiet home. Accustomed to the sorrows of low surf speeds, our columnist prefers to make his own measurements. *By Charly Kühnast*

I live in the sparsely populated lower left, lower Rhine area of Germany, or as a good friend once put it, "out in the sticks." Tranquility offers many advantages: Peace and quiet and a green environment, and parents do not need to choose their children's schools based on the quality of the drugs trafficked there.

But I have to admit, there are also some disadvantages: Public transport and a choice of Internet providers are things we have heard about but not actually experienced. If a port becomes available on the regional distributor, Deutsche Telekom graciously assigns a "DSL light" connection with a downstream rate of "up to" 384Kbps. This is the speed to which the Telekom shareholders are looking to slow down all DSL connections at some point, if customers

do not sign up for video on demand from the same source.

As an alternative, you could try Internet via satellite, which might be floating somewhere up in the heavens but offers latencies straight from hell. About six months ago – we are so lucky – a mobile phone company introduced 800MHz LTE with a downstream rate of 21Mbps. Although the latencies are still not what gamers need, for my fellow hinterland dwellers, this radio link is like traveling at warp factor 8. My fingers were wet with sweat when I signed the contract.

Now that I have the LTE router installed on my window sill, I want to know how much of this boldly advertised bandwidth actually reaches my home. Nigh on a thousand websites offer speed tests, but they all have one thing in common: I do not trust them. They

also use Flash. I'm looking for something more like a lean and sexy speed test for the command line of my Linux firewall, because this is where the cable from the LTE router terminates. My tool of choice is Speedometer. If you cannot find it in the repository of your favorite distribution, just visit the website [1].

Traffic and More

For a first impression, I launched a browser to download an ISO image from what I know to be a fast server and ran Speedometer while the download was in progress:

```
speedometer -s -rx eth0
```

The command only measures the downstream speed (-rx); the -s parameter switches the unit from the default bytes per to bits per second. For upstream speed, you need a similar command:

```
speedometer -s -tx eth0
```

You can do both at the same time, as you might have expected:

```
speedometer -s -tx eth0 -rx eth0
```

Speedometer then stacks two graphs. If you prefer adjacent graphs, add -c in front of the second data source:

```
speedometer -s -tx eth0 -c -rx eth0
```

Unfortunately, the graphs are scaled logarithmically by default, which is not always useful. For a linear scale, use the -l parameter (Figure 1). By the way, the measurements showed 17Mbps downstream and 6.5Mbps upstream. On the downside, LTE was interrupted two or three times for a few minutes on the first few days. Do you think I should keep my 384Kbps hinterland DSL link, just in case? ■■■

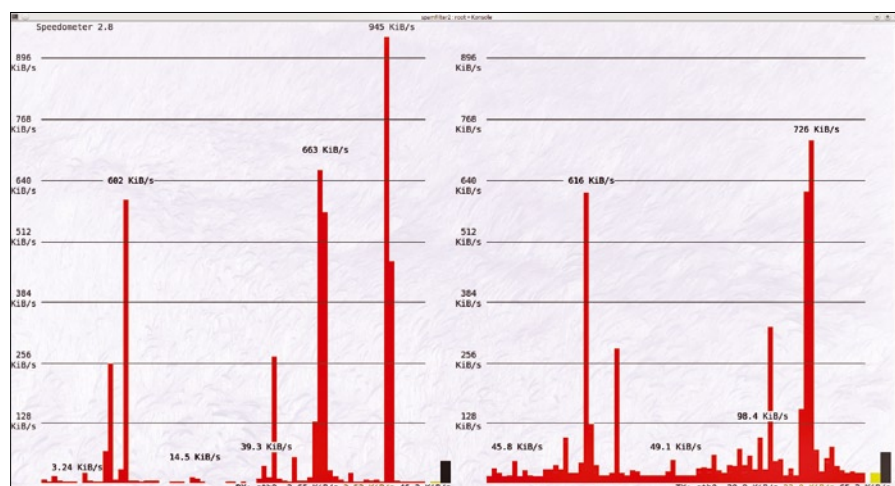


Figure 1: Long peaks in the two Speedometer graphs indicate a breakthrough on the Rhine – fast data throughput.

CHARLY KÜHNAST

Charly Kühnast is a Unix operating system administrator at the Data Center in Moers, Germany. His tasks include firewall and DMZ security and availability. He divides his leisure time into hot, wet, and eastern sectors, where he enjoys cooking, freshwater aquariums, and learning Japanese, respectively.

INFO

[1] Speedometer:
<http://excess.org/speedometer/>