

To process the large amount of data generated by its future particle accelerator, CERN currently investigates the use of data-intensive Grids that span the entire world. In the DataTAG project ([www.datatag.org](http://www.datatag.org)), we improve the performance of existing network protocols so as to optimise bandwidth utilisation in the gigabit WANs that underlie these Grids. In this talk, we will present our latest work on TCP, in particular new algorithms used for increasing/decreasing traffic and their implementation in the Linux kernel.