

The changes are aimed at processing network traffic, which increases operational efficiency. The new code was successfully tested and is now included in the Linux kernel version 6.13. According to Martin Karsten, a professor from Waterloo, if large companies like Amazon, Google, and Meta implement this method in their data centers, it will save gigawatt-hours of energy worldwide and make almost all internet services more energy-efficient.

Karsten worked with Joe Damato, an engineer from Fastly, and the code is based on research published by Karsten and graduate student Peter Kai. Their research identified inefficiencies in server operations with network traffic and proposed small changes in the Linux system that improve performance and energy efficiency.