

Will coronavirus bump web traffic into the slow lane?

March 26 2020, by Laurent Barthelemy and Jules Bonnard



Are we going to overload?

With more than one third of the globe's population confined to their homes in an attempt to limit the spread of the coronavirus, some are asking if the increased demand being put on the internet could substantially slow down web traffic.

To what extent has web traffic grown with billions watching on screens at home?

According to Nokia, one of the world's three largest telecoms equipment producers, most countries' telecoms networks are currently seeing a rise in [internet usage](#) of between 30 and 45 percent, with peaks being around 20 to 40 percent higher than this time last year. The Finnish firm says there is an "unprecedented rise" in use of applications which require little transmission delay during normal office hours, with videoconferencing tools such as Skype or Zoom seeing usage skyrocketing 300 percent in the United States, while video game usage is up 400 percent!

Are we in record traffic territory?

Germany's DE-CIX internet exchange, which is one of the world's most substantial [web traffic](#) hubs, has recorded historic usage peaks across its connection infrastructure in both Europe and the United States.

On March 10, it saw a peak of an unprecedented 9.1 terabytes per second data throughput—or 1,165 gigabytes. However, DE-CIX says it believes it is "prepared" for even higher activity levels which it will meet, it says, "with no problem".

Is the internet under strain?

Telecoms networks consist of a complex array of infrastructure. When users say they have a delay or unstable connection it is very difficult to assess whether the signal congestion is due to a problem with their equipment, their telecoms operator or the [global network](#).

Some services—for examples, online learning or business VPNs—can

also appear saturated to users owing to insufficient provider bandwidth rather than the networks themselves being behind choke points.

"For now, the networks seem to have stood up to the increase" in [traffic](#), says Nokia, although "these increases were supposed to happen over several years" rather than suddenly occur without notice.

Why did Netflix, YouTube, Facebook, Disney+ decide to dial down resolution?

The EU's internal market commissioner, Thierry Breton, called on online video platforms to reduce pressure on the web infrastructure in order to accomodate an increase in working and studying from home. Several agreed to temporarily lower resolution for netizens.

For example, Disney+ launched last Tuesday in seven European countries—the UK, Ireland, Germany, Italy, Austria, Switzerland and Spain—with a bit rate reduced by 25 percent while delaying its entry into France until April 7.

Streaming video has been identified as the most voracious user of available bandwidth.

At the end of 2018, 53 percent of the traffic of France's main telecoms providers came from Netflix, Google (which notably owns YouTube), Akamai (a distributor of third-party content) and Facebook, according to French telecoms regulator Arcep.

Reducing resolution constitutes a "precautionary measure," says Jean-Luc Vuillemin, Executive Vice President International Networks with Orange.

"We do not know how long this situation is going to last, and the real question being: if data volume rises day after day—will we be able to get boots on the ground in the next two to three weeks in order to increase our [network](#) capacity," he told AFP.

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