

codavel

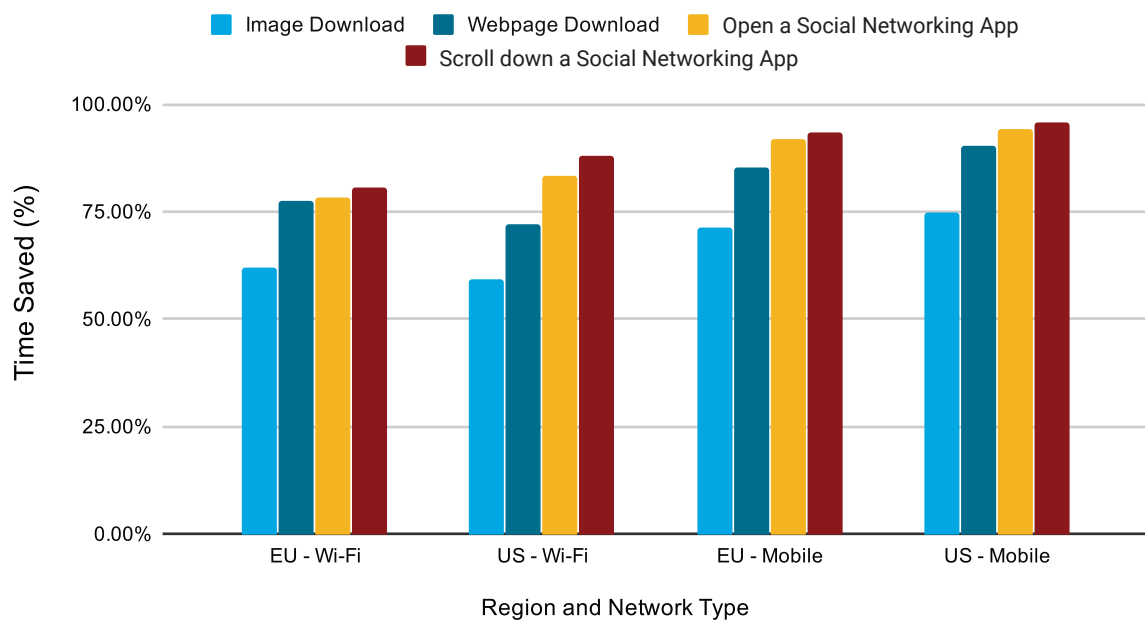
Performance Report

Shielding every user from Wi-Fi, 3G or 4G network instability

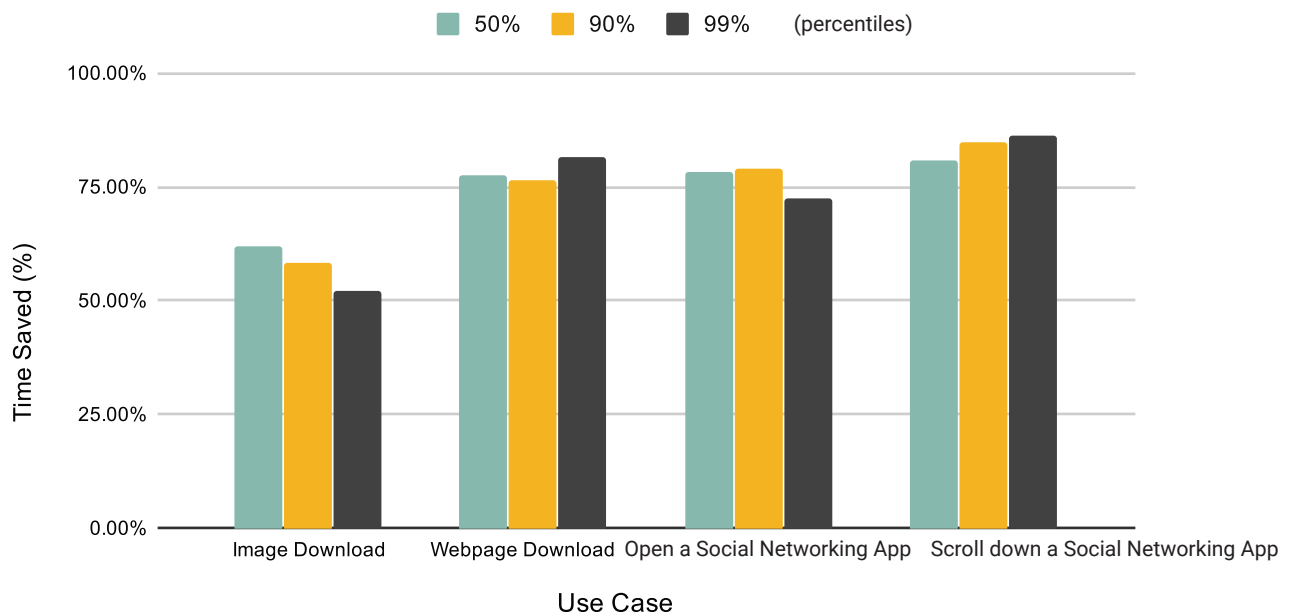
Bolina is a new end-to-end protocol specially designed for mobile apps that ensures:

- **Significant reduction of load times over any kind of network and for all percentiles**
- **Robustness to packet loss and latency**

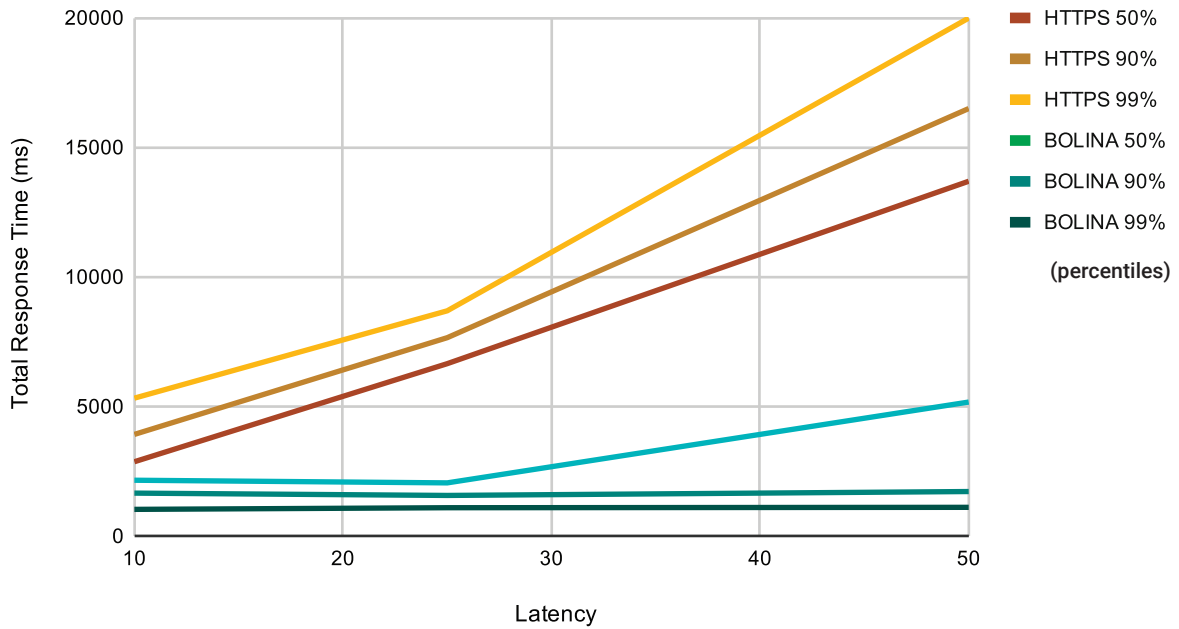
At a Glance



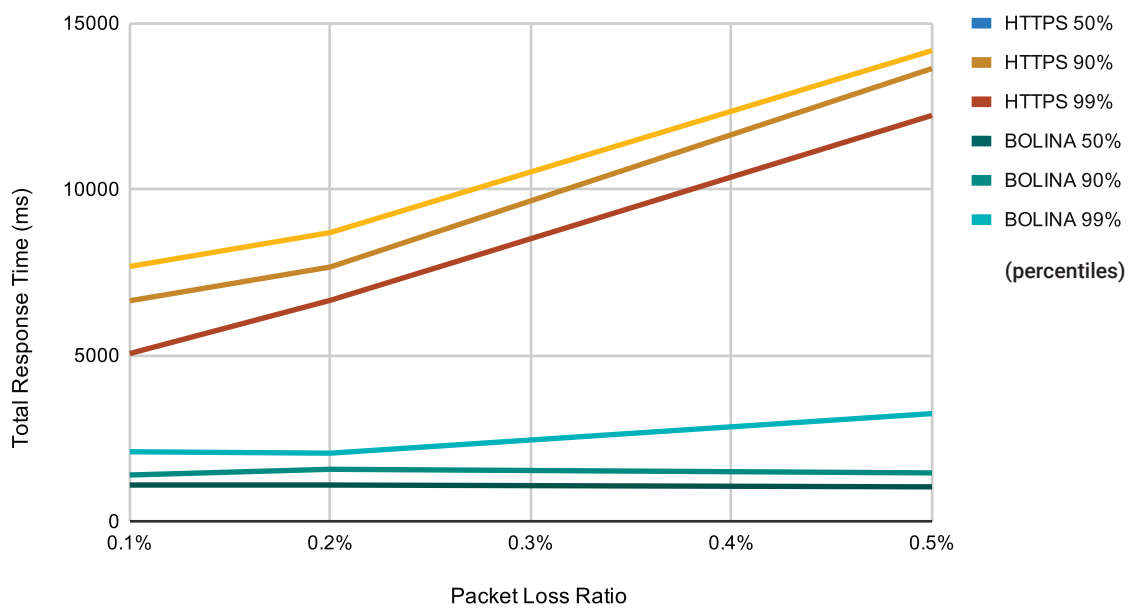
EU Wi-Fi



Open a Social Networking App | PLR: 0.2%



Open a Social Networking App | Latency: 25ms



Assumptions and System Setup

Based on the analysis presented [in this blogpost](#), we assume the network and data usage profiles presented on the following tables.

Mobile Device: OnePlus 5 (with Android 9.0)

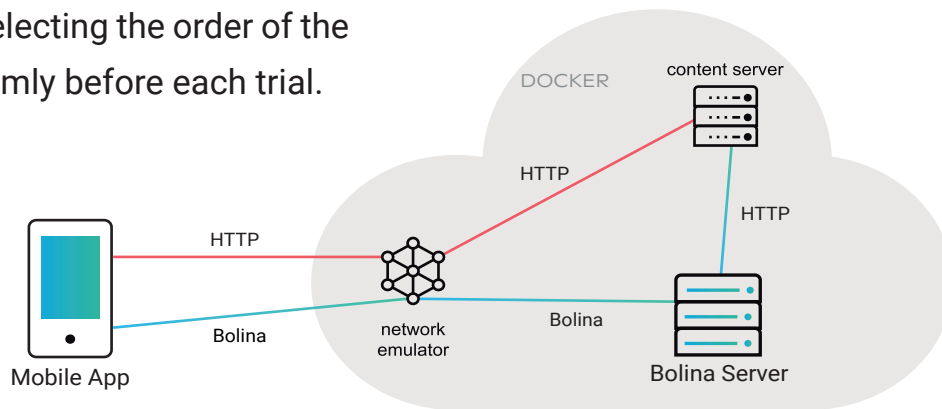
Server: Linux Ubuntu 18.04, Quad-Core CPU, 8GB RAM

Network: WiFi, 5Ghz, 802.11ac, uncongested channel

App: The tests were performed with Codavel's [Demo App](#) slightly modified: we removed the time restriction and calculated the time it took to download all the files of each use case. In the scenarios that had multiple requests, we used five simultaneous threads, selecting the order of the files randomly before each trial.

Network Profiles		Wi-Fi	Mobile
EU	Latency	25ms	50ms
	PLR	0.1%	0.2%
US	Latency	25ms	50ms
	PLR	0.2%	0.5%

Action	Data Profile	
	# Requests	Total Response Size (MB)
Open a Social Networking App	17	12.66
	2	2 x 0.0000095
	5	5 x 0.2393
	6	6 x 0.4932
	2	2 x 1.1
	1	1 x 1.9
	1	1 x 4.4
Scroll down a Social Networking App	21	20.08
	2	2 x 0.0000095
	3	3 x 0.2393
	5	5 x 0.4932
	6	5 x 1.1
	6	6 x 1.9
Image Download	1	0.49
Webpage Download	1	1.90



LEARN MORE

- Explore Bolina SDK and try it for yourself [here](#)
- Check [our documentation](#) to see how easy it is to integrate Bolina
- Discover what's behind Bolina at our [technology page](#)

Here you can find a previous version of this performance report, with a comparison between Bolina and HTTP.

