

Gemini, a modern protocol that looks retro

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What's wrong with the Web

- Pervasive surveillance,
- Slowness,
- Little choice of browsers,
- Distraction above content.

Why?

Partly because excessive complexity.

- Too much information sent (User-Agent:, 3-rd party resources, cookies. . .),
- Too much code to run,
- Cannot develop a browser from scratch,
- Too many things to prioritize form over content.

Possible solutions

- Block the worst (ad blocker, restrictions on cookies, NoScript. . .),
- A lightweight browser (lynx, Dillo. . .),
- Common limits of these approaches: you cannot know in advance if it will break the site or not.

Gemini does it

- Gemini is separatist: new protocol and new format,
- Simple protocol, not extensible : no cookies, no headers (User-Agent:.. .),
- New format (gemtext) very simple: subset of Markdown. No pictures, no hyperlinks,
- Back to Gopher? No, we have URI, TLS, UTF-8. . .
- Saves energy, too!

Demo 1

The command-line tool Agunua

Demo 2

Running manually the protocol

Gemini software

- Ease of writing software is one of the goals of Gemini,
- Indeed, it worked, everyone, and his cat, wrote a client or a server,
- All programming languages including Fortran, Prolog and assembly language.

Take me to your leader

- Today, the written specification is “almost” done,
- Governance is simple, the founder, Solderpunk, decides.

Isn't it too brutalist?

- No cache control,
- Do you like TOFU?
- Can users live without images?
- Translating existing content without hyperlinks.

Is it suitable for retrocomputing?

- It runs on low-end machines (Raspberry Pi 1),
- But not on 8-bits game console :-)
- TLS and Unicode require resources,
- More low-tech than retro,
- If you really need retro-computing, you may use Gopher,
- Gemini tries to be usable in 2021.