# The Gopher Times

Opus 3 - Gopher news and more - Jan. 2022

### **Heaven and computers**

tgtimes

Before the era of smartphones, laptops, before Windows and Apple, there were pioneers who took the fun of computers from the hands of the few who could afford computers, and shared them massively so that mere individuals could afford it.

An ocean of creativity spread. Art of all kinds were made on these new toys, that were permitting many to try on their own, or enjoy a tune of 8-bit music, a demo scene, play a video game, ASCII art...

Offering these pioneers a one-way ticket to enter the legend, 8bitlegends.com builds a corner of peace, making some room in our heart for the 8bit heroes.

https://8bitlegends.com/

# Bitreich Radio playing auto-generated 20h music

Bitreich Radio was lacking love. The scripts were bugged and outputted strange music. To change this, a redesign was done. See

gopher://bitreich.org/1/radio

for the new gopherhole menu.

When you listen to

gopher://bitreich.org/9/radio/listen

you will hear music auto-generated without any copyright. It is relaxing music you can listen to in a background, on a toilet, all for free and forever.

The #bitreich-radio title display has been fixed too.

I hope, this increases the listening experience.

All recommendations, especially about more autogenerated music, are welcome. We need to escape the copyright mafia trap.

Sincerely yours, Chief Music Manager (CMM)

## Computer that lasts forever

ploum

More RAM, faster CPU, more cache size, lower latency. Computer industry never sleeps while trying to raise the bar over and over. It plays with the limit of physics to keep the Moore's Law dream going.

By Building faster computers, hardware engineers offer more resources to software makers, allowing them to build more ambitious projects. The computer performance discipline sure has been worked up thoroughly.

If the software comsumes all the extra computing power for its own goal, then we are conjointly building very fast snails.

This conquest for a better cost/performance balance is one direction for the evolution of computers, but it is also possible to imagine a race for better reliability and durability instead.

Ploum offers a vision of what computers are like when maximizing durability of the hardware, but also the software ecosystem, so that a computer built today still be useful in 50 years, without upgrades (not preventing upgrades to happen).

An old knife is still a piece of metal that can be sharpened over again to be able to cut long after it was built. Could this also be true for computers?

https://ploum.net/the-computer-built-to-last-50-years/

# Year End Meeting 2021 Recordings On- 20h line

For everyone not able to join the 2021 year end meeting, here are the recordings:

```
gopher://bitreich.org/1/end-year-meeting/2021
```

Thanks to everyone who contributed to bitreich over the last five years!

Sincerely yours, Chief Community Manager (CCM)

## 100 years of radiodiffusion

tgtimes

The Internet existed forever: books and printed press have always been around for communicating ideas and information, and evolved progressively to become what the Internet is today.

Letters were carried by messengers riding horses, postal train, or airplanes. Long-range communication evolved slowly for a long time, but has accelerated rapidly in recent years, until today extreme bandwidth and latency.

The common pattern: a new discovery in electronics permits a new way to communicate information over a long-distance, with a lightning-fast adoption all around the world:

- 1919 wireless telegraphy and music transmission in Germany, Netherland and United-States
- **1920** daily radio programmes in England, United-States and USSR
- **1921** radio broadcasting from Eiffel Tower with 900 W power intensity
- **1922** foundation of the BBC and arrival of 2000 W broadcastings

A few years before, the long-range communication tool of choice was paper.

A few years later, the telephone and television started to develop.

# Bitreich University reaches 100% em- 20h ployment rate

The first students are leaving the MEME university degree programme. We, the board of meme professors, would like to thank all students who participated.

All students found jobs in different careers: Politics, News Reporters, Youtubers, Twitter Conspiracy Trolls or Bakers. Just watch your local news, radio, TV or antisocial network for them.

This means, there is a 100% employment rate!

We are so proud and hope for a new semester of successful students.

Sincerely yours, Chief Meme Caretaker (CMC)

## A world of tiny creatures

tgtimes

Ants. Is that what we would look like to the eyes of a giant? What if one of those giants had the curiosity of looking down on our world, watching all our tiny activities, our tiny trades, our tiny farming, our tiny meals, our tiny families, our tiny lives?

E.O. Wilson was one of these giants, looking at the ants: the real ones, the insect ones: An entomologist, someone dedicated to the study of insects.

After 92 years of empassioned life, E.O. Wilson is fading away, joining the soil, which he spent his life observing. Closing his own book, while at the same time inviting everyone to open their eyes, and look, carefully, at this world of tiny creatures.

I want to thank all contributors for patches and other feedback.

You can find the releases on codemadness (primary) and bitreich (mirror).

```
gopher://codemadness.org/1/releases/
https://codemadness.org/releases/
gopher://bitreich.org/1/releases/
```

#### It has the following changes:

#### stagit:

- Print the number of remaining commits.
- Ignore '\r' in writing diffs and file blobs.
- Percent encode characters in path names, like '?' and '#'.
- Encode XML / HTML entities in the project name.
- Add EXAMPLES section to the man pages.

#### stagit-gopher:

- Print the number of remaining commits.
- Add EXAMPLES section to the man pages.

#### Thanks to:

- quinq: for the remaining commits patch.
- srfsh: for suggesting to look into percent encoding characters.

(cl | g)it commander Bob

The web is well-known for its drift toward *platform effect*: reproducing the features of the underlying operating system from one of its applications, in this case, the web browser. This is largely made possible through javascript, and the advent of WebAssembly can only contribute more to this.

But making an assembly language a standard for shipping graphical applications needs not to rhime with excess and abuse of a platform. A more conventional approach would be standardising high-level API and protocols, for which low-level drivers would be written. Instead, Uxn standardises as low as the assembly language itself.

Yet, Uxn has nothing in common with Java:

>> Features were weighted against the relative difficulty they would add for programmers implementing their own emulators.

Say welcome to this rabbit hole, inviting you with a fresh take on making computers work for end-users.

Impressive acheivements were reached, such as portability of this platform on things as small as a 32bit microcontroller:

>> Currently, there are ports (not all are complete) for GBA, Nintendo DS, Playdate, DOS, PS Vita, Raspberry Pi Pico, Teletype, ESP32, iOS, STM32, STM32, IBM PC, and many more.

https://100r.co/site/uxn.html

To support local gopher politics, we added a banner to bitreich.org gopherhole. This is there to support political movement into more gopher support all over the world. Please support your local gopher charity, if you can.

Please do not block the banner in your gopher adblocker!

```
+======++######### ALL GOPHERS MATTER ]###########++
+##[ DONATE TO YOUR LOCAL GOPHER CHARITY ]##+
+############## [ CLICK HERE ]###############
```

Sincerely yours, Chief Political Officer (CPO).

### The UNIX calendar(1) command

tgtimes

It is probably there sitting in /usr/bin, the calendar(1) command can offer you a fair dose of flexibility that web-based or smartphone-based calendars lacks.

By storing events in a single file of text edited by hand, calendar(1) brings the comfort of your existing text editor to manage events with a simple syntax:

- one line per event: first a date, then a tab, then a description.
- A line starting with a tab implicitly has the same date as the previous event.
- Empty lines are ignored, and the C preprocessor brings #include and /\* comments \*/ as needed.

No need to format everything right away: taking notes at the bottom of the file, in the middle of a phone call and formatting after hanging-up... It is it trivial to manage a calendar file.

While the calendar(1) command is run, events for today and tomorrow are printed: as a digest of what is upcoming. A command line flag permits sending this digest to all users by email, making it a complete calendar software suite from edition to reminder.

There is even support for weekly, monthly and yearly (birthdays) events.

Sharing calendar events is as easy as sending the section of the calendar file by email, and synchronising the calendar across devices is a matter of synchronising a single file.

By adding a few more custom syntax rules on top of those supported by calendar(1), readable text can be maintained with little effort.

Jan 23	09:00	Breakfast: cooked eggs and fruits @ Home Sweet Home
	10:30	The Gopher Times proof-reading @ ircs://irc.bitreich.org/
	15:30	On-call duty untill! @ https://the-dull-gull.corp/login
Jan 24	12:30	Lunch break in town with folks @ that small cafe that does snacks
Jan 26	19:15	Call with friends abroad @ mumble://example.com/

## Gopher log4j contest

20h

We hereby announce the gopher log4j contest. Anyone sending in the patches to java to allow jdni gopher:// loading will be awarded with one year free bitreich premium membership. One drink per day is free.

### Please post your patch on

```
ircs://irc.bitreich.org/#bitreich-en
```

and you will be rewarded with your membership pass and a free towel for the member pool.

Sincerely yours, Leading Organisational Gardener 4 Java (LOG4J)

>> As a highly trained academic researcher, I spend a lot of time trying to advance the frontiers of human knowledge. However, as someone who was born in the South, I secretly believe that true progress is a fantasy, and that I need to prepare for the end times, and for the chickens coming home to roost, and fast zombies, and slow zombies, and the polite zombies who say "sir" and "ma'am" but then try to eat your brain to acquire your skills. When the revolution comes, I need to be prepared; thus, in the quiet moments, when I'm not producing incredible scientific breakthroughs, I think about what I'll do when the weather forecast inevitably becomes RIVERS OF BLOOD ALL DAY EVERY DAY. [...]

If James Mickens looks like he is a highly trained soldier killing zombies in the doomed lands of System Programming, that is because James Mickens is a highly trained soldier killing zombies in the doomed lands of System Programming.

https://usenix.org/system/files/1311\_05-08\_mickens.pdf

## Annna now on #gopherproject too

20h

With the extension of annua for multi-server support, she is now able to join irc.libera.chat/#gopherproject and help our gopher comrades there.

They will receive the bitreich news and have all the pleasure of annua features, like memes, URI resolvers etc. There is much to find out!

If you want to dig deeper, look at the annna internals:

git://bitreich.org/annna

I hope this brings an influx of new ideas for gopher<>IRC.

### Confessions of a thief

chemla

>>> Below is the beginning of "Confessions of a Thief" from Laurent Chemla. He founded a major French DNS registrar, but before that, was the first to commit online piracy in France (from a Minitel), and worked on development tools for Atari. The book is published online in French and translated below

A thief. How else to name one of the first individual in France to procure itself an Internet access? In 1994, borrowing the clothes of a telecommunication expert, that I was not yet, I obtained from an IT staff employee of a parisian University that he let me an access to Internet. In exchange, I brought him help - relatively - to the building of a network devoted to let student work from home.

I then stole, I confess, this first access to a network that remained to me a mostly unexplored land since my last visits in 1992, mediated by obscure manoeuvres of a friend or through piracy.

This theft benefited to me, I could learn to use a tool long before the majority of the IT crowd, gaining an advance that still persist today.

I stole, but I plead good faith. At this epoch nobody around me did understand what it was about. Would it bit a thief to steal something nobody had interest in? This access was to the reach of only a few testing university students, this access that a small IT company could not afford, I stole it, and I am not ashamed.

For my relatives, I am nontheless an "IT janitor". Programmer to a tiny IT company, I always have been passionated by telematic networks. A passion that costed me, in 1986, to be the first to be guilty of piracy in France, pirated from a Minitel, yes, but to each his glory. As there was not yet any law against IT piracy, I have been incriminated for stealing electrical power. All that ended up in an acquittal, but still, here is a decent start for a thief career!

Indeed, how to name differently someone who constituted its professional network by taking part to associations? We have the impression to contribute unpaid for the many, but we mostly get known and, time after time, the clients get attracted by this visibility. Of course anyone whose professional occupation deals with voluntary sector end-up face to its own consciousness. Not unlike, I suppose, a lawyer who gain clients from the excluded folk that he help graciously and daily. I ignore what its consciousness would tell him, but I know mine is not at rest.

Nowadays again, my activities continue to be lucrative out of Internet, at the time of Nasdaq's fall. How can one earn while everyone loose, if not by cheating?

A thief is on that use to its profit else's good. To me, Internet is a public good and, if serve as commercial gallery for some, it must not limit itself to such a deviation. Internet must first and foremost be the tool that, for the first time in mankind, permitted the freedom of speech, defined as a fundamental human right.

This right, in all its guarantee from our constitutional state, has stayed hypothetical since its proclamation. In France law protects freedom of Speech of syndicates and journalists but no text that permit to the simple citizen to undertake justice, to reach its freedom. What else since, before Internet, this freedom was to the reach of some privilegied? The lawyer protected them because only them needed that protection. Ten years ago, noone would have been able to benefit an as simple, fast and affordable way to expose works, arts or ideas but by vociferating in the street or by climbing the social scale rung by rung to the point of having media's attention. One had to be represented by others with the expression right for themself. Only ersatz. The only freedom that matters is the one available to all and I dont give a damn about those reserved to the mighty or their representatives.

Internet thereby permit to a growing number of citizen to apply their fundamental right to take the parole on the public place. From this point of view, it must be protected such as any other necessary yet fragile resource, such as water we drink everyday. It cannot be reserved to anyone, neither be limited in its usages if not by the common

right. No exception legislation must forbide the exercise of freedom of speech and, as soon as possible, states must preserve the common tool that became a public benefit. And as I use a public good to lead my own fights, yet again, I behave as a thief.

I thereby knew the Internet some time before everybody else, still at the age of the Far West, Eldorado, Utopia. At this era, the network was backed by public money (mostly from United States), the life was happier and the electronic sky bluer. We worked all along, among passionated, inventing new computer objects that even Microsoft did ignore, like Linux or the World Wide Web (you know, the three fastidious \*w\* we have to type in the address of your favorite porn website...) that did not yet exist and that today everybody mistake for the network itself.

We were far from thinking that some day, we would need a plethora of lawyers to organize the network. That some day, we would need interdepartmental comittees to address of the question. That some day, we would have to put black on white the manners not yet named "netiquette" that seemd all so natural to us. Our only desire, share that formidable invention with the most people, make its apology, attract the most numerous of passionated who shared with us their competency, their knowledge and intelligence.

I remember that at this epoch, when I was saying "Internet", my friends looked at me as if coming from another planet. When I transfered a file from a computer from one end of of the world to my own machine - by cabalistic commands typed by hand under an interface working without a mouse pointer - the seasoned IT engineers was assisting to the demonstration as to a bad movie: finding a file was taking hours, reading speeds was worth a sick snail and the file often revealed to be unusable... But while a pal entered in my office, I would show him how by typing a single command line I could share, for a ridiculous price, my work, my knowledge, my files or my data with pure strangers and that could live at the other side of the street as the other side of the world.

Besides from other passionated people, everybody was laughing at me. I could tell them that this thingy would be a revolution for human knowledge, they looked at me in pity and went back to their work.

In the best case, I was told with lucidity "It is a pirate thing.". Some was asking who would that fit, beyond telematic specialists. Other claimed that volontary and free sharing of resources would not have, by definition, any economical future. I was also asked sometimes who would dare to provide such a terrible service. And when I explained them that everything was entirely decentralised, with for only coordination volunteership and good will of all, the same ones was telling me that it could never work at a large scale.

https://www.confessions-voleur.net/

## **Publishing in The Gopher Times**

you

Want your article published? Want to announce something to the Gopher world? Directly related to Gopher or not, reach us on IRC with an article in any format, we will handle the rest.

ircs://irc.bitreich.org/#bitreich-en
gopher://bitreich.org/1/tgtimes/
git://bitreich.org/tgtimes/