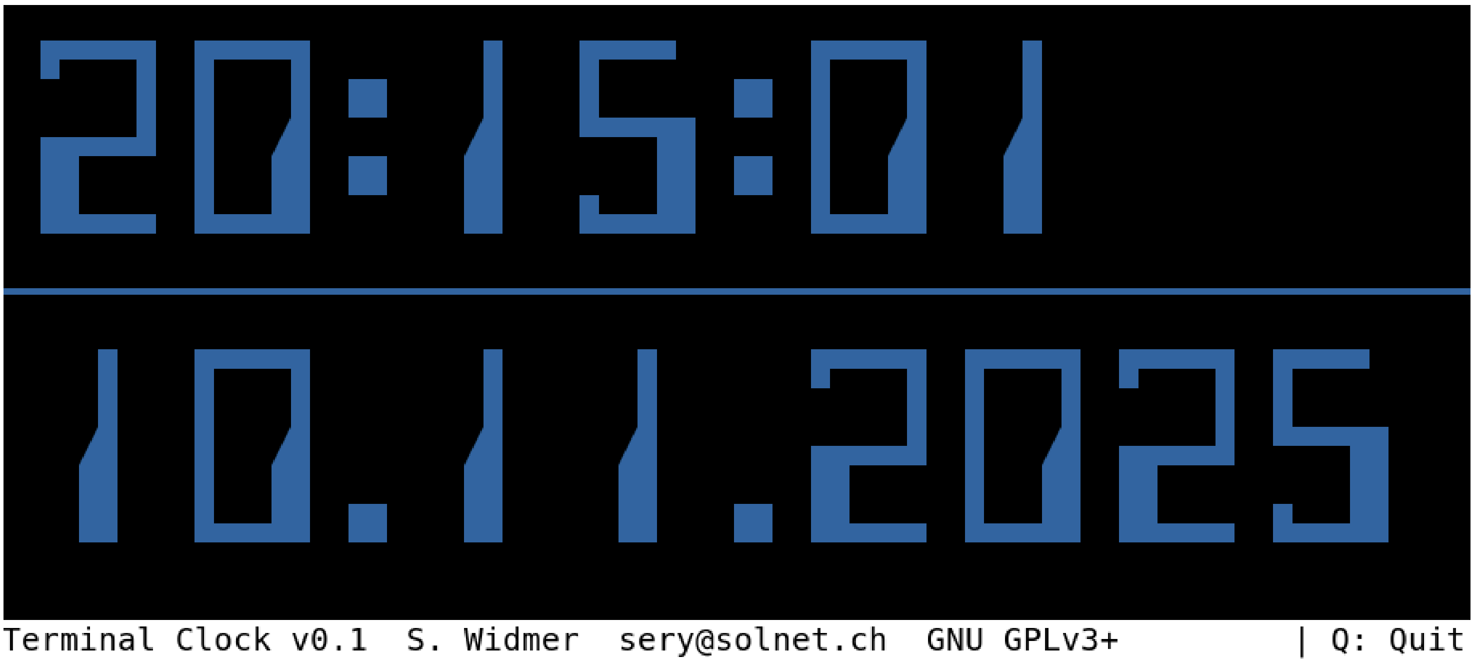
Terminal Shell Clock

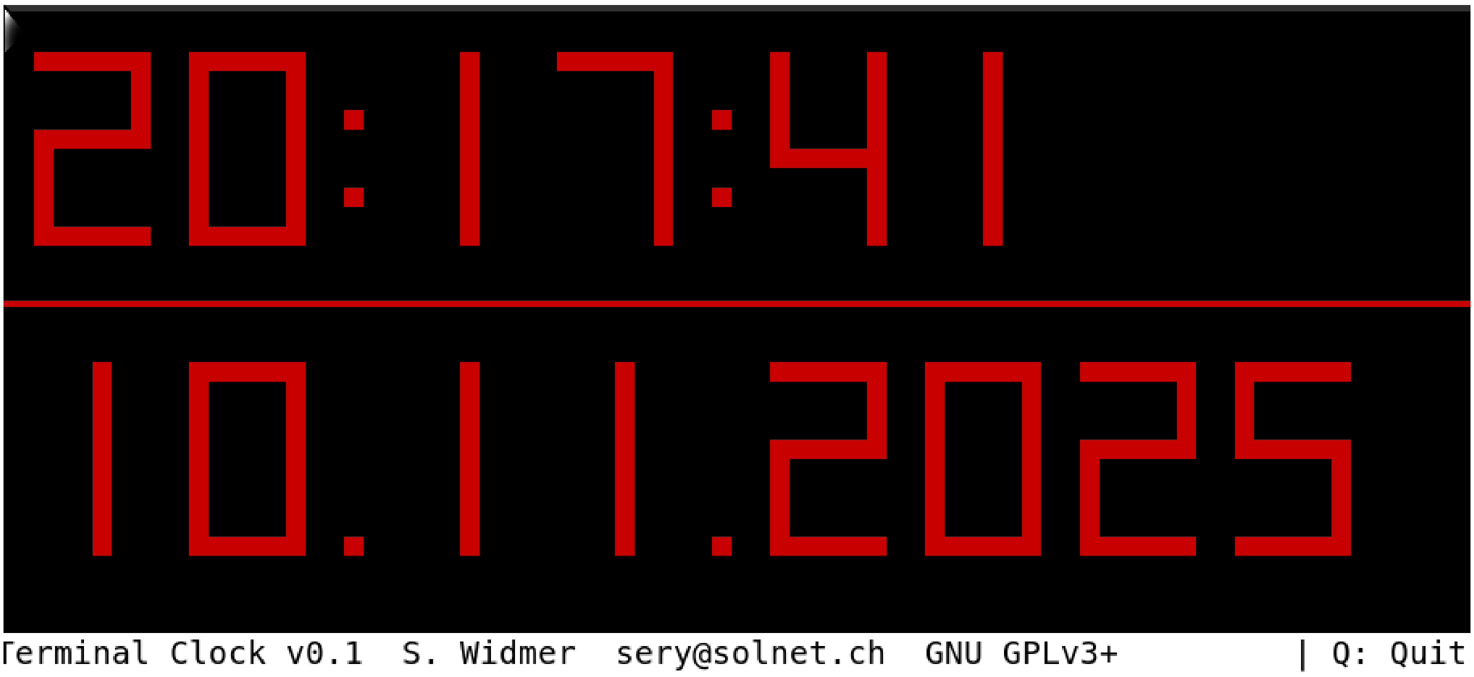
Preface



```
Terminal Clock v0.1  S. Widmer  sery@solnet.ch  GNU GPLv3+          | Q: Quit
```

I am coding this clock just out of fun and because I admire beautiful and funny clocks. Instead of searching and downloading an old terminal-clock, I decided to rather create my own one and include the date as well.

Programming such a clock with the Unicode character set using bash script is almost like programming with BASIC on my beloved CBM 8032 or C64 back in the day. Pure, raw and sometimes spaghetti code. Ah, those were the days!



```
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```
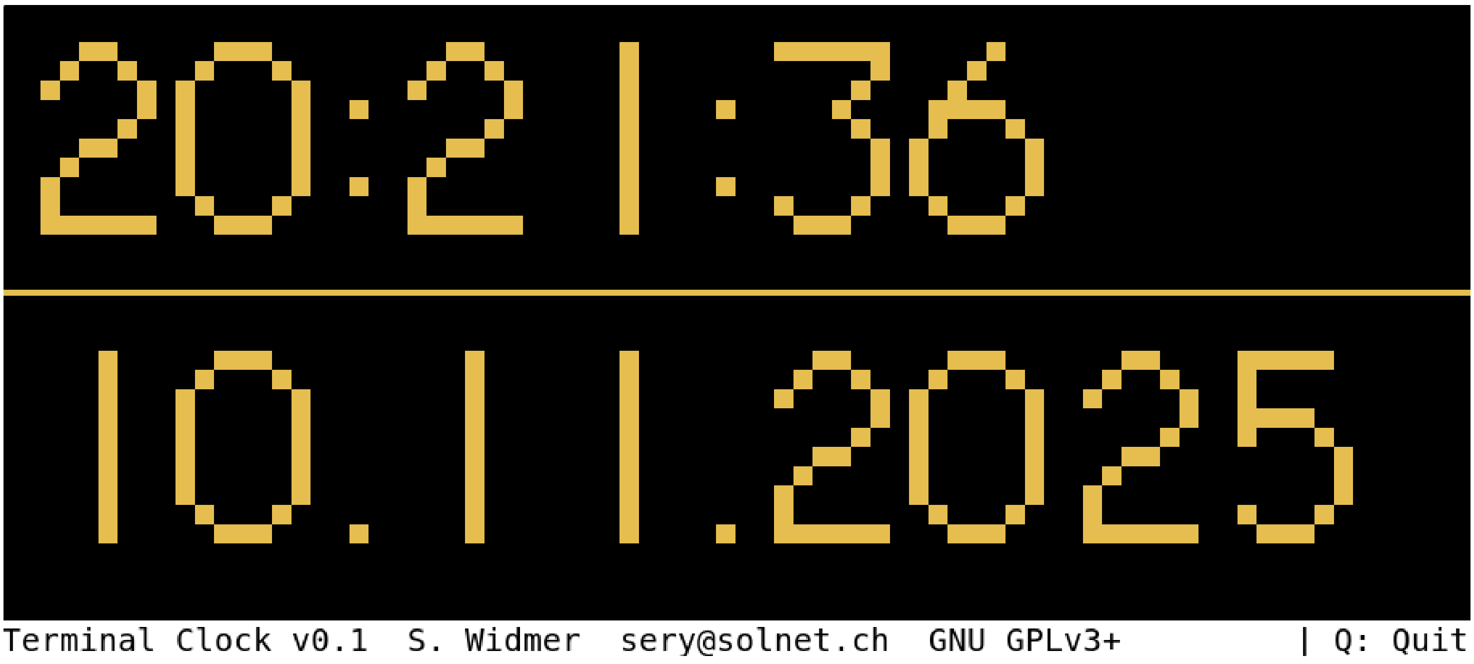

This is also proof that a fully functional program can be created with a Bash script. The advantages are obvious: a minimal installation of Linux is sufficient without having to use a bloated programming language.



```
20:21:36
10.11.2025
Terminal Clock v0.1   S. Widmer   sery@solnet.ch   GNU GPLv3+          | Q: Quit
```

Description

Measured on several platforms, the CPU-Load should remain below 2% – but mostly even below 1%.

Note that the label «SWISS MADE» of this clock is correct indeed – I am living in the «clock-country» Switzerland and try to continue the art of designing clocks. It is just that this one is made out of pure software

Installation and Dependencies

Linux

As this is a bash script, it is not needed to be installed. Copy it to wherever you like. However, there are a few dependencies:

- `bash`: It is a fundamental and almost universally pre-installed package on nearly all Linux distributions. Use `sudo apt install bash` if not installed.
- `tput`: The tput command is part of the ncurses-bin package (at least in Debian). Use `sudo apt install ncurses-bin` if not installed.
- `date`: In Debian and almost all other Linux distributions, the date executable (usually found at /bin/date or /usr/bin/date) is part of the coreutils package.

After all, if you feel unsure wether you have to install those mentioned packages, most probably you don't.

Windows

Due to the lack of a native Bash Shell, you can install GIT Bash for Windows that is intended for GIT usage and is emulating the Bash only. The clock.bash script will run nevertheless.

Restrictions in general

1. Depending on the font and terminal shell, not all characters (Unicode!) may be displayed correctly or might look pretty.

2. Especially the Unicode triangle chars like ◢ might not be displayed correctly and might be shifted or too small in size. As terminal-font, I have tested sucessfully with `Monospace Regular 9`. As for the Terminal-Shell, I've tested with xfce4-terminal and kitty, native linux console and xterm so far.

3. Not every terminal shell is capable of RGB colors although most do nowadays. If using a historic one, it might be a good idea to use one of the 16 specified colors.

Options

--alarm

This option is setting up an alarm time in HH:MM. E.g.: `./clock.bash --alarm=16:45`

If key `<c>` or `<C>` is pressed, the screen is clearing for a second and the `ALARM !` output is removed from screen.

Restrictions:

- There is no way to set seconds as well (HH:MM:SS). Is this useful?
- There is no way to set a specific date. I am assuming that is is not needed. Or is it?
- There is no way to set a specific action as executing another program by now. Would *you* have use of it?
- Finally: There is no way to set or apply a specific style for the outputted text "ALARM !"

Let me know what you think, and I'll consider whether and how this can be implemented as simply as possible.

--style

To give your clock a personal note and for your taste, you can choose one specific style based on an era.

Usage:

```
bash ./clock.bash --style=50 # run clock using a style from the 50ies
./clock.bash --style=E-13B # same as --style=50 using alias
```

Available styles:

`50` or `E-13B`

- Visual: MICR / bank-check style — blocky, machine-readable digits. This style is close looking to *E-13B font* that was used for Magnetic ink character recognition code, known in short as MICR code. It was introduced in 1958.
- Purpose: High-contrast, rigid digit shapes.
- Good for: Retro industrial / MICR look; terminals rendering box characters well.

`51` or `E-13B-simple`

- Visual: Simplified block-only variant of E-13B.
- Purpose: Same style with fewer decorative glyphs for better compatibility.
- Good for: Terminals with limited Unicode/box-drawing support.

`55` or `NIXIE`

- Visual: Nixie-tube inspired glyphs with rounded/segment-like shapes.
- Purpose: Emulate vintage nixie tube numerals.
- Good for: Retro-electronic, steampunk or museum-like displays.

`60` or `OCR-A`

- Visual: OCR-A (Optical Caracter Recognition) inspired segmented glyphs with distinctive gaps. This style is almost identical to OCR-A. OCR-A is a font issued in 1966 and first implemented in 1968. A dedicated font was needed in the early days of computer optical character recognition, when there was a need for a font that could be recognized not only by the computers of that day, but also by humans.
- Purpose: Readable “machine/early-computer” aesthetic.
- Good for: Classic OCR look where digits are clearly

`61` or `OCR-A-SIMPLE`

- Visual: Block-only simplification of OCR-A.
- Purpose: Better terminal compatibility while keeping OCR feel.
- Good for: Terminals with limited Unicode/box-drawing support.

`70` or `DATA-70`

- Visual: Futuristic, angular glyphs strongly inspired by Data 70. It is intended to look like a space-age-clock. Data 70 was the rival to the also famous Westminster font.
- Purpose: Retro-futuristic / space-age display.
- Good for: Sci-fi themed terminals and old-console styling.

`71` or `DATA-70-SIMPLE`

- Visual: Simplified Data-70 blocks.
- Purpose: Same theme with increased compatibility.
- Good for: Terminals with limited Unicode/box-drawing support.

`72` or `7-SEGMENT`

- Visual: Seven-segment display emulation.
- Purpose: Classic digital clock/readout appearance.
- Good for: Minimal, highly legible numeric output.

`78` or `VT100`

- Visual: VT100 emulation.
- Purpose: Classic terminal appearance.
- Good for: Minimal, highly readable output.

`80` or `default`

- Visual: Large broad block characters; default layout.
- Purpose: Balanced option intended to render well in most terminals.
- Good for: Most users — recommended when unsure.

`83` or `VT220`

- Visual: VT220 emulation.
- Purpose: Classic terminal appearance.
- Good for: Minimal, highly readable output.

`84` or `numbers`

- Visual: Numbers as numbers
- Purpose: For all terminals
- Good for: fun

`85` or `hashes`

- Visual: Hashes as numbers
- Purpose: For all terminals
- Good for: fun

`87` or `VT320`

- Visual: VT320 emulation.
- Purpose: Classic terminal appearance.
- Good for: terminal shells with more than 83 chars in width

`90` or `MODERN`

- Visual: Contemporary, cleaner glyphs / modernized styling. My own creation finally.
- Purpose: A modern alternative to the retro sets.
- Good for: users preferring a sleeker look.

--color

- Use `--color=<color>` to set the display color (default: red).
- Supported formats:
- Colornames:
  - `black`
  - `cyan`
  - `yellow`
  - `bright`
  - `yellow`
  - `bright_green`
  - `blue`
  - `bright_magenta`
  - `bright_blue`
  - `red`
  - `bright_white`
  - `bright_black`
  - `bright_red`
  - `bright_cyan`
  - `white`
  - `green magenta`
- Numeric: `00..15`
- ANSI codes: `30..37` and `90..97`
- Hex: `#RRGGBB`
- RGB triplet R,G,B (`0..255`)

Feature requests?

For any kind of feature you would like to see or bug reporting or thank you's:

Email me

Take care! Simon