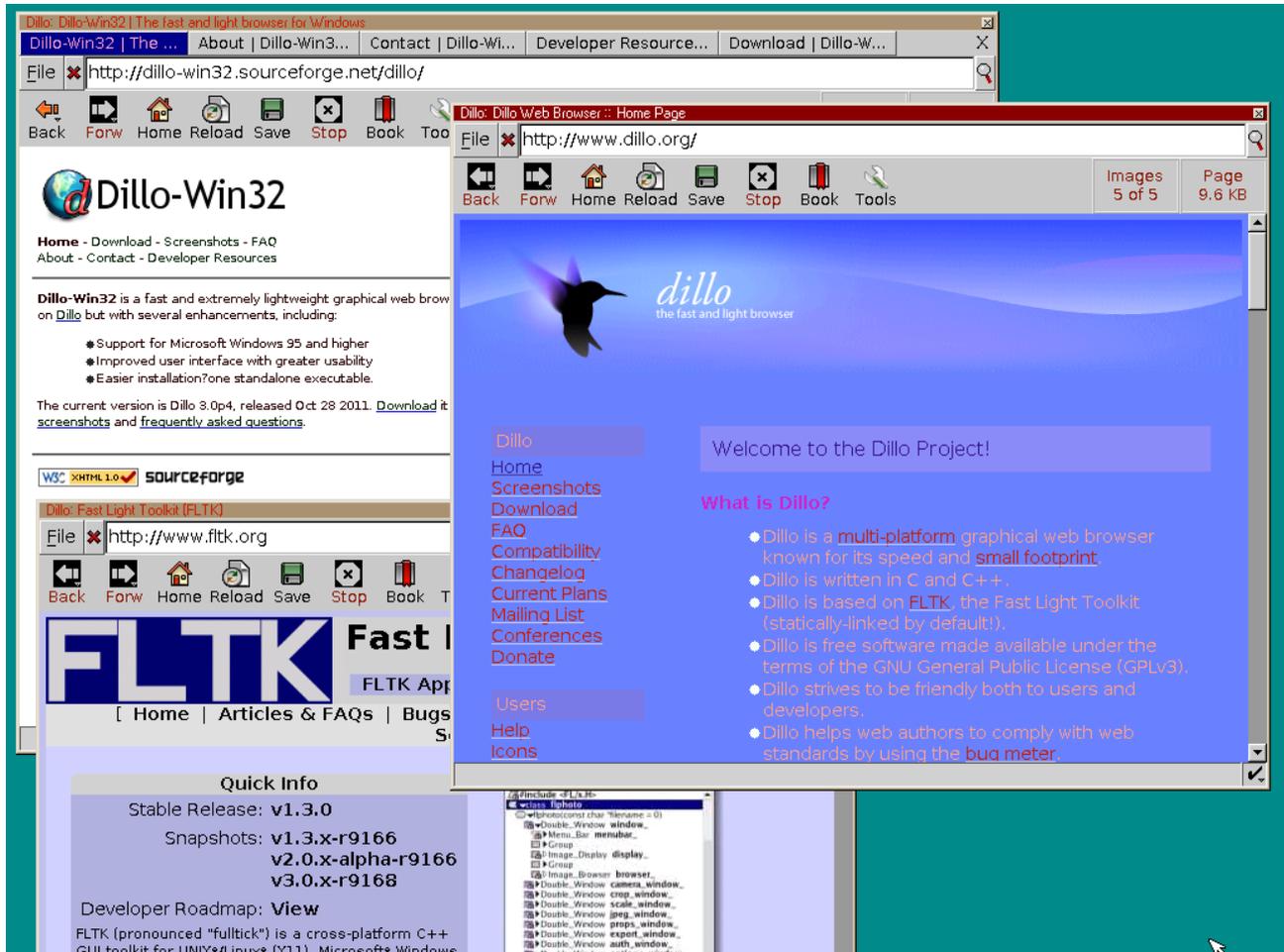


Dillo for DOS User Guide Rev. 3



Dillo is a graphical web browser with a small footprint. It is written in C and C++ and its GUI is based on FLTK, the Fast Light Toolkit.

Dillo is developed for Linux and has been ported to Windows by Benjamin Johnson. His port to Windows was used to port Dillo to DOS.

Dillo is not based on some different HTML rendering engine, it is written from scratch.

Dillo for DOS has been compiled with DJGPP and uses the Watt32 library for TCP/IP communication. For file transfers it will use the CURL library.

This version of Dillo is compiled to require short file names only. If long file names are enabled downloaded files can be saved with long file names, otherwise these will be truncated.

1. Installation

a) Packet driver

The general setup is this:

| |
|-----------------------|
| Dillo for DOS Browser |
| Packet driver |
| Network card |

Before running Dillo load the packet driver which fits your network card. You may find it on the CD which came with your PC or network card. Otherwise you may find one here:

[Packet drivers for DOS.htm](#)

If you want to run Dillo in a Windows XP DOS box you can use the SWSVPKT driver:

<http://www.softsystem.co.uk/products/swsvpkt.htm>

b) Dillo package

Unzip the archive you downloaded into a directory e.g. c:\dillodos.

The directory structure of this package is:

BIN - location for the WATTCP.CFG file, dillo.exe, cwsdpmi.exe, the DPML server for DJGPP and vcls.exe a utility which can clear an SVGA screen to text mode.

fonts - local fonts directory

CONFIG - contains Dillo's configuration files dillorc and keysrc, the "bm.txt" or bookmark file and the FLTK preferences.

When started Dillo will create the CONFIG directory if not present.

FONTS - here are the truetype fonts Dillo will use.

DOWNLOAD - this is where downloaded files and images will be stored if not specified differently in the file entry box.

Dillo will run without long filename support. If you want to save files with long filenames you have to load e.g. "doslfn" for long file name support when running in real mode DOS.

c) Customize the DILLO batch file

There is a DILLO.BAT file in the DILLODOS directory which will set the environment variables and start Dillo.

The path names in this batch file have to be checked by yourself to match your environment.

The default batch file currently looks like that:

```
@echo off
REM Customize these lines for your system:
REM -----
set DILLO=C:\DILLODOS
set NANOSCR=1024 768 8888

REM -----
REM You shouldn't need to edit below this line.
REM -----

set WATTCP.CFG=%DILLO%\ETC

%DILLO%\bin\dillo.exe %1 %2 %3 %4 %5 %6 %7 %8 %9
```

The first environment variable, DILLO, has to point to the DILLODOS directory or whatever you named it. Check the drive letter to match your environment.

The NANOSCR variable is defined as:

```
NANOSCR=[SCREEN_WIDTH] [SCREEN_HEIGHT] [SCREEN_PIXTYPE]
```

For SCREEN_PIXTYPE the following values are valid: 8888 for 32bit, 888 for 24bit and 565 for 16bit. The 24bit value is currently untested. In 16bit mode some colors may not be rendered correctly.

To allow for screenshots with SNARF set the pixtype entry in the DILLO.BAT file to 16 bit.

The WATTCP.CFG environment variable is read by the Watt32 TCP/IP driver and points to the location of the WATTCP.CFG file which is located in the BIN subdirectory.

If you redirect the STDOUT messages of Dillo to a file you will not be able to run a DOS shell selected from Dillo's menu.

d) Edit the WATTCP.CFG file

In the dillodos\bin directory there is a WATTCP.CFG file. This is set for DHCP as default. This may not be the right setting for you so you may have to edit the "my_ip", "netmask", "nameserver" and "gateway" variables in this file.

If you set my_ip to dhcp Watt32 will store the dhcp settings it has got from the router in the file W32DHCP.TMP.

e) SSL support

This version of Dillo for DOS provides SSL support using the OpenSSL library. Since there is no standard random number generator for DOS Dillo uses a seedfile.dat in the BIN directory to seed the pseudo random number generator of OpenSSL. Dillo will write back the state of this file at the end of a session to start with a different seedfile.dat for the next session.

Dillo will not check server certificates so you cannot be sure to be connected to the right server. Someone could redirect your traffic to a false server. Therefore do not use Dillo for your banking application.

This is why you don't get "this site is not trusted" messages from Dillo for DOS.

There is a noise.sys driver available for DOS but using seedfile.dat is more convenient and will work too in a Windows XP DOS box.

2. Running Dillo

Make sure you loaded the packet driver for your network card. Then run the DILLO.BAT file to start Dillo.

If no packet driver is not loaded Dillo will show an error message on start up while being in text mode. You can continue for offline browsing then.

Dillo will start using the full screen. If you do not want that you can use the -g commandline option to select a different size. So "-g 400x200" will open a very small window on startup.

There is also the -d option now which will make Dillo write wattcp debug files during the session.

If you open new windows, you can reduce the window size by clicking and dragging on the lower right corner of a window. Clicking on the title bar will bring the window into the foreground. If you increase the size of the window it will be blanked. Reduce the size again a little bit to restore the screen.

There is a magnifying glass in the upper right corner of the Dillo screen. This allows you to call the search engine you selected in the preferences.

Canceled file transfers will continue to add the data to the partially downloaded file. If there is a file with the same name and size in the download directory, Dillo will not download the file. You can download a file too by making a right-click on the link in the webpage.

When downloading very large pages the mouse may stop to move. This version gives more priority for downloading data than to keep the user interface responsive.

Dillo for DOS when run in a Windows XP DOS box will load pages with a lot of images faster if you move the mouse a little or press e.g. cursor right while it is doing that. This is not the case in real mode DOS.

If you are running in a Windows DOS box, you can restore the colors after switching to Windows and back to the DOS box. Enter ALT-Comma to go to text mode and enter ALT-Comma again to restore the Dillo screen.

The general user guide for Dillo can be found here: <http://www.dillo.org/dillo3-help.html>

3. New features

Added features in this release:

- SSL support
- Printing web pages to postscript files
- FTP support (directory download in text mode)
- improved open file dialogs
- faster downloads of webpages and files
- separate directory for downloaded files

4. Limitations

The limitations for Dillo in general are also limitations for Dillo for DOS. There are of course further limitations not mentioned here.

a) Dillo for DOS

- no mouse wheel support
- ALT-F will not work
- extended characters not supported in all fonts
- no extended characters support in the title bar

b) Dillo in general

- many web pages displayed differently compared to Internet Explorer, Firefox or Chrome. e.g. Wikipedia pages
- no Java/Javascript support
- no email support
- no flash player support

5. Dillo versions and forks

This version is an extension of my previous version of Dillo for DOS. This time based on the 3.0.2 version of Dillo for Linux. The patches of the Dillo-Win32 version were applied to this version. I expect this may allow to port newer versions of Dillo for Linux to DOS again.

Benjamin Johnson extended his Windows version of Dillo into a fork of Dillo. He stated that he will not continue developing this fork any further, however.

So now there are the original Dillo for Linux version, Benjamin's fork of that to Windows and DOS called the DPlus browser and my fork Dillo for DOS.

8th March 2013 Georg Potthast