# **NAME**

akfgopherserver - Gopher-Server

#### **SYNOPSIS**

akfgopherserver [Options]

## DESCRIPTION

The program **akfgopherserver** is a server for the Gopher protocol (not Gopher+).

Gopher is a simple Internet protocol, which is mainly used to distribute information in form of plain text files over the net. Other files can be offered for download.

This server can be started by regular users when needed. By default, it only responds to requests from local networks, while blocking access from the Internet.

If this server is run by a normal, non-privileged user, it uses port **7070**. This port must then also be explicitly specified when called up in the client. For example: **gopher://localhost:7070**.

If the program is running in a terminal in the foreground, you can simply cancel it with the key combination [Ctrl]+[C]. Otherwise, you can also terminate it using thekillall(1) or kill(1).

#### **OPTIONS**

- -h
- --help
- --Hilfe shows a short help
- -V
- --version
- --Version

shows the version

-t

--text unknkown filenames should be interpreted as text files (type 0). Otherwise they are binary files (type 9).

- -d directory
- --directory=directory
- --Verzeichnis=directory

make that *directory* the root directory. Without this option the current working directory, from which the program is started becomes the root directory.

- -N Servername
- --Servername=Servername
- --servername=Servername

sets the Servername.

International domain names must be created in ASCII Compatible Encoding (ACE).

- -p port\_number
- --port=*port\_number*
- $--Port=port\_number$

sets the *port\_number*. This is the port on which this server listens.

- --Serverport=port\_number
- --serverport=port\_number

set a virtual different *port\_number*. If the server is controlled by a frontend, you can set the port\_number of that with this.

-1

--localhost

Only listens on the **localhost**-address for IPv4. That is **127.0.0.1**. So with that the server should be only accessible on the same machine and not over the network.

- -a IP-address
- --address=IP-addres
- --Adresse=*IP-address*

binds the server to the given IP-address.

This can be used to limit the reachability to a local network. That is more secure than the built in filter

-4

--IPv4 use IPv4

-6

--IPv6 use IPv6 (default)

The server may however decide to degrade it to an IPv4 connection at will.

Whether IPv4 connections are also supported in IPv6 mode depends on the operating system and possibly its settings.

- -u user ID
- --Nutzer=user\_ID

If the server is started with root privileges (real user\_ID), you can use this option to specify another *user\_ID* with whose privileges it should ultimately run. The *user\_ID* can be a name or a numerical indication.

-D

--daemon

starts the server in the background as daemon

- --open
- --offen
- --Internet

opens the server to the whole Internet.

**Attention!** This turns off the filter for private networks. The server can be accessed via the Internet. You may also have to release the port on your router for this.

-i

--inetd Accepts requests on standard input and outputs responses on standard output. If the standard input is a socket, the connection data is read from it.

## **ENVIRONMENT**

HOSTNAME, HOST

If one of these variables is set, this is taken as the server name.

LC\_ALL, LC\_MESSAGES, LANG

these variables influence the language selection for the screen.

# **DETAILS**

### **Files**

Files that have no dot in the name (and are not executable) are recognized as text files. One can also use the file extensions **.text** or **.txt**. These file extensions are not displayed and underscores are converted to spaces.

Files in the Markdown-format with the extension .md or .markdown are also recognized as text files.

For Gopher text files must have less than 80 characters per line. To achieve this, you may use the command **fmt**(1).

Many more file extensions for different file formats are recognized.

Files whose name starts with a period are hidden, but can be retrieved. The same ist true for directories.

## **Directories**

For directories, you can specify a different display name by creating a file called **gophertag**. So you can keep the path short and still get a reasonable indication. For example, go to a directory called **rel**/ and enter

the following:

# \$ echo 'religious writings' > gophertag

Usually the menu is created automatically by file listing.

#### Menus

You can also create your own menus. This not only looks better, but is inevitable for several possibilities of Gopher.

To create your own menus, a file called **gophermap** must be created in a directory. Basically, each line represents a menu item. However, lines starting with a hash (#) are comments and are ignored. Lines that do not contain a <TAB> character become information lines ('i'). This also applies to blank lines. Lines of information should not carry important content, as they may be ignored by the client. Content should be in text files.

The format of a **gophermap** resource line is:

*Xname*<TAB>*selector*<TAB>*host*<TAB>*port* 

*X* is the gopher type (see section **Gopher Types**).

name is an explanation of the resource

selector

is the path to resource

host is the hostnameport is the port number

If you do not specify the host and the port, the current server is entered for this. In this case, it is also sufficient to specify only the file name as the selector. Then the path will be supplemented, if nessesary. Two dots as a selector ("..") lead to the parent directory. However, if there is a slash in the selector, it is transmitted unchanged. You can simply enter a slash for the main directory.

Please note that if the host and port are specified, the selector is always transmitted unchanged.

At the end of the file there should be a line that contains only one dot ('.'). This completes the menu. If instead there is a line at the end that contains only an asterisk ('\*'), an automatic file listing will be appended below.

If you generally prefer an automatic file listing, and only want to add individual other entries, you can add files with the file extension **.gophermap**, which include only one, or a few menu lines. The name of such files is never displayed, but it has an influence on the sorting. Whether such files are finished with a final character, and with which one, is irrelevant.

# **Gopher Types**

From the original specification:

- 0 Text file
- 1 Directory
- 2 CCSO phone-book server
- 3 Error
- 4 BinHexed Macintosh file
- 5 binary Archive
- 6 uuencoded file
- 7 Index-Search server
- 8 Telnet session
- 9 Binary

- Redundant server
- T TN3270 session
- g GIF format graphics file
- I other Image file

#### extensions

- i Informational message
- d Documentation
- h HTML file
- X XML file
- s Sound file
- : Movie file
- c Calendar file
- M MIME file

Other extentions can be used and are in use...

## **EXAMPLE**

Example for a **gophermap** file. Instead of "<TAB>" you must of course use a TAB character.

```
# First a greeting
Welcome at exampleserver

# Link to the file info in the main directory
OInformation<TAB>/info
# Subdirectory
1Books and texts<TAB>books
# External server
1Floodgap<TAB>/<TAB>gopher.floodgap.com<TAB>70
# Telnet session
8Telehack<TAB>none<TAB>telehack.com<TAB>23
# Links for other protocols are introduced with "URL:"
hWebsite<TAB>URL:https://akfoerster.de/
```

## **AUTHORS**

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# **SEE ALSO**

```
akfgb(1), akfgopher-dl(1)
RFC 1436
gopher://akfoerster.de:47520/1soft/akfnetz
https://akfoerster.de/p/akfnetz/
```