

If you have any questions about WSARCHIE or have problems getting it to run, email David Woakes (david@maxwell.demon.co.uk) with a description of the problem, the version of WSARCHIE you are using, the Winsock stack you are using and its version.

Performing an Archie Query
Search Type
Archie Server
Hosts
Directories
Files
Aborting a query
Status Bar
WS_FTP

Common Problems

Common Problems

Menu Commands

File menu
Edit menu
Options menu
Help menu

Copyright Notices

Copyright

File menu commands

The File menu offers the following commands:

Save This command is used to save the query result as a text file, in a detailed format

<u>Retrieve</u> This command is used to either retrieve the selected file or expand a directory,

depending on what is selected in the file list box.

If a file is selected in the list (check the file name box, if the file is prefixed with FILE:, then it's a file) then WSARCHIE can be set up to use <u>WS_FTP</u> to retrieve

the selected file. See FTP Setup also.

Can be selected by double-clicking the file name in the file list box or the file

name box.

Expands the selected directory in the directory list box. Note the difference

between this option using the directory selected in the directory list box and that

above, which uses a directory selected in the file list box.

Can be selected by double-clicking the directory name in the directory list box.

Exit Exits WSARCHIE.

Edit menu commands

The Edit menu offers the following commands:

<u>Copy Result</u> This command is used to copy the query result to the clipboard

<u>Copy File</u> This command copies the currently selected filename to the clipboard

<u>Copy Directory</u> This command copies the currently selected directory to the clipboard

<u>Copy Host</u> This command copies the currently selected host name to the clipboard

Options menu commands

The Window menu offers the following commands, which enable you to arrange multiple views of multiple documents in the application window:

<u>User Preferences</u> Allows the user to specify default Archie server and search type.

FTP Setup Allows the user to setup the command used to retrieve files, and

also to specify his identity.

Help menu commands

The Help menu offers the following commands, which provide you assistance with this application:

<u>Index</u> Offers you an index to topics on which you can get help.

<u>Using Help</u> Provides general instructions on using help.

<u>About</u> Displays the version number of this application.

Save command (File menu)

Use this command to save the result of the query. The format used is similar to the usual long listing form used by archie servers.

Selecting the command will bring up a save file dialog. The usual rules apply here.

Retrieve command (File menu)

Use this command to retrieve the selected file (note if the file is a directory then the directory will be expanded, i.e. a list of the files in the directory will be retrieved from the Archie server. Note also that at the moment the list of files does not have the attributes Archie Date and the host internet address).

When the command is selected, the ftp command will be displayed in a dialog with two buttons, OK and Cancel. The command may be edited as desired before clicking OK.

See WS_FTP and FTP Setup for details on configuring FTP details.

Shortcuts

Double click on the file name in the list of files or the filename box.

Expand command (File menu)

Expands the selected directory in the directory list box. Note the difference between this option using the directory selected in the directory list box and that above, which uses a directory selected in the file list box.

Shortcuts

Can be selected by double-clicking the directory name in the directory list box.

Exit command (File menu)

Use this command to end your WSARCHIE session. You can also use the Close command on the application Control menu.

Shortcuts

Mouse: Double-click the application's Control menu button.

Keys: ALT+F4

Copy Result (Edit menu)

Use this command to copy the current result to the clipboard.

Shortcuts Keys: CTRL+C

Copy File command (Edit menu)

Use this command to copy the currently selected file name to the clipboard.

Copy Directory command (Edit menu)

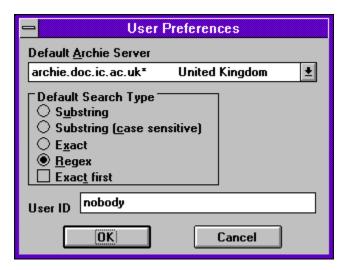
Use this command to copy the currently selected directory name to the clipboard.

Copy Host command (Edit menu)

Use this command to copy the currently selected host name to the clipboard.

User Preferences (Options menu)

When this command is selected the following Dialog will appear:

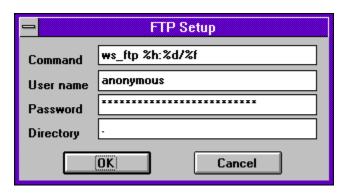


The selections for default Archie server and default search method will be stored and used as the default startup values, next time you run WSARCHIE.

The User ID field is used in the Archie Request to identify you. This does not need to be changed from 'nobody', the default value.

FTP Setup (Options menu)

This command displays the following dialog:



The command field should be tailored to give the full path name for the FTP program, e.g. "C:\FTP\ WS FTP". The following special entries in this box will be substituted when an FTP request is made.

- %h the host name
- %d the directory name
- %f the file name
- %u the user name field as entered in the user name field
- %p the password field as entered in the password field

Note the default entry will work without modification if WS_FTP.EXE is in the command path. Note also the "/" between "%d" and "%f", used to make up the full path name of the file. The ":" is specific to WS_FTP.

Note: <u>WS_FTP</u> does not take the user name and password from the command line, but has it's own configuration details.

The Directory field should be filled in with the name of the directory that you wish files to be retrieved to. No check is made to see if the entry is valid, and if it does **not** exist it will **not** be created and you will not be able to perform FTPs, using WSARCHIE. The default value is '.' or the current directory.

Index command (Help menu)

Use this command to display the opening screen of Help. From the opening screen, you can jump to step-by-step instructions for using WSARCHIE and various types of reference information.

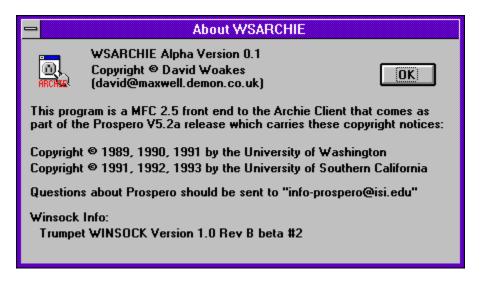
Once you open Help, you can click the Contents button whenever you want to return to the opening screen.

Using Help command (Help menu)

Use this command for instructions about using Help.

About command (Help menu)

Use this command to display the following dialog:



See <u>Copyright</u> for fuller details on the copyright notices from the University of Southern California and the University of Washington.

Performing an Archie Query

1.	To perform a query enter a search string in the <u>Search for</u> box.				
	<u>S</u> earch for				
2.	Select an archi	<u>e server</u> from the archie server drop down list.			
	<u>A</u> rchie Server	archie.doc.ic.ac.uk* United Kingdom			
3.	Enter a <u>match domain</u> if desired, e.g. "uk" to restrict the search to entries for hosts end with "uk" or "src.doc.ic.ac.uk" to restrict the search to the that site.				
	<u>D</u> omain				
4.	To start the query press return, Alt+E or use the mouse on the "Search button" The "Search for", "Archie Server" and "Domain" boxes are disabled along with the search				
	type radio butto	ons and the "Search" button. The "Abort" Abort" button is enabled.			

If desired the user may abort the search at any stage by pressing Alt+B or by selecting the "Abort" button.

Whilst the query is being performed, various status indications are given in order that the progress of the query may be seen. The indications are in the <u>status bar</u>, and also in the title bar of the application. The following is a brief description of the stages of an archie query

- 1. A name look up is done to translate the name of the archie server to numeric form.
- When this completes a request is put together and sent to the archie server. At this point the title bar changes and will give the name of the archie server along with the initial time out period. If no response is received, the time period is doubled and the request retransmitted. This will be repeated up to three times before the request is deemed to have failed.
- 3. If a packet is received, the archie server will send back an acknowledgment from which may contain queue position and system time. You will not be advised of any changes in either of these, as they are sent once only by the archie client. The values returned are displayed in the <u>status bar</u>. The time out period will also be set to a value advised by the archie client, usually 900s if it your query is not going to be performed immediately.
- 4. The next packet from the archie server usually adjusts this to 180s and is a good indication that your query is now being processed.
- 5. When packets start to arrive the time out is then reduced to 5s and the packets received are indicated in the <u>status bar</u>. When the total number of packets is known this will be displayed as "packet x of y", otherwise "packet x" is displayed.
- When the last packet is received, WSARCHIE will translate the results. If there are a large number of matches, this can take several seconds.
- 7. The results will then be displayed in the <u>Hosts</u>, <u>Directories</u> and <u>Files</u> list boxes. The first host will be displayed selected. The directories on that host that contain matches are then displayed with the first directory selected. The files in that directory are then displayed with

the first file selected. Further details on the selected file are displayed in the $\underline{\text{file details}}$ section.

Search Type

The type of search performed by the archie client is determined using the search type radio buttons.

Substring Substring (case sensitive) Exact Regex Exact first	
The choices have the following	g effects:
Substring:	A simple, everyday substring search. A match occurs if the file (or directory) name in the database contains the user-given substring.
Substring (case sensitive):	As above but the case of the strings involved becomes significant.
Exact:	The fastest search method of all. The restriction is that the user string (the argument to the 'prog' command) has to exactly match (including case) the string in the database. This is provided for those of who know just what you are looking for.
Regex:	Use ed(1) regular expressions. Searches the database with the user (search) string which is given in the form of an ed(1) regular expression.
	NOTE: Unless specifically anchored to the beginning (with ^) or end (with \$) of a line, ed(1) regular expressions have ".*" prefixed and appended to them. For example, the following are equivalent
	.*xnlock.* and xnlock
	Thus the regex match becomes a simple substring match.
	For example:
	knob - matches any string containing the substring 'knob'
	a*splat - matches strings that contain zero or more a's followed by the string 'splat'
	#.*# - would match anything containing a '#' followed by zero or more occurrences of _any_ character, followed by another '#'

example of the first case is:

Other special characters that may be useful are '[' and ']', which are used together. They can be used to specify either a set of characters to match or a set of characters to not match. An

[abcd]

which matches any of one of the four letters, while an example of the second case is:

[^abcd]

in which the '^' in the first position means that any character **not** in the list will be matched.

Ranges can be specified with a '-'.

[a-z]

matches any lower case letter and,

[^a-z]

matches any character other than a lower case letter. Furthermore, you can specify multiple ranges such as:

[%@a-z0-9]

or

[^A-Za-z]

meaning: match '%' or '@' or any lower case letter or digit, and match any character other than a letter, respectively.

When you want to match a character which has a special meaning you should precede it by a back slash, '\'.

Some final examples of REs are:

[Mm]ac\.txt - match anything containing the string "Mac.txt" or "mac.txt"

[^aeiou][^aeiou]* - match any string consisting entirely of non-vowels

foo-v[0-9]\.tar\.Z - match "foo-v0.tar.Z" through "foo-v9.tar.Z"

Exact first

This is a check box and is means that the exact search method will be used first. If no matches are found then the method selected using the radio buttons will be used. This box is disabled if the exact search method is chosen.

Note that changing the search type selected after the search is performed will have no effect on the displayed list of matches.

Archie Server



This drop down list box contains the list of archie servers that are in the "Archies" section of the file "WSARCHIE.INI" (NB this file must be in either WSARCHIE's working directory, the windows directory or the same directory as the program). The default archie server is displayed in the box when the program is first started.

The list supplied is that given by archie.doc.ic.ac.uk at the time of release. '*' after the name of a server means that it uses V3 of the Archie software. This is for information purposes only and is not used in any way by WSARCHIE to perform the query.

When the search is started, the Archie Server name is truncated at the first '*' or white space (tab or space) in the name.

If you wish to add an Archie Server that is not listed, add a new line in the 'Archies' section of WSARCHIE.INI in the form 'xxxxxxx=aa.bb.cc.dd'. 'xxxxxxx' should be substituted with a name that is unique within the 'Archies' section. The position in the section will be the position that the Archie server name appears in the list, e.g.

my_special_archie=archie.of.my.heart My Own Country

There does not need to be a country or area name appended, but if there is it should be separated from the server name with at least one space or tab.

Domain



This field is used to restrict the search to a subset of hosts within a particular domain, e.g. ".ac.uk" will restrict the search to academic sites in the UK.

Hosts			
<u>H</u> osts			

This is used to display the list of hosts with files or directories matching the search term.

The directories on the selected host containing directories or files that match the search term are displayed in the <u>Directories</u> list box. Selecting a new host will cause the <u>Directories</u> list box to be updated.

Directories

D <u>i</u> rectories		

This is used to display the list of directories for the current selection in the $\underline{\text{Hosts}}$ list containing files or directories that match the search term.

The files within the selected directory are displayed in the $\underline{\text{Files}}$ list. Selecting a new list will cause the $\underline{\text{Files}}$ list box to be updated.

Files			
Fi <u>l</u> es			

This is used to display the list of files for the current selection in the <u>Directories</u> list box that match the search term. Further details for the selected file are displayed in the <u>file details</u> section.

Double clicking on a file in this list will initiate the <u>FTP</u> command (except in the case of a directory, when the directory will be expanded. Note also that at the moment the list of files does not have the attributes Archie Date and the host internet address). See the File menu <u>Retrieve</u> command

Aborting a query

A query can be aborted at any stage by pressing Alt+B or selecting the "Abort" button

Any information retrieved will be lost.

File details File Name Size Mode Date Archie Date Host Address

This section of the result display contains the following fields:

File Name This is the full name of the file. It is prefixed with "FILE: " if it is a file and

"DIRECTORY: " if it is a file.

Size This is the size of the file in bytes.

Mode This is the access mode of the file.

Date This is the files own date stamp.

Archie Date This is the date that archie server last checked the files existence.

Host Address This is the numeric internet address of the host upon which the file resides.

FTP

Files can be retrieved using a suitable FTP program. Use the <u>FTP Setup</u> command from the <u>Options</u> <u>menu</u> to setup a suitable command line.

This command will be executed when a filename is double clicked in the $\underline{\text{Files}}$ list, or the $\underline{\text{Retrieve}}$ command from the $\underline{\text{File menu}}$ is selected.

The default setup is to use WS_FTP.

Status Bar

For Help, press F1 Packet none Queue unknown Time unknown

The three boxes at the end of the status bar are used as follows (going from right to left):

The time that the archie server thinks it will take to process the query, when it starts the query.

The queue position when the query is received

The number of packets received.

Common Problems

The following is the list of known problems with wsarchie and how they can be solved.

1. WS_FTP (16 or 32 bit versions) fail to execute.

Get the latest version from either

ftp.usma.edu:/pub/msdos or somewhere on 147.51.200.18 (it is fairly obvious if you try).

2. There is no response from the server, even though you can telnet to it.

This is usually caused by a firewall on your site blocking the incoming packets because they are UDP packets. You will need to talk to your network supervisor. Wsarchie (Version 0.2+) uses a non privileged port number above 2050 (the actual number may vary), so there shouldn't be problems with letting them in. Some administrators take a different view and refuse to let these packets in. There is nothing I can do if you cannot get the network administrator to change there philosophy. Try the latest version of wsarchie available from ftp.demon.co.uk:/pub/ibmpc/winsock/apps/wsarchie.

3. You get the message "WINSOCK ERROR: NO_DATA: No entry found".

This means that the name server lookup failed. Try using telnet to connect to the archie client. If this succeeds from the same machine then there is a problem with name resolution. If you are probably using Chameleon's winsock, try reducing your list of name servers to one or check whether the latest version fixes this.

4. With PC-NFS V5.1 you will often get the error WINSOCK ERROR: EMSGSIZE.

I believe this is caused by an underlying restriction in the winsock stack. There is nothing that I can do about this.

5. With Novell Winsock, an empty error dialog is displayed when a search is started.

Hopefully this version should at least display an error number here.

6. With Novell Winsock, searches fail with the error ENOBUFS.

Check your net.cfg file. If there are lines in it like:

tcp_sockets 32 udp_sockets 8 raw_sockets 1

then taking them out might fix the problem, but will probably restrict the winsock capabilities. I wouldnt really suggest that you play with these settings unless you are fairly expert on Novell.

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This archie client is base upon the archie client that is included as part of the Prospero V5.2a release. Prospero comes with two copyright notices as follows:

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Prospero was originally written by Clifford Neuman. Contributors include Steven Seger Augart, Benjamin Britt and others identified in individual modules.

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Prospero was written by Clifford Neuman.

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WS_FTP

WS_FTP is a WINSOCK compliant FTP client program written by John A. Junod. It is obtainable via FTP from many sites worldwide. The latest copy is usually available on **ftp.usma.edu** in **/pub/msdos** as **ws_ftp.zip**