Pathfinder Help

Configuring Pathfinder
- Click on the **Config** button to display Pathfinder's Configuration window, from which you can
  - Specify your callsign, which is needed for some QSL searches
  - Specify whether you wish to be notified when a script error is encountered on a target web site or during a callbook lookup
  - Specify whether Pathfinder displays status information in the Main window's title bar
  - Specify whether or not windows are be restored on startup to a secondary monitor or forced to appear on the primary monitor
  - Specify whether or not diagnostic information should be recorded in the file ErrorLog.txt
  - Setup Pathfinder to respond to callbook lookup directives from DXKeeper by querying QRZ.com:
    - Specify the **Username** and **Password** to your free QRZ.com account; after changing your username or password, you can manually log in by clicking the **Login** button
    - Indicate whether Pathfinder should automatically log in to QRZ.com on startup
    - Indicate whether Pathfinder should warn you when a callbook lookup directives has been executed without being logged into QRZ.com, which limits the information returned to a name and address
  - Setup Pathfinder to access HamCall.net by specifying the **Username** and **Password** to your Free HamCall.net account
- Configuring access to the Flying Horse Radio Amateur Callbook
  - On installation, Pathfinder assumes that your Flying Horse Radio Amateur Callbook is accessible via D:\
  - If you're using a CDROM drive other than D:\ or have copied the Flying Horse Radio Amateur Callbook to a folder on your hard drive, click the **RAC** button while depressing the **Ctrl** key and use the Browse button in the Radio Amateur Callbook Settings window to locate the file Callbook.exe

Searching for QSL information on the web
- Enter a target callsign, and then click one of the 12 search buttons to search its associated site
- Striking keys **F1** to **F6** is equivalent to clicking on a top-row search button; **F7** to **F12**, a bottom-row search button
- Strike the **Enter** key to search the most recently used site
- Click on the **HC** button to search the most recently used site for the target callsign's home callsign (only available after a site has been searched for the target callsign and the target callsign is different than its home callsign)
- Depressing the Alt key while striking clicking a search button or striking **F7** to **F12** initiates a search for the target callsign's home callsign
- Click on the **Stop** button or strike the **Esc** key to terminate a search
- Click on the **X** button or strike the **Home** key to clear the target callsign
- CTRL-click the **X** button to clear the target callsign and the results display

Country-specific callbooks
- After you enter a callsign, a country-specific callbook search button will appear if a web-accessible callbook for the callsign country is available
- Striking the numeric keypad **/** key is equivalent to clicking on the country-specific callbook search button

Search library updates
- On startup, Pathfinder displays any newly available or updated searches; to update your search library, click the **Update** button. If you haven't performed a search library update in a while, you can download the entire search library.

Modifying web searches
- Depress the **Ctrl** key while clicking on a search button to change the search associated with a search button, or to modify a search

Searching for QSL information in the Flying Horse Radio Amateur Callbook
- Enter a target callsign, and then click the **RAC** button to search for QSL information

Responding to requests from other DXLab applications
- DXKeeper, SpotCollector, and WinWarbler are all capable of sending callsigns to Pathfinder's Target Callsign textbox
- If you want Pathfinder to automatically perform a search when a callsign arrives from one of these applications, then depress the **Ctrl** key while clicking on the appropriate search button and check the **Auto** box in its Pathfinder Search dialog; when you click the **OK** button, the caption of this search button will be underlined to indicate that it will automatically be invoked.
- DXLab applications can direct Pathfinder to perform an online callbook lookup for a specified callsign; Pathfinder navigates to the specified site and displays a web page containing detailed information, extracts a subset of this information (e.g. name, QTH, address, state, province, country, grid square), and returns it to the requesting application

If you have questions or suggestions, please send them via email to the DXLab reflector at dxlab@yahoogroups.com .

Pathfinder Download and Installation

Installing or Upgrading the DXLab Launcher
The **DXLab Launcher** automates the installation of new DXLab applications, including Pathfinder, and the upgrading of already-installed DXLab applications.

If you're an aspiring DXLab user who has **not installed any DXlab applications** on your PC, or if you're a long-time DXLab user who has **never installed the Launcher**, then installing the Launcher will make it easy to install new DXLab applications and keep them up to date as upgrades are released.

Step-by-step guides for installing the Launcher are available, both in HTML for browsing (http://www.dxlabsuite.com/dxlabwiki/InstallLauncher) and in PDF for printing (http://www.dxlabsuite.com/Download%20and%20Installation.pdf).

You can uninstall Pathfinder by running the Add/Remove Programs applet on the Windows control panel.
If you have questions or suggestions, please post them on the DXLab reflector at
http://groups.yahoo.com/group/dxlab.

If you're not a member, you can sign up at http://www.dxlabsuite.com/reflector.htm.

Pathfinder's Dynamic Searches

One second after you enter a Target Callsign, Pathfinder consults a built-in prefix table to determine the associated DXCC country. If Pathfinder knows of a web-accessible callbook for this country, it presents a dynamic search button directly beneath the Target Callsign textbox.

As illustrated in the Screen Shot below, Pathfinder labels the dynamic search button with the country's DXCC prefix and the letters "CB," an abbreviation for "callbook."

Clicking on the dynamic search button or striking the insert key invokes the country-specific search. Note that some of these country-specific callbooks are databases, some are simple lists of callsigns that you must manually peruse, and some are hybrids. The Australian callbook, for example, is a database whose entries contain the operator's name, rendered as a hyperlink that navigates to the operator's address.

Dynamic Search is the automatic selection of a search based on the Target Callsign's DXCC country. This enables Pathfinder to query the 30+ country-specific callsign databases and callsign listings presently accessible via the web.

Searches Subfolder
The installation of Pathfinder 3.0 creates a subfolder named `Searches` within Pathfinder's application folder, and populates this subfolder with several QSL database searches as well as country-specific callbook searches.

You can replace Pathfinder's 12 built-in searches with any of these new searches by using the Load button on the Search Modification dialog box; see page 9 for further instructions.

QSL Database Searches

Site	URL
DB0SDX	http://www.asp-profi.de/projects/hamradio/qsl/default.asp
Deja News	http://www.deja.com/
eHam	http://www.eham.net/callbook/
IK4LZH	http://qsl.425dxn.org/
T77WI	http://www.inthenet.sm/arrsm/query_manager.htm
WM7D	http://www.wm7d.net/

Country-specific Callbooks

Pathfinder's dynamic search mechanism automatically checks your `Searches` subfolder for the presence of a file whose name matches the Target Callsign's DXCC entity. If you've installed Pathfinder in the folder `C:\Program Files\DXLab Suite Pathfinder,` then entering VK9NS as the Target Callsign leads Pathfinder to check for the existence of

`C:\Program Files\DXLab Suite\Pathfinder\Searches\VK.TXT`
If this file exists, Pathfinder presents and labels the dynamic search button. Prefix to DXCC mapping is driven by contents of file
`C:\Program Files\DXLab Suite\Pathfinder\Searches\Prefixes.TXT`

New country-specific searches can be added by placing an appropriately named search file into the `Pathfinder` folder. For example, a copy of `WM7D.TXT` named `K.TXT` will cause Pathfinder to display the dynamic search button for American callsigns; clicking on the dynamic search button will search the WM7D data base.

You may modify the prefixes.txt file, but should do so carefully; Pathfinder's parser is both intolerant and cryptic.

DXCC	URL
4S	http://www.dxlabsuite.com/rssl/4s5.htm
	http://www.dxlabsuite.com/rssl/4s6.htm
	http://www.dxlabsuite.com/rssl/4s7a_e.htm
	http://www.dxlabsuite.com/rssl/4s7f_l.htm
	http://www.dxlabsuite.com/rssl/4s7m_r.htm
	http://www.dxlabsuite.com/rssl/4s7s_z.htm
9A	http://www.hrs.agram.com/callbook.htm

9M2	http://www.jaring.my/enrich/marts/9m2tmp.html
	http://www.jaring.my/enrich/marts/9m2trans.html
	http://www.jaring.my/enrich/marts/9w2trans.html
9M6	http://www.jaring.my/enrich/marts/9m6trans.html
	http://www.jaring.my/enrich/marts/9m8trans.html
	http://www.jaring.my/enrich/marts/9w8trans.html
BY	http://www.dxlabsuite.com/by2hit/ebycall.htm
C3	http://www.sta.ad/ura/qsl.htm
CO	http://www.infocom.etecsa.cu/www/frc/dire3.htm
ER	http://www.ournet.md/~arm/QSL.html
ES	http://www.dxlabsuite.com/es5aaw/es_callbook.htm
EW	http://www.dxlabsuite.com/ew2eo/cal_eng.htm
EY	http://www.geocities.com/CapeCanaveral/Hangar/5873/callbook.html
F	http://www.ref.tm.fr/nomenclature/nomenclature.shtml
GU	http://www.guernsey.net/~sgibbs/amateur_radio/gu_calls.html
HS	http://hs-callbook.dhs.org/cgi-bin/search.cfm
JT	http://www.pc.mdlink.de/70223102/JTCALL.TXT
LX	http://www.dxlabsuite.com/lx1no/rl_callb.html
LY	http://www.dxlabsuite.com/lrmd/lycbk.txt
LZ	http://www.pc.mdlink.de/70223102/LZCALL.TXT
OH	http://oh-callbook.sral.fi/
OL	http://hippo.feld.cvut.cz/cgi-bin/getaddr
OZ	http://www.tst.dk/servlet/tstsog/tstsog.resultdetails?post=4
PA	http://www.dxlabsuite.com/pa3esz/nl_hams.html

PY   http://www.carioca.com/ham/manager.htm

SP   http://Tartarus.Phys.US.edu.PL/

SV   http://www.radiomagazine.com/call/call.htm

T9   http://www.dxlabsuite.com/t93y/callbook.htm

TF   http://www.nett.is/~tf5bw/ira/cqtf/irafeltal.html

TG   http://members.xoom.com/CRAG/Miembros.htm

VE   http://www.rac.ca/callbook/

VK   http://www.aca.gov.au/database/radcomm/licence.htm

VP9   http://www.bermuda-shorts.com/rsb/callsign.htm

YL   http://www.ltn.lv/~linda/hamlist.htm

YO   http://www.dxlabsuite.com/yo3kaa/yocall.htm

YS   http://www.milian.com/faf/miembros.shtml

ZS   http://www.sarl.org.za/callbook.htm

Kudos to Kurt OE1002419 (http://www.swl.net/oe1002419) for his contributions to both the general and country-specific search repository.

Note that some of the above URLs are unstable - they suddenly become inaccessible and then just as suddenly reappear; as of 10/3/99, both the 9A and OL callbooks are "down". If you notice that one of these has changed in what appears to be a permanent way, please send email to AA6YQ at aa6yq@ambersoft.com so that the search repository can be updated.

If you have questions or suggestions, please send them via email to the DXLab reflector at dxlab@yahoogroups.com.

Assigning a Search to a Button

Each online callbook and QSL database accessible via Pathfinder is described by a small file, referred to as a *search file*. Your copy of Pathfinder maintains its search files in a subfolder named `Searches`; this subfolder was created and populated when you installed Pathfinder. If you installed Pathfinder in

    C:\Program Files\DXLab Suite\Pathfinder,

then the searches subfolder is

    C:\Program Files\DXLab Suite\Pathfinder

From time to time, new online callbooks and QSL databases become available. In addition, the location or search parameters for existing online resources sometimes change. You can create or modify your own search files to expand Pathfinder's search capabilities -- see Modifying searches for more information. In addition, you can download search files -- either en masse or individually -- from Pathfinder's Search library as they become available by following these directions.

If a downloaded search file describes a callbook or QSL database that you expect to search frequently, you can assign the search to one of Pathfinder's 12 search buttons via the following steps.

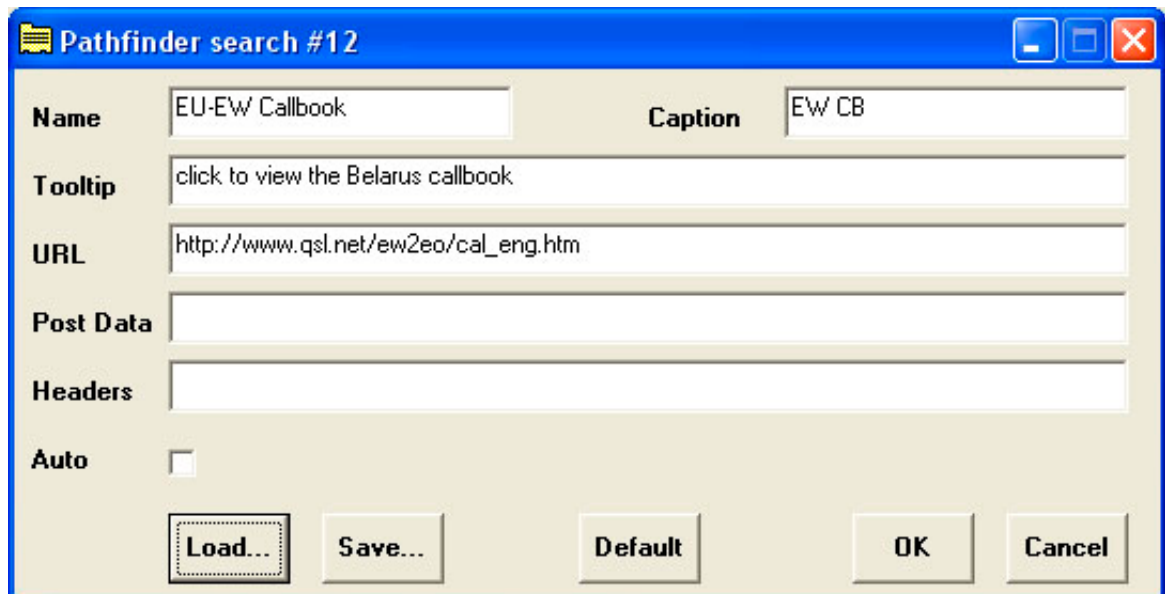| Step	Directions
1	Hold down the control key while clicking on the search button to which you want the search assigned; the **Pathfinder Search** dialog box will be displayed.
2	Click the Load... button in this dialog box; the **Select file from which to load search** dialog box will be displayed.
3	Change the Look in: pull-down so that the dialog box displays the contents of Pathfinder's `Searches` subfolder.
4	Click on the downloaded search file you are assigning to the search button, and then click the Open button; the **Select file from which to load search** dialog box will be closed.
5	Click the OK button in the **Pathfinder Search** dialog box. The search button you designated in step 1 will now search the online resource described by the downloaded search file.

If you have questions or suggestions, please send them via email to the DXLab reflector at dxlab@yahoogroups.com.

Modifying Pathfinder Searches

Suppose, for example, that you find DX-IS to be not very useful and would rather replace it with a display of the EU-EW callbook.

Step Directions

1   Hold down the control key while clicking on the DX-IS button (or while striking the F12 key) and Pathfinder will present a dialog box that allows you to change all of the search parameters -- from the caption on the search button to the URL, PostData, and Headers -- to whatever you want.

2   Place http://www.dxlabsuite.com/ew2eo/cal_eng.txt in the dialog box's URL field, and clear all characters from the PostData and Header fields. The EU-EW callbook does not involve a database search -- its a static text file accessible via this URL.

3   Update the Name, Caption, and Tooltip fields to reflect the new search. The dialog box should now look like this:

Step	Directions, continued
4	Click the OK button, and you'll never be more than one click or keystroke away from the EU-EW callbook. Pathfinder will remember this modified search from one session to the next, even if you upgrade the program.
5	To share this search with friends, click the Save... button in the above dialog box -- you'll be prompted for a filename, into which Pathfinder will store the search parameters.If you send them this file, another Pathfinder user can click the Load... button in the above dialog box -- the result will be as if they'd typed in the search parameters themselves.

It's only necessary to use Save... and Load... if you plan to share searches; Pathfinder automatically remembers your search modifications from session to session using the Windows registry.

Pathfinder 4.9.4

Automating a Database Search

Automating a database search is more complex:

Is the parameter encoded in the URL?	Some QSL information sources expect parameters like Target Callsign to be encoded in the URL -- QRZ and Buckmaster, for example**.** You can usually determine what they expect by using your browser's "View HTML" or "View Source" command. As you might guess by looking at these searches, the string {Target Callsign} in the URL field is replaced by the contents of Pathfinder's Target Callsign textbox before the URL is sent. Similarly, the string {MyCallsign} is replaced by the current user's callsign.
Must you encode and convey specific information as Post Data and Headers?	Other QSL information sources use HTML forms and CGI, which means you must properly encode and convey specific information to the server as Post Data and Headers. {Target Callsign} substitution is provided for the PostData and Header fields. In addition, any string of the form {N} -- where N is a decimal number less than 255 -- is replaced by a single byte of value N before the field contents are sent.
Discovering what's required	One way to discover what's required is to monitor the interaction between a browser and the search engine with a TCP/HTTP protocol analyzer. Another is to set up a captive web server and then modify the client HTML to send the POST request to that web server.
Restoring a search to "factory" parameters.	The Default button in the modification dialog box restores a search to "factory" parameters. Thus one can experiment freely and then easily put things back the way they were when you first installed Pathfinder.

If you have questions or suggestions, please send them via email to the DXLab reflector at dxlab@yahoogroups.com.

Updating Your Search Library

Each online callbook and QSL database accessible via Pathfinder is described by a small file, referred to as a *search file*. Your copy of Pathfinder maintains its search files in a subfolder named `Searches`; this subfolder was created and populated when you installed Pathfinder. If you installed Pathfinder in

        `C:\Program Files\DXLab Suite\Pathfinder`

then the searches subfolder is

        `C:\Program Files\DXLab Suite\Pathfinder\Searches`

From time to time, new online callbooks and QSL databases become available. In addition, the location or search parameters for existing online resources sometimes change. You can create or modify your own search files to expand Pathfinder's search capabilities -- see page 9 of this document for more information. In addition, you can download search files -- either en masse or individually -- from Pathfinder's Search library (http://www.dxlabsuite.com/pathfinder/searches) as they become available. The following two sections describe these search file download procedures.

If a downloaded search file describes a country-specific callbook, no further action is required; Pathfinder checks its `Searches` subfolder whenever you enter a callsign, and thus will reference the new search file when needed.

If a downloaded search file describes a callbook or QSL database that you expect to search frequently, you can assign the search to one of Pathfinder's 12 search buttons by following the instructions on page 8.

To update a search already assigned to one of Pathfinder's search buttons, assign the newly-downloaded search file to the existing button by following the directions on page 8 of this document.

Downloading All Search Files
The following process updates all search files. If you've made modifications to the search files in your `Searches` subfolder, be sure to make copies before proceeding.

Step	Directions
1	Download the self-extracting executable containing all search files from http://www.dxlabsuite.com/pathfinder/searches/SearchLib.exe
2	When prompted, direct your browser to save this executable file to a temporary location on your hard drive; subfolder `C:\Temp` is often used for this purpose. Note the name of the executable file being downloaded, as well as the destination subfolder.
3	When the download has finished, initiate self-extraction by double-clicking on the executable file in a Windows Explorer window. The **WinZip Self-Extractor** dialog box will appear.
4	By default, the self-extractor will place all search files in `C:\Program Files\DXLab Suite\Pathfinder\Searches` If you installed Pathfinder in `C:\Program Files\DXLab Suite\Pathfinder`, then this default destination is correct -- just click the Unzip button. Your `Searches` subfolder will now contain a full set of up-to-date search files. If you installed Pathfinder elsewhere, modify the Unzip to folder field to designate Pathfinder's `Searches` subfolder and then click the Unzip button.

Downloading Individual Search Files

Step	Directions
1	Display Pathfinder's Search Library by viewing http://www.dxlabsuite.com/pathfinder/searches
2	Find the entry corresponding to the search file you wish to download, and click on it. Your browser will display the search file's contents -- six lines of descriptive information.
3	Use your browser's **SaveAs** command (in it' **File** menu) to store the file into Pathfinder's `Searches` subfolder. If you are updating an existing search file, your browser will ask permission to replace it with the new version; click the **Yes** button.

If the downloaded search file describes a country-specific callbook, no further action is required; Pathfinder checks its `Searches` subfolder whenever you enter a callsign, and thus will reference the new search file when needed.

If the downloaded search file describes a callbook or QSL database that you expect to search frequently, you can assign the search to one of Pathfinder's 12 search buttons by following the directions on page 8 of this document.

To update a search already assigned to one of Pathfinder's search buttons, assign the newly-downloaded search file to the existing button by following the directions on page 8 of this document.

If you have questions or suggestions, please send them via email to the DXLab reflector.