



**Search32**

The Fastest 32 Bits Search Tool For Windows 95  
Copyright © Anet Inc., 1995 - 1997

## **Contents**

[Concept and Designated Purpose](#)

**Working with Search32.exe**

[Interface Overview](#)

[Index Files or Indexes](#)

[Operations on Indexes](#)

[Index Options](#)

[Search Queries](#)

[Search Query Syntax](#)

[Configuration File Search32.ini](#)

[Comments on Microsoft Networking](#)

[Working with Search32 Language Maker](#)

[Distribution Kit and Requirements](#)

[About](#)

## Concept and Designated Purpose

Welcome to [Search32](#), the fastest 32 bit search tool for Windows 95 environment!

Easy to use!

[Search32](#) is designed to perform word-based [search queries](#) on large groups of text (ANSI) files with a total size of tens, or even hundreds, of Megabytes.

Standard search programs, such as Windows 95's [Find](#) tool, perform their searches in a direct manner, scanning an entire disk for matching files. This takes a noticeable time, especially when a large amount of information is scanned.

[Search32](#) tool uses another approach to retrieve the information sought. Search operations are based on a set of specially created ancillary [index files](#), rather than on the original text (ANSI) files. Of course, this technique requires additional disk space. Index file size is usually 30 - 60 % of original text files total size. This method allows [Search32](#) to perform [search queries](#) amazingly fast. This approach is especially useful when it is necessary to perform numerous search queries based on the same index.

## Search Queries

A search query is a word expression composed in accordance with [search query syntax](#). Execution of any search query uses a currently loaded index. To perform any search query you must create at least one [index](#). See '[Operations on indexes](#)' to create an index on a group of text (ANSI) files.

To perform a search query:

- 1) Make [Search](#) tab the current tab.
- 2) Select (load) the index desired index from the [Index being used](#) combo box. An empty index list (in which case the search is disabled) indicates there is no index in the [index folder](#). If no index is available or the existing indexes do not cover your needs, create a new one. See '[Operations on indexes](#)' .
- 3) Make sure the [Update Index](#) button is disabled. Otherwise, update the index.
- 4) Enter a proper search expression in [Enter search expression](#) combo box or choose one from the combo box list. See [search query syntax](#) topic for help with correct search expressions.
- 5) Execute the query by pressing [OK](#) button.

Once the query has been successfully executed displayed are:

The total number of files and entries found

The list of matching files found

Full text view of the currently selected file in file viewer window below.

Navigate forward and backward through the resultant entries using either the navigation scrollbar at the bottom of the file viewer window or F2 and F3 keys.

Other features:

- \* To search for a selected word while in the file viewer window click right mouse button and choose [Search for Selected Word](#) menu item or use the current hot key combination. (Double click to select a word).
- \* To re-search any word among files found click right mouse button and choose [Search among Files Found](#).
- \* To customize [View Options](#) for the file viewer window click corresponding pop-up menu items. For more information see [View Options](#) topic.
- \* To run a program associated with resultant file double click the file name from [Files found](#) list box.
- \* Click right mouse button (or <Shift> + right mouse button ) to show a context sensitive menu for the currently selected file, enabling shell operations on that file such as [Open](#), [Print](#), [Quick View](#), [Properties](#), etc. To see [Quick view](#) in the menu you must first install it. Use Control Panel \ Add/Remove Programs \ Windows Setup \ Accessories.



- 1) It is possible to perform a search query on an out-of-date index and get true search results for files that are not marked as **<Modified>** or **<Deleted>**. Such search results do not display newly created or modified files.
- 2) If files presented in current search results are modified or deleted after the results have been received, they will be labelled as **<Modified>** or **<Deleted>** accordingly. In case of an automatically updateable index you will be notified that the index has been changed. To get up-to-date search results first update the index (unless it is automatically updateable) and repeat the search query.

## Index Files

Index files (an index) is a set of special ancillary files allowing amazingly fast performance of a [search query](#). No search query is possible if no index exists. Before carrying out a search, you must create at least one index. See '[Operation on indexes](#)' topic to see how to create, update and remove indexes. A valid index always consists of two files with the same generic name and [INF](#) and [LNG](#) extensions and several groups of files with the same name and the following extensions: [WTB](#), [RTB](#), [ENT](#) and [STS](#). The group names are constructed as follows: generic index name + three digits group number (starting from zero). Index files contain information about all entries of any particular word from the origin indexed text (ANSI) files and provide fast access and data to retrieval.

When [Search32](#) is launched all indexes available are out-of-date unless they have been updated at launch. Indexes should be updated at launch to ensure that all file changes since the program's last run are included in subsequent searches. Once an index is updated, it becomes up-to-date.

While [Search32](#) is running, even up-to-date indexes, unless they are automatically updateable, can become out-of-date if relevant files are changed. Note, up-to-date status of an index is indicated disabling either the [Update Index](#) button from the [Search](#) tab or the [Update](#) button from the [Indexes](#) tab.

For information on automatically updateable indexes see [Index Options](#).



- 1) Store all indexes in a single folder, making it the [index folder](#) for [Search32](#), so all indexes can be easily accessed from the [Index being used](#) and the [Index name](#) combo boxes in the [Search](#) and [Indexes](#) tabs respectively.
- 2) Perform all [operations on indexes](#) only via [Search32](#) interface.
- 3) Try to work with many indexes of moderate size rather than one huge index. This minimizes the time required to create, update or load an index and, to a lesser degree, perform [search queries](#). You can more easily free disk space by removing any index if it is no longer needed.

## Search Query Syntax [Examples](#)

A search query expression has the following syntax:

[^]word1 <op> [^]word2 <op> [^]word3...

where word1, word2, word3 and so on are the words sought, optional symbol '^' stands for a boolean **NOT** operation and required <op> symbol can be either '&' or '|', standard signs for boolean **AND** and **OR** operations respectively.

### Word's Symbols:

Which characters are detectable as valid word symbols and which are not depends on a language with which an index have been created. For example, both English (i) and English (s) languages from the standard supply (see [Index Options, Language section](#) for more information) supports the following symbols: `_`, `a - z`, `A - Z`, `0 - 9`. Upper and lower-case letters are the same for English (i) and differ for English (s). In addition to those symbols asterisk sign (\*) represents an arbitrary (may be zero) number of valid word symbols and can be placed at the beginning and/or end of the word. For example, `*map`, `bit*` and `*tma*` all match word 'bitmap'.

### Boolean Operations:

If you wish for any queried words to get all matching files and the word's entries in them provided that EACH file must contain ALL the words queried, you should apply **AND** operation. For example:

`word1 & word2` - shows all files and entries in them where both words are presented

If you wish that EACH resultant file must contain ANY ONE (or more) of the words queried, you should apply **OR** operation. For example:

`word1 | word2` - shows all files and entries in them where either `word1` or `word2` is presented

If you wish to get all files not containing any word queried, you should apply **NOT** operation for that word. For example:

`^word` - means to show all files not containing `word`.

### Using parentheses:

The precedence of AND and OR operations are the same, a search query expression is parsed from left to right, so `word1 | word2 & word3` is not the same as `word2 & word3 | word1`. To ensure the correct precedence use parentheses. For example:

`(^(word1 & word2) | word3) & word4`

### Examples of improper search expressions:

`^^word` - two signs 'NOT' should be delimited by parentheses:

`^(^word)`. Avoid double negative syntax.

`((word1 | word2) & word3` - number of left and right parentheses are not equal.

## Operations on Indexes

[Search32](#) interface provides the following operations on [indexes](#): creating, updating, removing and switching between existing indexes.

### To create a new index:

- 1) Make [Indexes](#) tab the current tab.
- 2) Fill in the [Index name](#) combo box with generic name of the index you want to create. Location for the new index is defined by current [index folder](#).
- 3) [Browse for files to index](#) or fill in the [Location of files to index](#) text box with a line using the following syntax:  
`[+|-]pathname1[+]; [+|-]pathname2[+]; ...`,  
where pathname1, pathname2 and so on are full pathnames for files to index, delimited from each other with semicolon. Wildcard symbols '\*' and '?' are available. Optional sign '+' or '-' at the beginning of a particular pathname item specifies whether or not to include the item from the entire index scope. Optional sign '+' at the end of the item specifies whether or not to process subfolders. Example:  
`c:\*.txt+; -c:\tmp\*.txt; c:\mypas files\*.pas+`  
This syntax covers all files with .txt extensions from drive 'c' excluding those located in 'tmp' folder as well as all files with .pas extensions from 'mypas files' folder and all its subfolders.
- 4) Customize parameters from the [Index Options](#) frame.
- 5) Press the [Create](#) button. Watch the status bar at the bottom of the window while indexing. Note that the index creation time varies depending upon total size of indexed files and the performance of your computer.

### To update an existing index:

- 1) Make [Search](#) or [Indexes](#) tab the current tab.
- 2) Select an index you want to update from the [Index being used](#) (while in the [Search](#) tab) or [Index name](#) combo box (while in the [Indexes](#) tab).
- 3) While in the [Indexes](#) tab modify (if necessary) the list of indexed files for that index in [Location of files to index](#) text box. Use [Browse](#) button instead of editing this text box manually.
- 4) Press [Update Index](#) button (while in the [Search](#) tab) or [Update](#) button (while in the [Indexes](#) tab) and watch the status bar at the bottom of the window.



Text files that have been previously indexed but are not included in the new list are removed from the updated index. Old versions of the same files are replaced with new versions. Unrevised files remain untouched in updated index.



Disabled [Update](#) button indicates [Up-to-date](#) status of a selected index. As soon as you modify contents of the [Location of files to index](#) text box, the [Update](#) button

becomes enabled.

**To remove an existing index:**

- 1) Make [Indexes](#) tab the current tab.
- 2) From the [Index name](#) combo box select the index you want to remove.
- 3) Press [Remove](#) button.

**To switch between existing indexes:**

- 1) Select (load) any index you want from either [Index being used](#) combo box in [Search](#) tab or [Index name](#) combo box in [Indexes](#) tab. When using the [Index name](#) combo box you are able to view [Notes](#) text box and [Current index statistics and options](#) frame. Both refer to the currently selected index.



Index folder is shown by [Index folder](#) locked text box at the top right corner of [Indexes](#) tab. It specifies the folder where all current [indexes](#) are located. To change index folder press the [Change](#) command button and choose any folder you want using [Browse for index folder](#) dialog box.

## Interface Overview

[Search32's](#) interface allows users to perform word-based [search queries](#) and [operations on indexes](#) as well as customize [Search32's](#) start behavior, hot key combination, file view and index monitoring options. These correspond to the five main dialog boxes: [Search](#), [Indexes](#), [Properties](#), [View Options](#) and [Monitoring](#) tabs respectively.

While in the [Search](#) tab you can:

- 1) Select (load) an [index](#) you want from the list of indexes currently available.
- 2) Update the selected index if necessary.
- 3) Enter and execute a new word [search query](#) or one from the [list of current search session queries](#).
- 4) View the results of an executed query:  
the total numbers of files and entries found,  
the list of matching files found  
and full text view of any resultant file with internal viewer.
- 5) Quickly navigate through the entries found in the file viewer window.
- 6) Easily re-search for any word among files found.
- 7) Easily search for any selected word while in the file viewer window.
- 8) Customize [View Options](#) with right-click pop-up menu while in the file viewer window.
- 9) Run the program associated with any particular matching file found (for example, to edit the file).
- 10) Execute any shell operation available in a right-click pop-up menu upon a selected file.

While in the [Indexes](#) tab you can:

- 1) Select (load) an [index](#) you want from the list of currently available indexes.
- 2) Create a new index for a group of text (ANSI) files.
- 3) Update an existing index.
- 4) Remove an existing index.
- 5) Change current [index folder](#).
- 6) View statistics and view and/or edit notes and options for the currently selected index.

While in the [Properties](#) tab you can:

- 1) Customize [Search32](#) start behavior options.
  - 2) Specify hot keys combination.
- See [Properties Tab](#) for more information.

While in the [View Options](#) tab you can:

- 1) Check/uncheck [Stay on Previously Selected](#) option.
- 2) Check/uncheck [Word Wrap](#) option.
- 3) Choose font and background color for the file viewer.

See [View Options Tab](#) for more information.

While in the [Monitoring](#) tab you can:

- 1) Specify whether index monitoring is normal or suspended.
  - 2) Define the list of not monitored folders.
  - 3) Specify whether to monitor Index and Windows folders.
- See [Monitoring Tab](#) for more information.

All previously executed search queries are accumulated and become available during the current search session from the [Enter search expression](#) combo box.

## Configuration file Search32.ini

All parameters stored in configuration file [Search32.ini](#) can be adjusted from [Search32](#), so there is no need to edit it directly. Configuration file [Search32.ini](#) is automatically rewritten each time you exit [Search32](#). It is located in the same folder as [Search32.exe](#). [Search32.ini](#) stores the following parameters:

### [Indexes]:

- 1) An [index folder](#).
- 2) Generic name of the index with which you last worked.



When [Search32](#) is launched, it reads the parameters from [Search32.ini](#) and loads all the [indexes](#) located in the index folder making the index with which you last worked the current index. If [Search32.ini](#) doesn't exist or contains improper parameters, the folder containing [Search32.exe](#) becomes the index folder. In this case the executable makes the first found index the current index.

### [Properties]:

- 1) [Search32](#) start behavior parameters.
  - 2) Letter key of hot key combination.
- See [Properties Tab](#) for more information.

### [View Options]:

- 1) [Stay on Previously Selected](#) option.
  - 2) [Word Wrap](#) option.
  - 3) Font and background color for the file viewer.
- See [View Options Tab](#) for more information.

### [Monitoring]:

- 1) Comma delimited list of non-monitored folders.
  - 2) Index and Windows folders monitoring options.
- See [Monitoring Tab](#) for more information.



[Normal/Suspended](#) monitoring option isn't saved in [Search32.ini](#) file. It is [Normal](#) by default and can only be changed while [Search32](#) is running.

### [Registration]:

- 1) Registration number.
- 2) Registration password.

### [Miscellaneous]:

- 1) Comma delimited list of file types used in [Add Files to Be Indexed](#) dialog box.

## Browse

Pressing [Browse](#) button opens [Add Files To Be Indexed](#) dialog box to define the list of files to be indexed, instead of manually filling [Location of files to index](#) text box.

Determine the list of files to be indexed by using [Add Folder](#) or [Add Files](#) command buttons.

- 1) [Add Folder](#): add all files of the currently selected type (see [File types to select](#): combo box) from the currently selected folder (see [Folders](#): list box).
- 2) [Add Files](#): add only the selected files from [Files](#) list box.

Multiple selections are available. Use standard Windows technique to select. [With Subfolders](#) check box specifies whether a particular item added includes subfolders.

[Exclude From Index](#) check box specifies whether a particular item added is excluded from the index scope.

All actions are reflected in the [Result](#) text box at the top of the dialog box. Edit this text box using syntax that is exactly the same as [Location of files to index](#) text box.

See '[Operations on indexes](#)' topic for help.

Press [Clear All](#) button to clear [Result](#) text box contents.



Use of \*.\* ([All files](#)) for creating the list of indexed files is not recommended, because along with files of text (ANSI) format, improper formats, e.g., executables, help files and so on, implicitly come into the list. The program does not check indexed files for their formats.

## Index Options

### Automatically updateable:

Specifies whether the current index is updated in background whenever relevant indexed files are changed, newly created or deleted. This relieves the user from periodic tiresome index updatings and assures indexes are up-to-date. Note, such indexes are updated at [Search32](#) start independent of [Update all indexes at start](#) check box status ([Properties](#) tab).



- 1) The system monitors changes only in folders that existed at the time the index was created. New folders will not be subject to updates, even if they are covered by the index scope. To update files in new folders, go to the [Indexes](#) tab, enable [Update](#) button (by entering a space at the end of [Location of files to index](#) text box contents) and update the index.
- 2) [Search32](#) does not provide automatic updates of remote indexes. See [Comments on Microsoft Networking](#) for information about remote indexes.

### Language:

Now supports the following languages (symbol 'i' or 's' in parenthesis indicates CASE INSENSITIVE or CASE SENSITIVE versions accordingly):

- 1) English (i)
- 2) English (s)
- 3) English + Russian (i)
- 4) English + Russian (s)
- 5) English + German (i)
- 6) English + German (s)

Each language is simply a character set table which supports certain ANSI symbols and ignores the others. While indexing some text it acts as a filter, allowing inclusion of any words that consists of supported symbols and skipping the others that consists of ignored symbols. When creating an index choose the appropriate language. Press [Dots](#) button next to the [Language](#) combo box to view a language character set either for a current index or for a language from the list.



If your version of [Search32](#) is supplied with [Search32 Language Maker](#), you can be able to customize the available languages for your needs or to create a new language(s). See [Working with Search32 Language Maker](#) topic for details.

### Maximum and Minimum word length:

Specifies a maximum and a minimum word length while indexing or for a currently selected index. Words with greater or lesser length are ignored while indexing and searching. You cannot enter a maximum greater than 99 or a minimum less than 1.

### Compacting ratio:

Specifies the number of deleted files allowed to be stored in an index. When indexed files are deleted from the disk and Search32 updates relevant indexes, it doesn't physically delete them from the index. Rather it marks them as "removed" and ignores them while searching. This greatly speeds updates, but uses additional disk space. If, while updating an index, the number of deleted files exceeds the specified compacting ratio value Search32 re-creates the index.



Note, you can change all editable parameters from the [Index Options](#) frame (except [Automatically updateable](#)) only when creating a new index (not when updating an existing one).



Use [Notes](#) text box to enter any user comments for a particular index while creating or updating it.

## Distribution Kit and Requirements

[Search32](#) distribution kit consists of the following files:

englishs.ln\_  
germani.ln\_  
germans.ln\_  
hsun32.ex\_  
keyhook.dl\_  
lngmaker.ex\_  
parsers.dl\_  
readme.txt  
russiani.ln\_  
russians.ln\_  
search32.ex\_  
search32.hl\_  
setup.exe  
setup.inf  
shellext.dl\_  
srch32\_d.dl\_

### Requirements:

[Search32](#) tool is designed for Windows 95 and Windows NT operating system. It is not compatible with Windows 3.x.

## About

**This product is copyrighted by:**

© Anet Inc., 1995 - 1997

## Version 2.03

### Contact information:

Anet Inc.

315 Alamo Square

Alamo, CA 94507

U.S.A.

Phone: 888 - 709 - 2638 (TTT - 709 - ANET) or  
510 - 735 - 1173

FAX: 510 - 735 - 7035

E-Mail: search32@anetusa.com (*registration/sales*)  
s32support@anetusa.com (*technical support*)

### or in Russia:

142092, Moscow Region, Troitsk, Oktyabrsky Prosp., 3.

Phone: (095) 334 - 53 - 13

E-Mail: support@anetusa.com

### Implementation notes:

This product is based on our [Srch32\\_d.dll](#) dynamic link library, a powerful engine for indexing and text retrieval operations. Unique algorithms are assembled as a fast, comprehensive, easy to use tool. Its interface functions can easily be built into any 32-bit application to provide speedy search capabilities. **Anet Inc.** is ready to help with your needs for up-to-date text retrieval technologies.

### Multilanguage support:

At this time the following ANSI character sets are supported (both case insensitive and case sensitive versions):

English (i)

English (s)

English + Russian (i)

English + Russian (s)

English + German (i)

English + German (s)

Please visit our Web site for more languages:

<http://www.anetusa.com/s32langs.htm>

## Search Queries Examples

Query expression:

Query action:

`car` Finds all files and text strings containing `car`. Each resultant file will contain at least one entry of `car`.

`^car` Finds all files not containing `car`.

`car & lorry` Finds all files `car` and `lorry`. Each resultant file will contain at least one entry of `car` and one entry of `lorry`.

`car | lorry` Finds all files and text strings containing `car` or `lorry`. Each resultant file will contain at least one entry of `car` or one entry of `lorry`.

`car & ^lorry` Finds all files and text strings containing `car`, provided that each file must contain at least one entry of `car` and no entry of `lorry`.

`^car & ^lorry` or `^(car | lorry)` Finds all files containing neither `car` nor `lorry`.  
or

`^car | ^lorry` or `^(car & lorry)` Finds all files containing neither `car` nor `lorry`.

`bit*` Finds all files and text strings beginning with `bit...` (e.g. `bit`, `bitmap`, `bitwise` etc.). Each resultant file will contain at least one matching entry.

`*bit*` Finds all files containing words which begin with `bit...` (e.g. `bitmap`), have `...bit...` in the middle (e.g. `arbitrary`) or end with `...bit` (e.g. `inhibit`). Each resultant file will contain a matching entry for at least one query parameter.

## Properties Tab

### Run at Windows start:

Specifies whether [Search32](#) will run at every Windows start.

### Update all indexes at start:

Specifies whether [Search32](#) will update all indexes when it starts. This option ensures that all current relevant files' modifications, deletions and creations are included. Note, automatically updateable indexes are updated at start whether or not [Update all indexes at start](#) is checked.

### Run minimized:

Specifies whether [Search32](#) will run minimized on the taskbar at start.

### Hot keys:

Specifies <Ctrl + 'letter key'> hot key combination, a handy way to find a word from within another active program. Just select the word and press the hot key combination. Results appear amazingly fast. Note, the hot key combination also works when searching for a selected word while in file viewer window.

### Customize Languages:

Press the button to launch [Search32 Language Maker](#) utility. See [Working with Search32 Language Maker](#) utility for details.

## Comments on Microsoft Networking

This version of [Search32](#) is local and doesn't provide network users to simultaneously search on remote shared index(es). But a single user can create and search on remote index(es).

When creating a network index, all names of indexed files must be network file names (UNC names) rather than local file names. To ensure this, specify a proper expression in [Location of files to index](#) text box while creating the network index. This will make possible to correctly open the files from the displayed search results. For example, the following expression covers all files with .txt extensions from drives C and D of computer named MyComputer:

\\MyComputer\c\\*.txt+; \\MyComputer\d\\*.txt+

For local index this expression looks simply as:

c:\\*.txt+; d:\\*.txt+

To load a remote network index follow these steps:

- 1) Using Windows 95 Explorer's [Map Network Drive](#) right-click menu item, map network drive that contains a remote index you want to search. This should be done before Search32 begins running.
- 2) Run [Search32](#), go to [Indexes](#)-tab, press [Change](#)-button to activate [Browse for Indexes Folder](#) dialog box and open [Select drive](#) combo box. Once step (1) is successfully carried out, mapped network drive is available.

Now, proceed as usual.

## **View Options Tab**

### **Stay on Previously Selected:**

If checked, system maintains selection on the file selected in previous search results. Otherwise, the first file in the list is selected.

### **Word Wrap:**

Specifies whether or not text appears wrapped in the file view window.

### **Font:**

Font selection for text in the file view window.

### **Background color:**

Select background color for the file view window. Only pure colors are available.

## Monitoring Tab

### Monitoring:

**Normal** monitoring ensures all updates of automatically updateable indexes are carried out at the time [Search32](#) detects creations, deletions or modifications of relevant files.

**Suspended** monitoring detects all changes to relevant files but stores and accumulates them not allowing the system to update indexes. Switching back to **Normal** launches all suspended updates of relevant indexes.



Use **Suspended** monitoring when performing extensive file operations that may cause extensive index(es) updates.

### Exclude from monitoring:

You may exempt particular folder monitoring. This is useful when the **contents** of a folder are not pertinent to any [Search32](#) index but the folder itself is covered by some index as in the following example: the index with `c:\*.txt+` scope and the folder `c:\some folder` with extensively changeable contents but not containing any file with `.txt` extension. Excluding the folder from monitoring saves time when [Search32](#) updates its indexes.

### Select a folder:

Double click on a folder to make it available for inclusion in the [Exclude from monitoring](#) folder list.

### Add:

Click the button to add the selected folder (displayed with opened case icon) to the exempt list.

### Remove:

Click the button to remove the highlighted folder from the exempt list.

### Not to monitor Index folder:

Store only index files in the [index folder](#).

### Not to monitor Windows folder:

Windows OS uses this folder to store system files that are frequently updateable (swap file, registry database files and others). If you have no indexed files in the Windows folder, it is better to exclude it from monitoring. See [Exclude from monitoring](#) section above.



# Working with Search32 Language Maker

## 1.Introduction

[Search32 Language Maker](#) is a simple and easy utility for creating and/or customizing languages for [Search32](#). Why it may be necessary to have additional languages? First, to create a new language that is not presented in the standard language supply (go to the [Index Options](#) to see which languages make up the standard supply). Second, to add some special symbols to or to exclude some unnecessary ones from an existing language character table.

For example, you wish to find in a text all words that represent certain price like \$300. Since no language from the standard supply doesn't treat '\$'-sign as a valid word symbol (it is considered as a delimiter), this task is problematic to solve with standard languages. So, you need to customize a language or create a new one including '\$'-sign to the character table. Or another example. Say, you wish to search only for numbers. In this case, you don't need any other symbols except digits in the language character set. Index created using such "digits" language is dramatically lesser in size, since it skips all the words, except words containing digits.

Phisically, the character table and the name of any language is stored in binary file with [.LNG](#) extension. The process of creating a new language is the producing of such a file and placing it to the folder where [Search32.exe](#) is located. The latter is necessary, since [Search32](#) "sees" just co-located .LNG files.

## 2.More About Languages

In fact, any language acts as an operator that establishes one-to-one correspondence between source and replace symbol for every one symbol from the ANSI character table. To design a language means to define the operator by which every ANSI symbol will be replaced with some other ANSI symbol.

Follow these recomendations while implementing the replacement operator:

1. To make a symbol not supported (ignored) in a language character set, define the operator that replaces this symbol with 0 symbol.
2. To create case sensitive language define the operator that replaces every supported symbol with precisely the same symbol.
3. To create case insensitive language define the operator that replaces every supported symbol except letters as in item 2 and the corresponding upper and lower case letters with a common letter (for example, the upper case letter).

## 3.Creating (Customizing) a Language Step By Step

To design a language you should know about the two main aspects:

1. Which ANSI characters should be supported by the language and which should not.
2. What version of the language, case insensitive or case sensitive you are creating.

To create(customize) a language follow these steps (step 5 and 6 are only for creating case insensitive languages):

1. Launch [Search32 Language Maker](#) either from within Search32 (go to the [Properties](#) tab and press the [Customize Languages](#) button) or independently.
2. To create a new language press [New](#) button and enter any sensible language name in the displayed dialog. New item with this name will appear in the [Languages](#) list box. To customize an existing language (if it is not in the [Languages](#) list box) press [Open](#) button and open a corresponding file.
3. Choose [Switch](#) mode (see the window right bottom corner).
4. Turn the symbols you wish to be supported on and to be ignored off in the [Language character set](#) grid. (See **Interface** section for details).
5. Once all needed symbols are turned on and all the unnecessary are turned off switch to [Drag](#) mode.
6. Drag replacement symbols and drop them onto source symbols to be replaced.
7. Save the created(customized) language pressing either [Save](#) or [Save As](#) button.

#### 4.Interface

##### **Languages:**

Top read only text box contains the full file name for a currently selected language. Contains nothing for a language being created. List box below contains the names of all currently opened languages. Red bullet prior to a name indicates the modified status of the language.

##### **Buttons:**

(Submenu items with the same names from the [File](#)-menu are equivalent)

##### **New**

Displays [New](#) dialog box for entering a name of the language being created.

##### **Open**

Displays [Open](#) dialog box for opening [Search32](#) language file(s) (\*.LNG). Multiple selections are available.

##### **Close**

Closes the currently selected language from the [Languages](#) list box.

##### **Rename**

Displays [Rename](#) dialog box for entering a new name for the currently selected language from the [Languages](#) list box.

##### **Sort**

Sorts the [Languages](#) list box items by their names.

##### **Save**

Saves to the file the currently selected language from the [Languages](#) list box.

##### **Save As**

Saves to the file under a new name the currently selected language from the [Languages](#) list box.

##### **Save All**

Saves all opened languages.

**Language character set grid:**

Displays ANSI character set table for the currently selected language from the [Language](#) list box (if any). Ignored symbols are depicted with gray color and supported with black. Symbols that colored with blue are system reserved for search query expressions and can not be included to a language character set. Note, that all depicted symbols are replacement (not source) symbols.

To switch between supported and ignored states for a symbol do the following:

1. Make sure you are in the [Switch](#) mode (see below).
2. Either move selecting rectangle to a particular symbol with arrow keys and then press spacebar key or simply click left mouse button.

To define a certain replacement symbol for any source symbol do the following:

1. Make sure you are in the [Drag](#) mode (see below).
2. Drag the replacement symbol and drop it onto the source symbol. Note that you are able to drag only included (supported) symbols.

**Font combo box:**

Defines a font for the [Language character set](#) grid and for the displayed replacement operator in the right part of the status bar (see below).

**Switch and Drag mode radio buttons:**

Determines the mode for editing the character set table in the [Language character set](#) grid.

**Status Bar:**

Left part of the status bar at the bottom of the window displays an explaining text for the active control. Right part of the status bar displays a replacement operator for the currently selected symbol from the [Language character set](#) grid. In parenthesis corresponding ANSI codes are displayed.



