SlovoEd Studio & Conversion Tools

Compiler of SlovoEd-compatible dictionary databases

Thank you for buying our products and encouraging us to develop new ones.

Table of contents

What is SlovoEd?

SlovoEd is a well-known set of products of Paragon Software (SHDD). SlovoEd exists for the following mobile devices: Palm OS, Pocket PC, Windows CE Smartphone, Symbian OS (Nokia 9210/9290 Communicator, 7650, 3650, 6600, Siemens SX1, and Sony Ericsson P800/P900[*]).
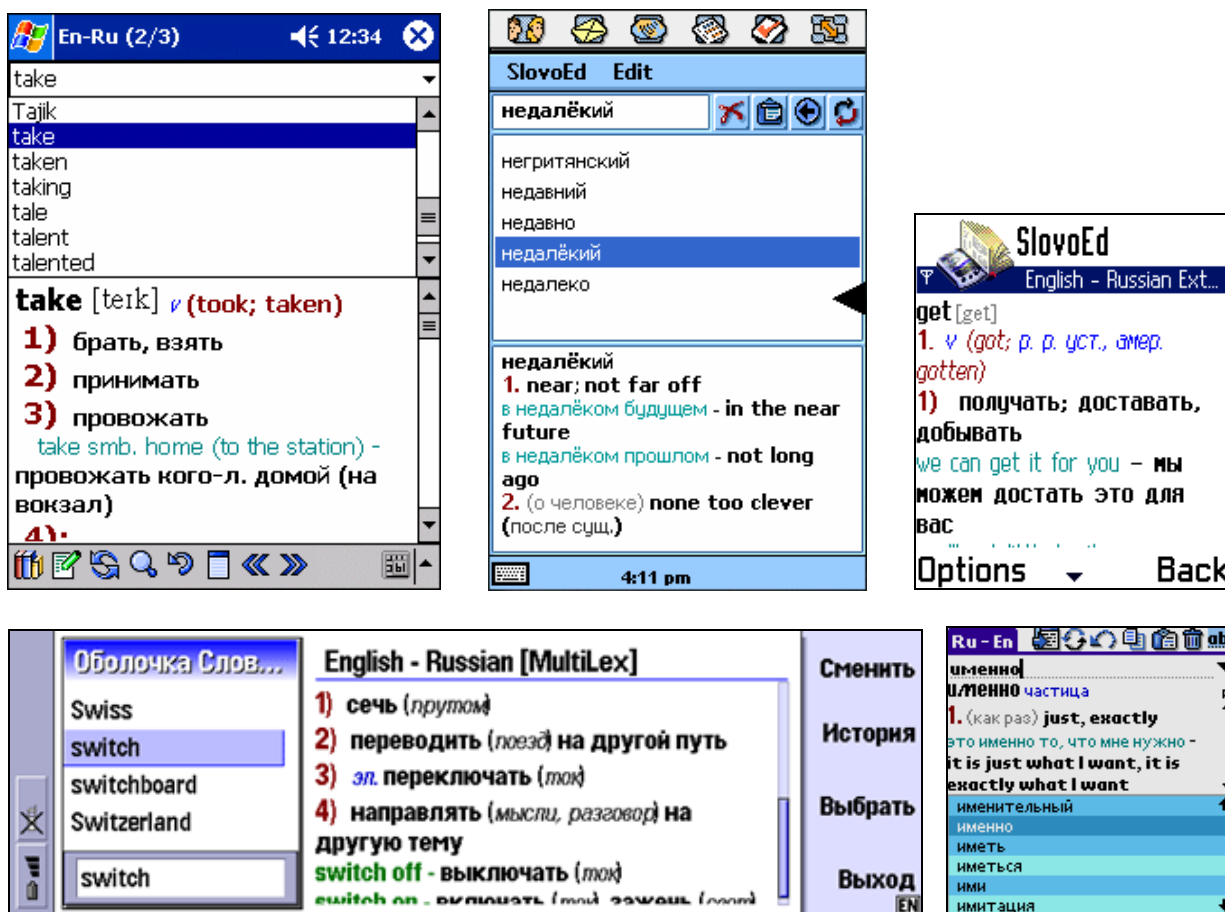
The application SlovoEd always consists of two components – a software engine and a dictionary database. A dictionary database is represented by one or two files with the extension *.prc. Paragon Software (SHDD) uses a special SlovoEd Studio & Conversion Tools to create such *.prc files. We offer everyone to use our compiler to create your own dictionary databases. This documentation describes how to work with the SlovoEd Studio & Conversion Tools.

About the compiler

SlovoEd Studio & Conversion Tools allows you to convert dictionary databases of different types into the SlovoEd-compatible databases. Using SlovoEd Studio & Conversion Tools, you can create a dictionary database from the source file you want and design it as you like. At the moment, you can convert dictionary databases from four different sources into the SlovoEd-compatible format.

---

[*] SlovoEd for Siemens SX1 is being developed at the moment.

Requirements

This compiler is designed only for advanced users of desktop personal computers (with some experience in programming).

SlovoEd Studio & Conversion Tools is designed for desktop PC. On your desktop computer, you should have installed Windows 2000/XP/NT 4.0. Preferable PC requirements: 128 MB RAM, 1500 MHz CPU rate or higher. The required free space on the disk where you will save your project is 20 MB.

Installation

The installation should be done in the following way:

1. Launch the installation file.
2. Choose a directory where the compiler will be installed. To change the destination folder you should press the button "Browse" and set it manually. Then press the button "Next".
3. At the end of the installation you should press the button "Finish".

The icon of SlovoEd Studio & Conversion Tools will be placed on the desktop of your PC.

Using the compiler

To start the compiler you should double click on its icon.

In this section, the meaning of each compiler window will be explained.

Load/Create new project

Choose if you want to go on an existing project or to start a new project.

Project Name

Enter the name for your project.

Please choose kind of dictionary

Here you should choose what dictionary you will compile – unidirectional (for example, the dictionary to translate texts only from Russian into English) or bi-directional (for example, to translate texts from Russian into English and back).

Dictionary source

On this step you should specify some dictionary parameters (for example, its languages).

Dictionary source format

Choose from what format the dictionary database will be compiled into the SlovoEd-compatible format. At the moment the compiler can convert three source formats:
- Lingvo-compatible format - *.dls

- *.csv (Microsoft Excel)
- *.wb (dictionary databases from some Internet resources - http://www.freelang.net/dictionary/index.html , for example).

Dictionary source file

Here you should choose a source file of the dictionary database. Press the button "Browse". Further steps will depend on chosen source format. For the Native SlovoEd format you should only choose the source file. For other formats a separate application will be started. In that application you will be able specify settings of chosen format. Then you will specify the source file.

Dictionary Languages

In the field *language* you should set *from what language* translation will be done, in the field *pair language* you should set *into what language* translation will be done.

If you are working on a bi-directional dictionary database, you will have to set parameters for both directions of your dictionary (for example, at first you will have to set the source file for the English-German dictionary, then for the German-English dictionary).

Common dictionary properties

Here you should set common properties of your dictionary database.

Dictionary Source file

This field will be filled in automatically.

Dictionary Title

Here you should specify the title of your dictionary database. By default the title will be <language 1> - <language 2>, where «language 1» is a language from which the dictionary database will translate text, «language 2» is a language into which the dictionary database will translate. For example, if you are working on the Spanish-French dictionary, the title will be "Spanish – French". You will be able to see this title on your mobile device in the SlovoEd application in the About window.
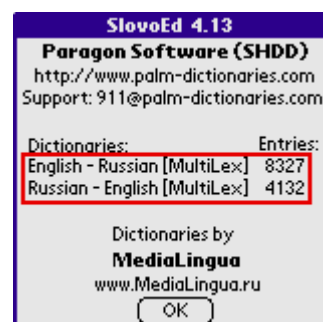
Full Dictionary Title

Here you should type the full title of the dictionary database (for example, the German-English Professional Modern Dictionary). By default the full title equals the title. You will be able to see this full title on your mobile device in the SlovoEd application in the "Select dictionary" window (the menu item "Choose dictionary").
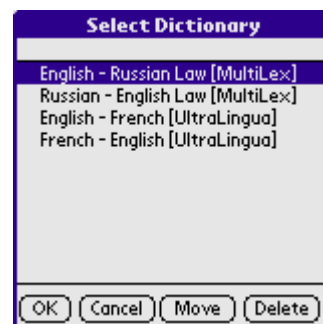
Dictionary subject

Here you should specify the specialization (subject) of your dictionary (for example, medical). For example, you will be able to see this subject on Pocket PC in the SlovoEd application in the "Activate/Deactivate dictionaries" window.
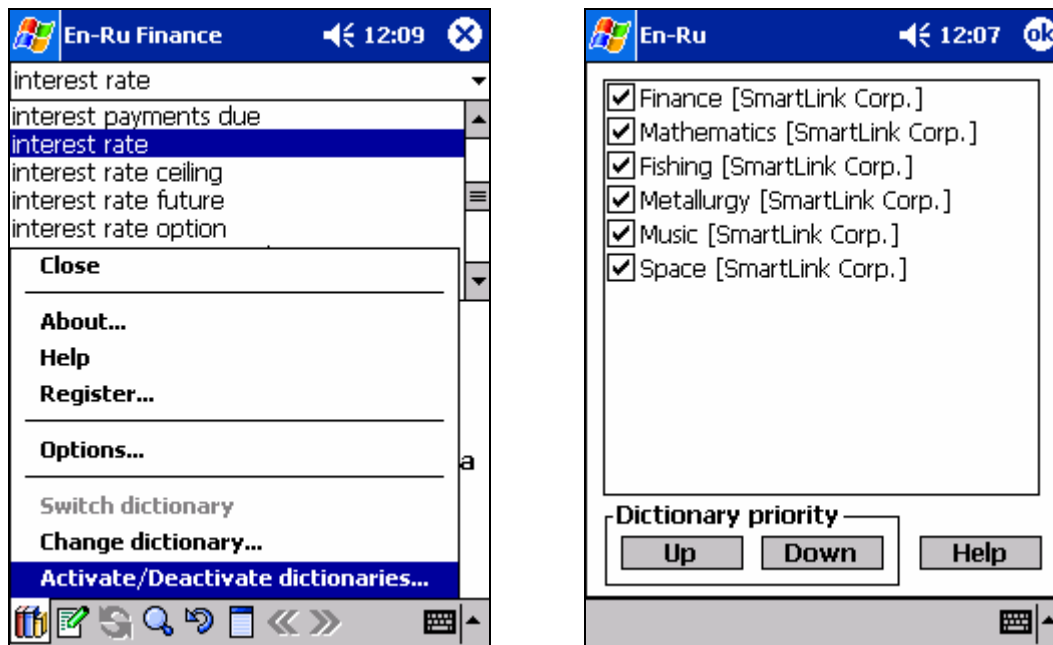
Author's name

Here you can type the dictionary author's name. You will be able to see this name on your mobile device in the SlovoEd application in the About window.
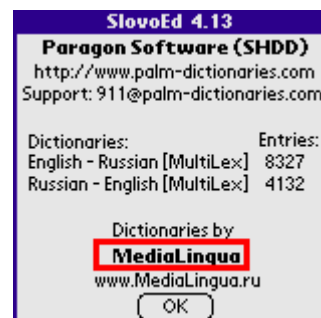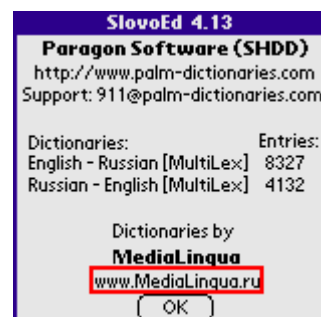
Author's homepage

Here you can type the dictionary author's homepage. You will be able to see this homepage address on your mobile device in the SlovoEd application in the About window.

Styles Properties

Preliminary explanation

The final appearance of the dictionary can be like in the picture at the right. In this picture, **draft 1** is the title of the word entry, [dra:ft] is the transcription, the words *чертёж*, *план*, *проект* are the translations, the words in brackets are the auxiliary information and comments. In terms of the compiler, all parts of the word entry are called styles. Thus, the title of the word entry is a style; the transcription is another style and so on.
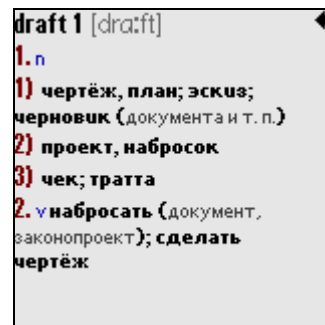
The window *Styles Properties* has two frames. In the left frame, there are visual options that you can set. The right frame is the dictionary preview.
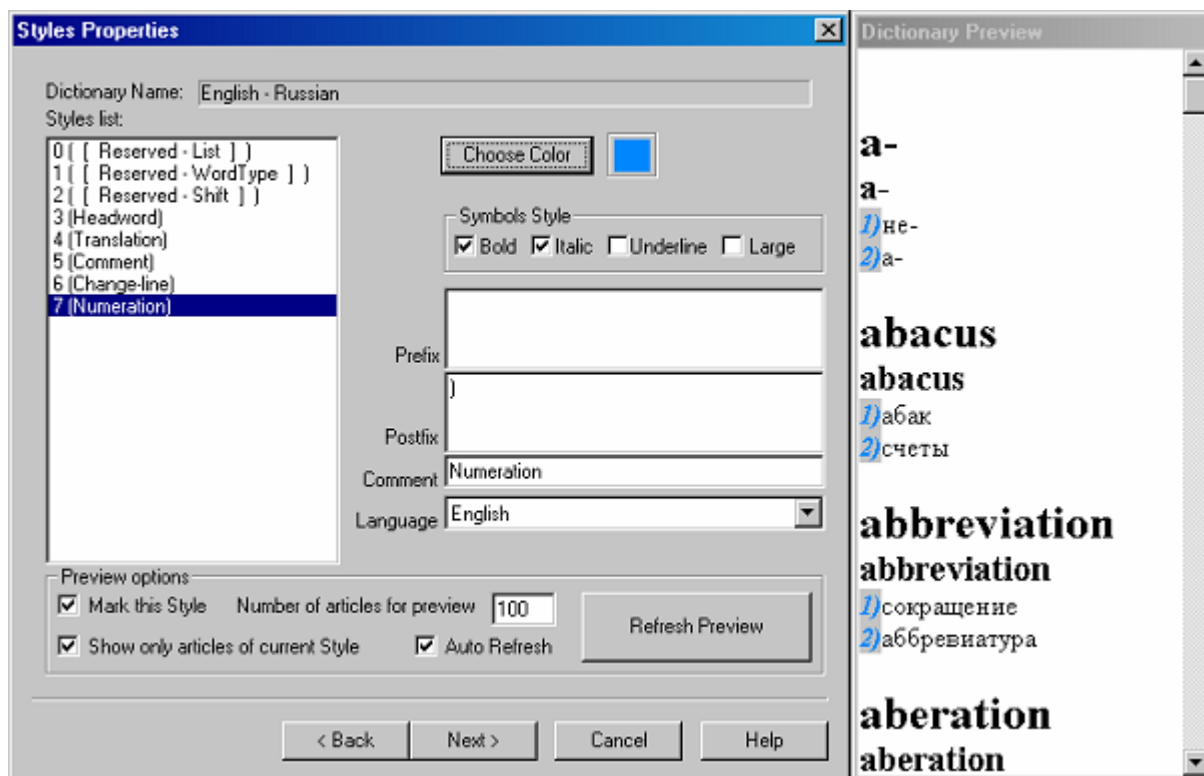
Below, each visual option will be described.

Styles list

In this window, you can see the list of all styles used in the current dictionary. The compiler makes the list of styles. You cannot change the names of the styles 0,1,2, but you can change the names of the other styles.

So, in this window you can choose a style to set then its visual properties (font, color and so on).

Choose Color

Here you can choose a color for the chosen style.

Font

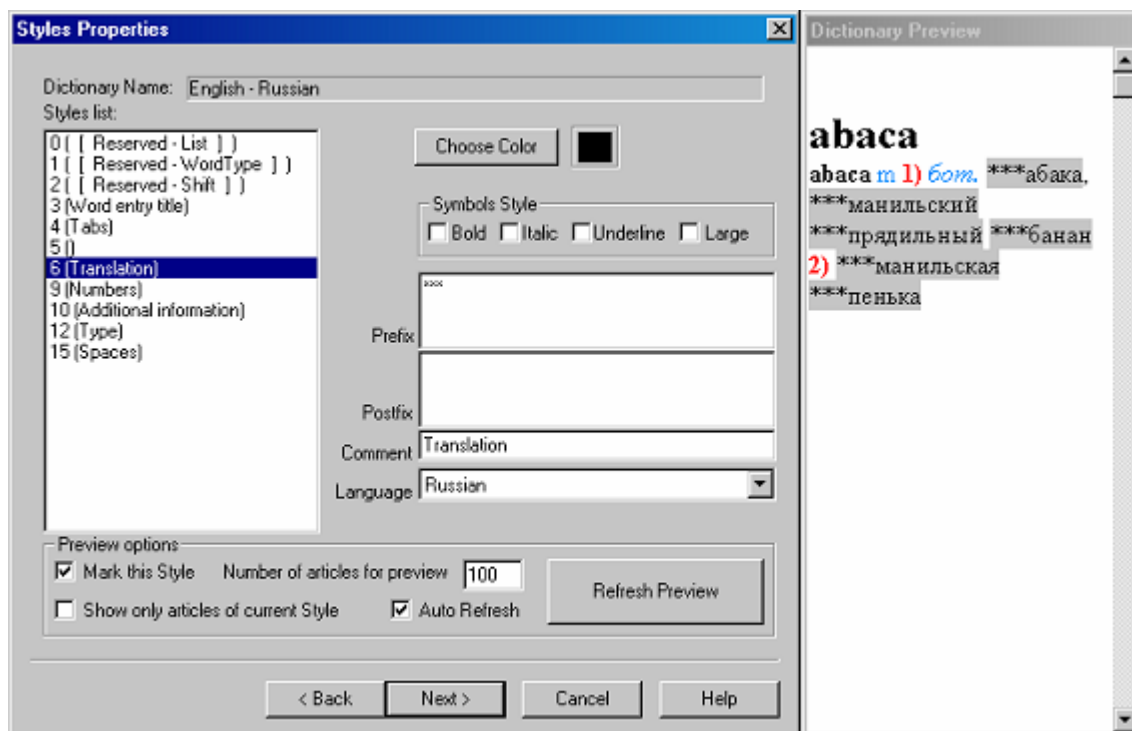Here you can choose a font for the chosen style. By default, none of the options "Large", "Bold", and "Italic" will be switched on.

Prefix

Prefix will be added before every element of the current style in every word entry of the dictionary. For example, let us add *** before every meaning of translation. We should type *** in the prefix field when the style Translation is selected.

Postfix

The same as prefix but after each element of the current style in every word entry.

Comment

In this field you can change the name of the current style (except the styles 0,1,2). Maximal allowed text length is 255 symbols. Besides, in this field you can type some comments, which will help you to remember the current style features later on.

Language

In this field you should specify language of the current style. This is necessary for correct text representation.

To know how the dictionary will look after your corrections you can use two ways: either press the button "Refresh Preview" from time to time, or put a tick in the checkbox "Auto Refresh".

Preview options

Here you can set the options of the dictionary preview. There are the following options:

Mark this style
In the preview frame, the current style will be highlighted in all word entries.

Show only articles of current style
Only those word entries will be shown in the preview, which contain the current style.

Number of articles for preview
Here you can choose how many word entries should be shown in the preview frame.

Auto-Refresh
The preview frame will be refreshed automatically after any change in options.

Refresh Preview
Press this button if you want to refresh the preview frame after making some changes.

Compression type

Here you should choose a compression type. There are two types of compression – Fastest and Full. The fastest compression takes 5 - 15 seconds; the full compression takes 2 - 15 minutes. The dictionary after the fastest compression will have bigger size than after the full compression.

In the professional version of SlovoEd Studio & Conversion Tools, which is designed only for use inside Paragon Software (SHDD), there is another compression type. This compression type gives the best result, even better than the Full type. Therefore if you and Paragon Software do a dictionary database from the same source file, Paragon Software (SHDD) will get better result than you.

Compilation example

For example, let us compile the bi-directional Russian-English dictionary from the *.wb file. The source file was taken from http://www.freelang.net/dictionary/russian.html . On this web page tap the link "download the word list". Then on the desktop computer you should start the downloaded exe file. Then open the folder where the dictionary has just been installed and take two *.wb files. Well, let us start the compiler.

1. Choose "Create new project"
2. Type the project title (for example, "first russ-engl dictionary")
3. Choose "Bi-directional dictionary"
4. Choose "WB converter" as "Source dictionary format":
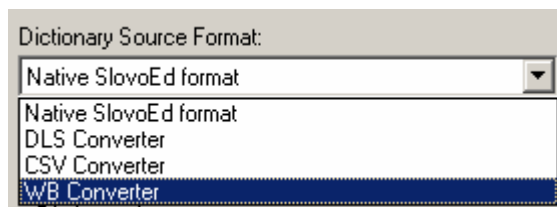
Then press the button "Browse". The program "WB Converter" will be started. Press the button "Browse" again and specify the path to the source file of our dictionary database.

In this paragraph you can read about how to use the checkbox "Create pair dictionary". If you want to create a bi-directional database but you have only one source file (responsible for translation only in one direction), you should do the following: at first

you should set parameters of the dictionary database to translate words in one direction. Then, when you are setting parameters of the pair database, you specify the same source file and put a tick in the checkbox "Create pair dictionary".

In our example, we do not need to put a tick in the checkbox "Create pair dictionary", therefore press the button "Convert":
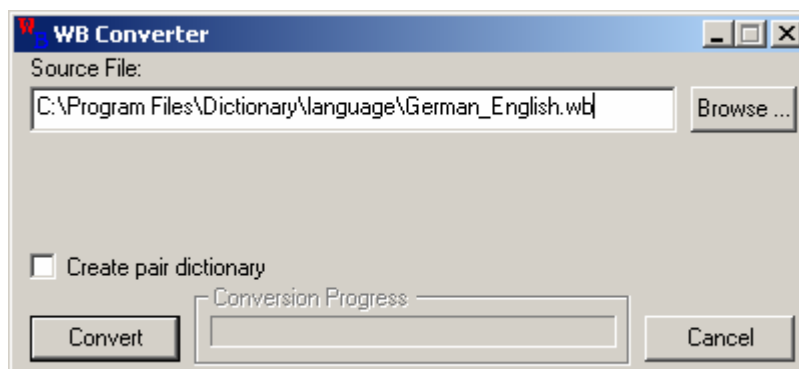
When the dictionary is converted for further actions, you will see the appropriate window. Press the button "Ok". The window "Dictionary source" will appear again. Choose "Language" = "English", "Pair language" = "Russian". The window should look like in the picture below:
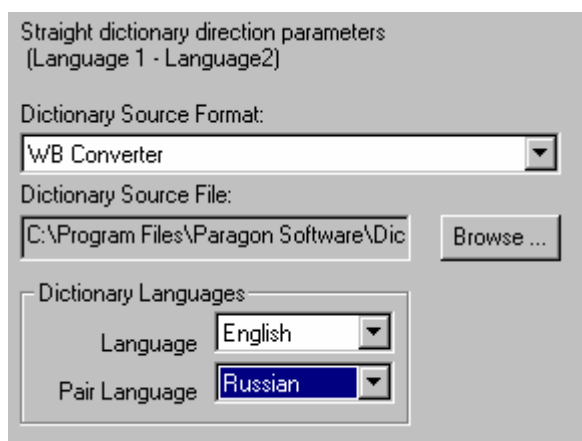
Then press "Next". The compiler will prepare for further actions. Then do the same for the pair dictionary database. Then you will see the window to set common dictionary database properties:
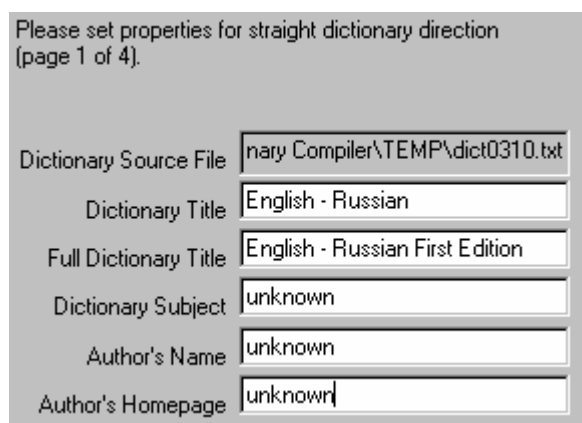
Set the dictionary database properties as you like and press the button "Next". Then you will have to set visual properties of your dictionary database. First, to see changes at once in the preview frame you should put a tick in the checkbox "Auto-Refresh". Second, you should put a tick in the checkbox "Show only articles of current style" not to waste your time scrolling the text in the preview frame and looking for changed appearance of a certain style. Besides, let us highlight the current style in word entries by putting a tick in the checkbox "Mark this style".
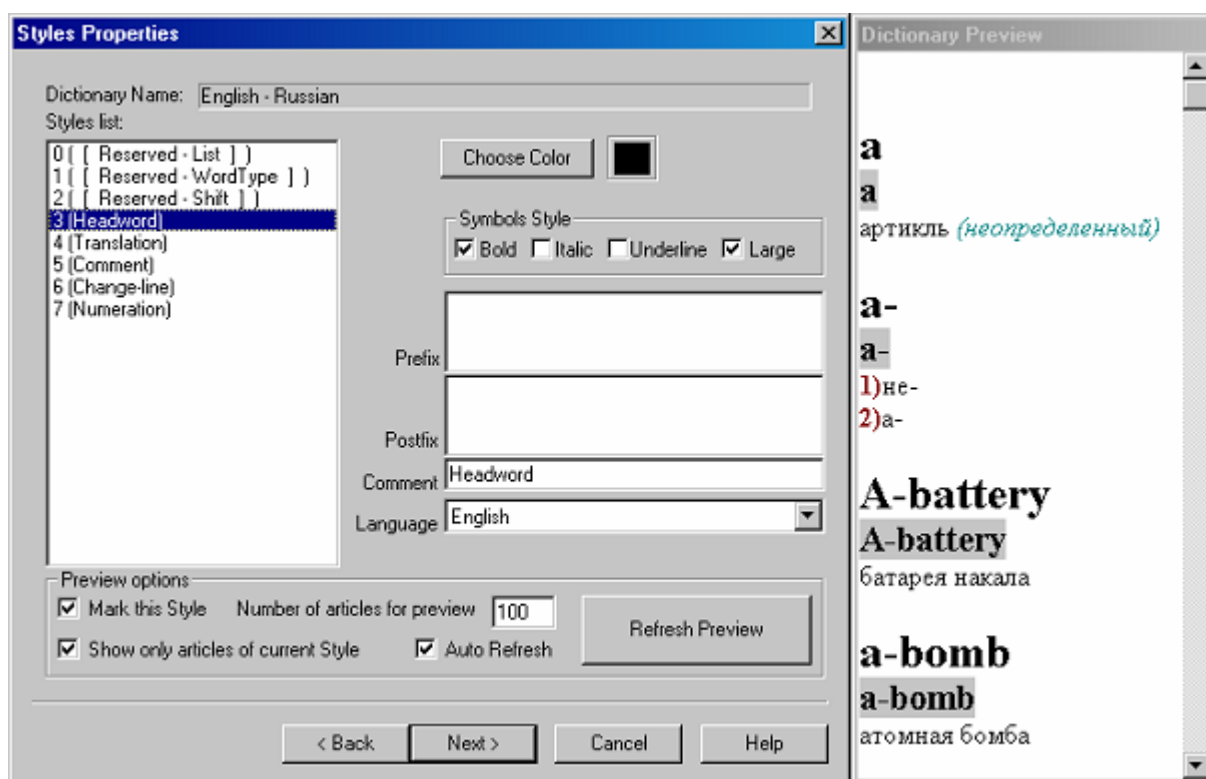
Now let us check each style and make necessary changes. For example, let us change the appearance of numbers showing translation meanings. Let us change the color of this style for blue, the font for italic and bold. Press the button "Change color", choose a blue color. Put ticks in the checkboxes "Bold" and "Italic".

As a result we will see the following:
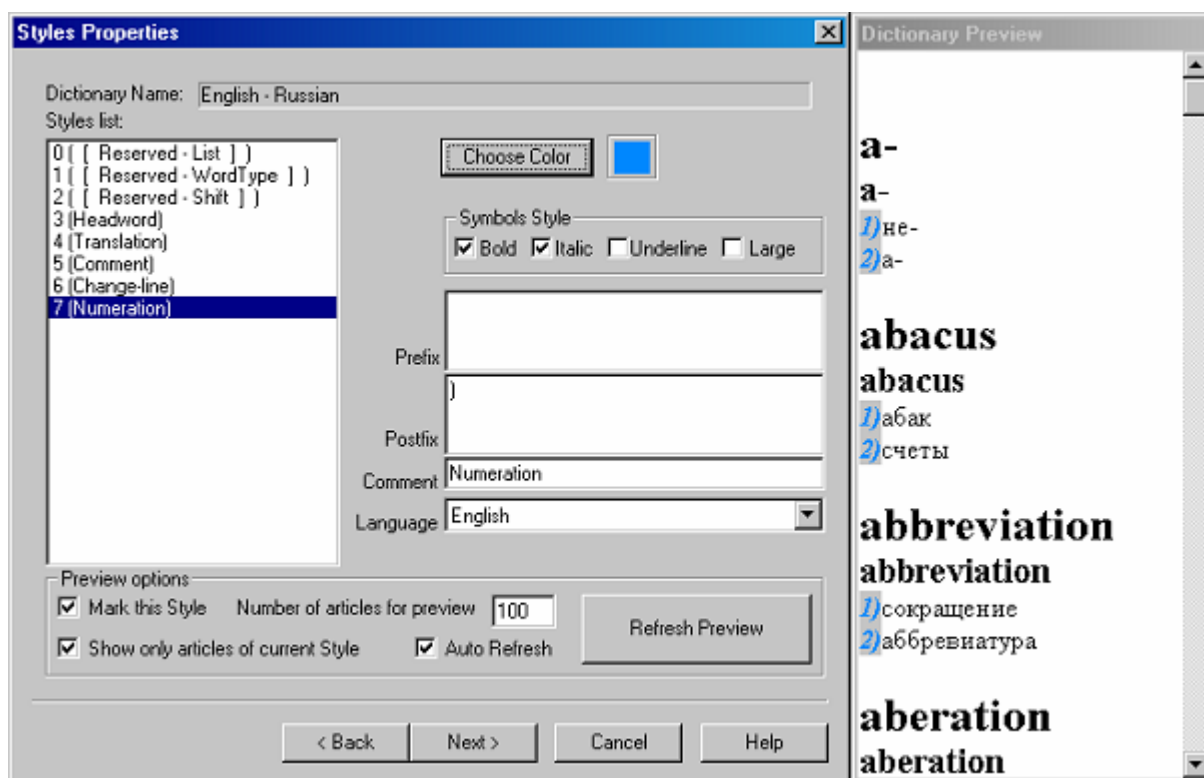
In the same way you can change appearances of all the other styles of word entries. When all necessary changes are made, press the button "Next". Then you should choose a way of compression – "Fastest" or "Full". Let us choose "Full". You will be asked to save the project before performing the compression. Choose a folder to save the project there (by default, your project will be saved in the folder where SlovoEd Studio & Conversion Tools is installed) and press the button "Save". The final stage of the compilation will begin. As we have chosen the compression type "Full", the process will take about 5-10 minutes and then the compiler will be closed automatically. Resulting SlovoEd-compatible files will be saved in the same directory where the project was saved.

How to use files made by the compiler

Palm OS

If you have a device with Palm OS, you can use the *.prc files made by the compiler in the following way:

1. Download the package of any dictionary for Palm OS from the web-site of Paragon Software (SHDD): http://www.palm-dictionaries.com
2. Install the application SlovoEd on your device. Its icon will appear in the list of all applications.
3. Install the dictionary database (*.prc files) that you made on your device too.
4. Launch SlovoEd on your device by tapping its icon.
5. Your dictionary database will be available in SlovoEd in the window "Change dictionary".

Pocket PC

If you have a device with Pocket PC/Pocket PC 2002/Pocket PC 2003, you can use the *.prc files made by the compiler in the following way:

1. Download the package of any dictionary for Pocket PC/Pocket PC 2002/Pocket PC 2003 from the web-site of Paragon Software (SHDD)[1]:
   http://pocket-pc-dictionaries.penreader.com
2. Install the application SlovoEd on your device. Its icon will appear in the window Start/Programs.
3. Using the program File Explorer, put your *.prc files (made by the compiler) in the folder on your mobile device where the *.prc files of the installed dictionary are placed. For example, it can be the folder My Device\Program Files\Paragon German-English Lite [Arsenal].
4. Reset your device.
5. Your dictionary database will be available in SlovoEd in the window "Change dictionary".

Windows CE Smartphone

If you have a device with Windows CE Smartphone, you can use the *.prc files made by the compiler in the following way:

6. Download the package of any dictionary for Windows CE Smartphone from the web-site of Paragon Software (SHDD):
   http://smartphone-software.penreader.com
7. Install the application SlovoEd on your device. Its icon will appear in the window Start/Programs.
8. Using the program File Explorer, put your *.prc files (made by the compiler) in the folder on your mobile device where the *.prc files of the installed dictionary are placed. For example, it can be the folder My Device\Program Files\Paragon German-English Lite [Arsenal].
9. Reset your device.
10. Your dictionary database will be available in SlovoEd in the window "Change dictionary".

Symbian OS

If you have a device Nokia 9210 Communicator, you can use the *.prc files made by the compiler in the following way:

1. Download the package of any dictionary for Nokia 9210 from the web-site of Paragon Software (SHDD): http://nokia-9210-software.epocware.com
2. Install the application SlovoEd on your device. Its icon will appear in the panel Extras.
3. Using the program Nokia 9210 Communicator (its icon is on the desktop of your desktop PC), put your *.prc files (made by the compiler) in the folder on Nokia 9210 where the *.prc files of the installed dictionary are placed. For example, it can be the folder C\System\Apps\SlovoEd.
4. Your dictionary database will be available in SlovoEd in the window "Change dictionary".

On devices Nokia 9290, 7650, 3650, 6600, Siemens SX1 and Sony Ericsson P800/P900 you should act in the same way[2].

---

[1] The possibility to use files made by the compiler will be implemented in SlovoEd beginning from the version 4.0.
[2] The possibility to use files made by the compiler will be implemented in SlovoEd beginning from the version 2.0.

Example of using the compiler in corporate purposes

The compiler can be used not only to create language databases (to translate words from one language to another), but also to create reference books (for example, address book or database of corporate terms).

Let us suppose you work for a large corporation. A lot of your colleagues have got modern and useful PDAs. But everyone chose a device according to his needs: one of your colleagues chose Zire 71 with the operating system Palm OS, the second colleague chose HP iPAQ 1940 with the operating system Windows Mobile 2003, the third one decided to use the advantage of the smartphone to combine the functions of the phone and the organizer and chose NOKIA 6600. It seems that there is no program solution, which would provide all the employees of your corporation with the address book containing the information about all your colleagues due to the following problems:

1. Software for PDA usually depends on the operating system of PDA. And all your colleagues have PDAs with different operating systems. There is no universal program, which would work on all PDAs.
2. The address book may contain up to 20 000 entries. If you used the standard address book (any PDA contains it by default), the search would be executed rather slowly in such a big address book.
3. The standard address book uses the main memory on any PDA. But the main memory is limited and usually rather small. So it is preferable to install memory-consuming applications on memory card. Unfortunately it is impossible to place contacts in standard address book on memory card.
4. To provide all PDAs of your colleagues with the same address book, you will have to do it by means of the synchronization between a PDA address book and Microsoft Outlook on a desktop computer. But a set of synchronization problems is known for each operating system of PDAs. So a technical engineer of your corporation will have to find workarounds for all problems, which may appear during the synchronization a PDA with a desktop computer.

The compiler allows you to create a universal address book, which can be used on any PDA (with any operating system) and avoid all the listed above problems. You can use the following procedure:

1. Anyhow convert the source corporate address book into a format supported by the compiler. For example if you use *Contacts* in Microsoft Outlook as your address book you should do the following:
    * open *Contacts* in Microsoft Outlook
    * run *Import&Export* in the *File* menu
    * in the opened window select the *Export in the file* item and press the *Next* button
    * select the *Comma separated (Windows)* file type and save this file. **Warning!** If you use Microsoft Outlook 2003, you should select the *Microsoft Excel* or *Tab separated (Windows)* file type. When the file is saved, change its extension to .csv.
2. Convert the corporate address book (*.csv) into a *.prc file using the compiler. The SlovoEd dictionary engine can work with this format. To convert *.csv file into a *.prc file you should do the following:
    * start the compiler
    * choose "I want to create new project"
    * type the project title (for example, "addressbook")
    * choose "Unidirectional dictionary"
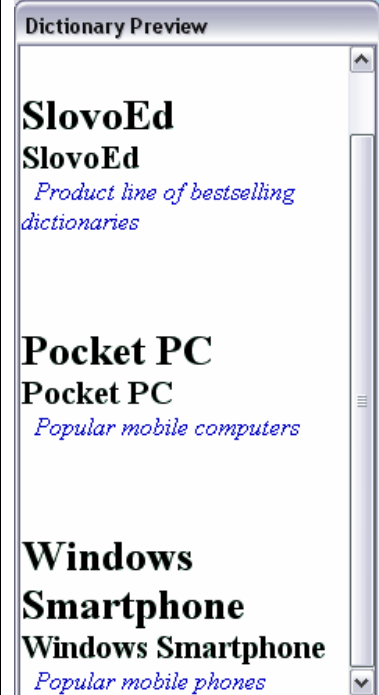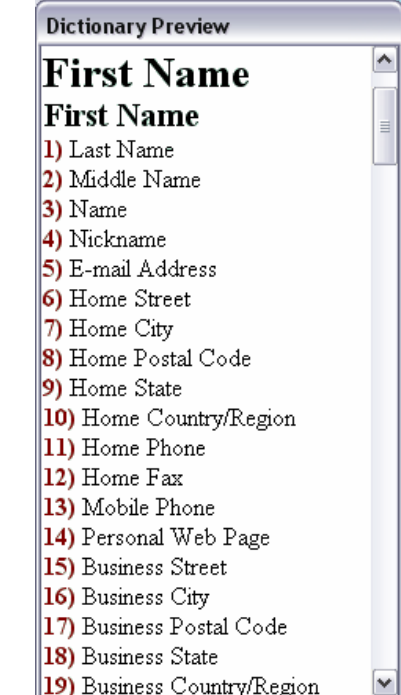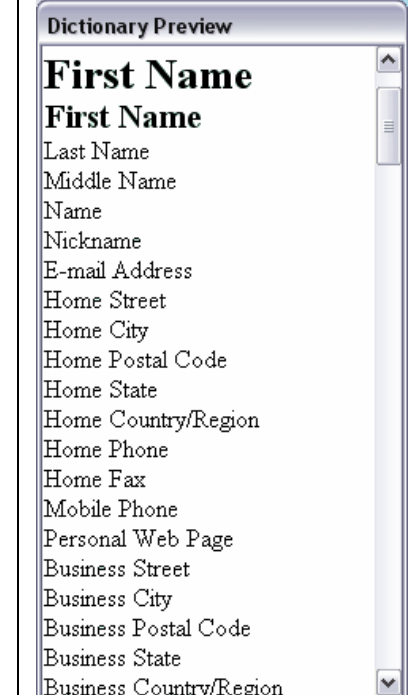
- choose "CSV Converter" as "Source Dictionary Format":
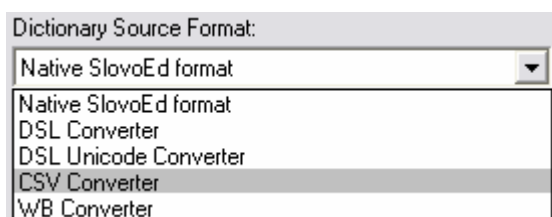
- press the button "Browse". The program "CSV Converter" will be started. Press the button "Browse" again and specify the path to the source file of your database.
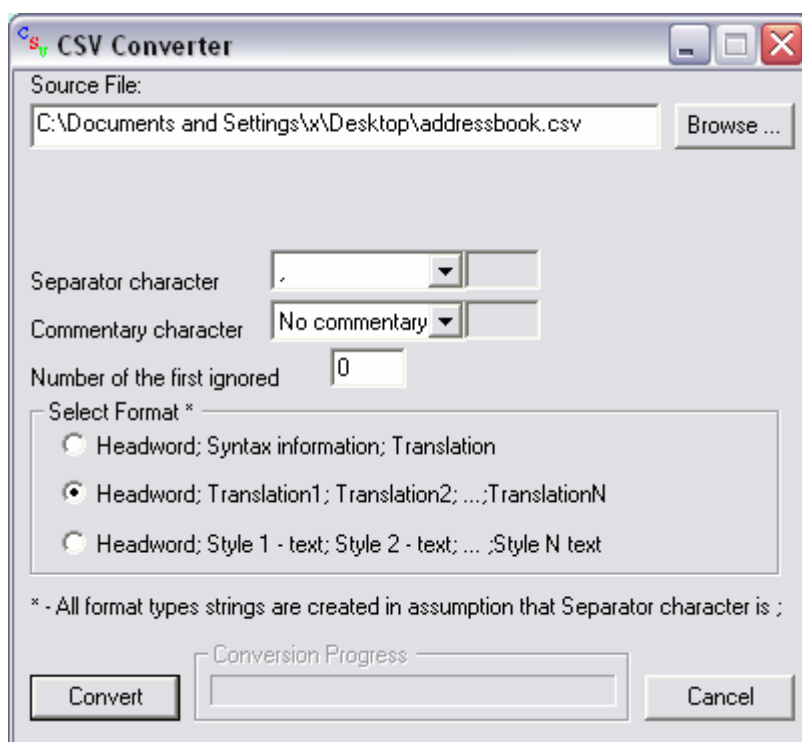
Then select a separator character that is used in your database file and an expected entry format (one of the items in the *Select Format* section). In the pictures below you can see how entry will look like for each format:

Headword;Syntax information; Translation	Headword;Translation1; Translation2;…;TranslationN	Headword; Style1- text; Style2- text; …; StyleN- text
Dictionary Preview **SlovoEd** SlovoEd *Product line of bestselling dictionaries* **Pocket PC** Pocket PC *Popular mobile computers* **Windows Smartphone** **Windows Smartphone** *Popular mobile phones*	**Dictionary Preview** **First Name** **First Name** 1) Last Name 2) Middle Name 3) Name 4) Nickname 5) E-mail Address 6) Home Street 7) Home City 8) Home Postal Code 9) Home State 10) Home Country/Region 11) Home Phone 12) Home Fax 13) Mobile Phone 14) Personal Web Page 15) Business Street 16) Business City 17) Business Postal Code 18) Business State 19) Business Country/Region	**Dictionary Preview** **First Name** **First Name** Last Name Middle Name Name Nickname E-mail Address Home Street Home City Home Postal Code Home State Home Country/Region Home Phone Home Fax Mobile Phone Personal Web Page Business Street Business City Business Postal Code Business State Business Country/Region

In the specified entry format types, the character «;» means separator character that is used in your database file. In the described above example, the separator character is «,».

- press the button "Convert". When the dictionary is converted for further actions, you will see the appropriate window. Press the button "Ok". The window "Dictionary Source" will appear again. Choose "Language" and "Pair language".
- press "Next". The compiler will prepare for further actions. Then you will see the window to set common dictionary database properties:

Please set properties for straight dictionary direction (page 1 of 4).

Dictionary Source File	nary Compiler\TEMP\dict0310.txt
Dictionary Title	English - Russian
Full Dictionary Title	English - Russian First Edition
Dictionary Subject	unknown
Author's Name	unknown
Author's Homepage	unknown

Set the dictionary database properties as you like and press the button "Next". Then you will have to set visual properties of your dictionary database. This process is described in details in the **Compilation example** section.

- When all necessary changes are made, press the button "Next". Then you should choose a way of compression – "Fastest" or "Full". Let us choose

"Full". You will be asked to save the project before performing the compression. Choose a folder to save the project there (by default, your project will be saved in the folder where SlovoEd Studio & Conversion Tools is installed) and press the button "Save". The final stage of the compilation will begin. As we have chosen the compression type "Full", the process will take about 5-10 minutes and then the compiler will be closed automatically. Resulting SlovoEd-compatible files will be saved in the same directory where the project was saved.

On this step, you have partially solved problem 3: now your data need much less space than before.

3. Install any SlovoEd dictionary on your PDA (according to the operating system of your PDA). To download a dictionary, use necessary links from the text above in the sections Palm OS, Pocket PC, Windows CE Smartphone and Symbian OS. On this step, you have solved problem 2: the SlovoEd dictionary engine is specially designed for quick search in large databases of a certain format. Also you have solved the second part of problem 3: the SlovoEd dictionary engine can work with data placed on memory card. The main memory of your device will remain free.

4. Copy the compiled *.prc file on PDAs by one of the procedures described above in the sections Palm OS, Pocket PC, Windows CE Smartphone and Symbian OS. On this step, you have solved problem 1: the universality of the corporate address book. The output *.prc file can be used on all kinds of PDAs despite the operating system. Finally, you will not meet problem 4 at all as you just need to copy one file to PDA (no synchronization). The fewer programs take part in the same process, the less the possibility of having problems on any step.

Thus the compiler is that very program solution which allows you to provide all employees of your corporation with a database of important information and give them the powerful and quick engine to work with this database.

Uninstallation

To completely uninstall SlovoEd Studio & Conversion Tools from your desktop PC you should do the following:

1. Press the button "Start", choose the item "Settings", and then open the "Control Panel".
2. In the appeared window choose "Add/Remove programs".
3. In the list of the installed programs choose "SlovoEd Studio & Conversion Tools" and press the button "Remove".

Customer support service

SlovoEd Studio & Conversion Tools is a free program and is designed for advanced PC users. Therefore the creator of the compiler will support customers personally. As a result Paragon Software (SHDD) cannot guarantee that all the messages will be replied in two or three days. Response time will depend on internal circumstances in Paragon Software (SHDD). Paragon Software (SHDD) may refuse to provide technical support on this product to a customer without any warning.

Your comments and reports about the compiler send to the e-mail address: support_team@penreader.com
Web-site of Paragon Software (SHDD): www.penreader.com
Tel.: +7 (095) 408-61-79, +7 (095) 408-76-77 (technical support line works from 11.30 a.m. till 7.00 p.m. of Moscow time)[*]

Paragon Software (SHDD) can be a distributor of your dictionary databases made by our compiler on mutually beneficial terms. If you have any questions concerning cooperation with Paragon Software (SHDD), send your message to marketing@penreader.com

---

[*] **When calling from outside Russia, please consider time shifts:** Moscow is 11 hours ahead of San-Jose, 8 hours ahead of New York, 3 hours ahead of London, 2 hours ahead of Munich and Paris, 6 hours behind Tokyo. Moscow office operation hours are from 11.30 a.m. till 7.00 p.m. of Moscow local time.

© Paragon Software (Smart Handheld Devices Division)
Dolgoprudny, Moscow region, Russia