

ritePen® Pro 3.1 for Windows

User Manual

Table of Contents

What is ritePen?	2
ritePen Basics	2
Why Do I Need ritePen Pro?	3
How Does ritePen Work?	3
Entering Text	4
Gestures	5
Word Menu	7
Handwritten Shortcuts	9
Context Sensitive Recognition.....	11
Creating Recognition Profiles.....	13
Binding Contexts to Applications	15
User Dictionary.....	17
Customizing Writing Area	19
Main Menu.....	20
Binding Pane.....	20
Settings.....	21
General.....	21
Ink.....	23
Profiles.....	24
WordMenu	30
Macros.....	31
Floating Toolbar	34
Auto-Upgrades	35
Appendix. Advanced Binding Features	36
Programmatic assignment of recognition profiles to application windows	36
Enabling context sensitive recognition in Web forms	36

What is ritePen?

ritePen is an easy-to-use and powerful handwriting recognition application. It allows you to write anywhere on the screen of your Tablet PC, on an electronic whiteboard, with your pen tablet, or even with a mouse or on a touchpad. ritePen instantly converts your handwriting into text and enters the text into any Windows application, such as Microsoft Word, Notepad, Excel, Outlook, File Manager, Internet Explorer, etc. ritePen also allows pen control of your applications and desktop via ink commands.

ritePen Basics

- Understands any handwritten style, does not require learning or training. Just write continuously, in whole sentences, on multiple lines of text, anywhere on the screen. Your writing will be automatically segmented into words, recognized and entered into the needed document or application.
- Supports simple and reliable gestures for common operations like adding a line break or space, deleting a wrong letter, copying and pasting, or adding punctuation and special signs via the pop-up keyboard. It also allows you to choose variants of recognized words from the answer list.
- Does not interfere with your regular use of a PC. Unlike other pen input applications, it intelligently detects scrollbars, menus, resizing areas, and other navigational and designated elements of application windows and allows seamless manipulation and navigation within your desktop application. ritePen application can also be manually switched between writing and mouse mode by single tap.
- ritePen software employs advanced dictionary technology. In addition to large main dictionary which includes common words, key medical terms, personal and geographical names, you can always add your own personal or industry specific terms to further increase recognition accuracy. You can simply type in new words into the custom user dictionary or import them from text files or the system clipboard.
- This Professional Edition of ritePen includes context sensitive recognition; you can assign individual "recognition profiles" to fields of forms and other applications to recognize them with high accuracy. Examples are phone numbers, personal names, mailing addresses and many other common data types. To facilitate context sensitive recognition, ritePen Pro comes with an extensive set of predefined "lexicons" and an easy visual binding interface.
- This version of ritePen software recognizes handwriting in multiple languages: English, French, German, Italian, Portuguese, Russian, and Spanish. Simply switch your keyboard layout to another language and write - ritePen application will follow your workflow. More languages are under development.

- With ritePen, you can automate all your routine desktop tasks by creating and using Handwritten Shortcuts (*pen macros, ink commands*): putting your signature in a document, pasting common texts without looking for them, opening favorite websites or frequently used documents are now at your fingertips.
- Unlike other handwriting recognition utilities, ritePen seamlessly works with remote applications over Citrix and RDP protocols, which is important for data input in many industries.
- When ritePen software is running on a Tablet PC or a Windows Vista PC, it further improves recognition accuracy by combining our riteScript technology with the embedded handwriting recognition engine, providing industry's best recognition accuracy.

We are constantly improving ritePen's features, handwriting recognition accuracy and usability. You can check for new upgrades at any time by clicking the *Check For Upgrade* button in the *About* box.

Why Do I Need ritePen Pro?

With ritePen Professional Edition, you can enjoy full power of handwriting recognition, pen-based desktop control, and easy corrections. The following features of ritePen Pro are absent in the standard edition:


- **Context sensitive recognition** with many dozens of pre-built **lexicons** coming with ritePen Pro. You can **assign** dedicated **recognition profiles** to any application or form to further improve recognition accuracy.
- Ability to customize **writing area**. Exclude your drawing applications from "writing mode" of ritePen without losing the ability of full-screen writing.
- Advanced **handwritten shortcuts**. Use any keystroke combinations to automatically perform sophisticated repetitive desktop tasks with a single ink command.

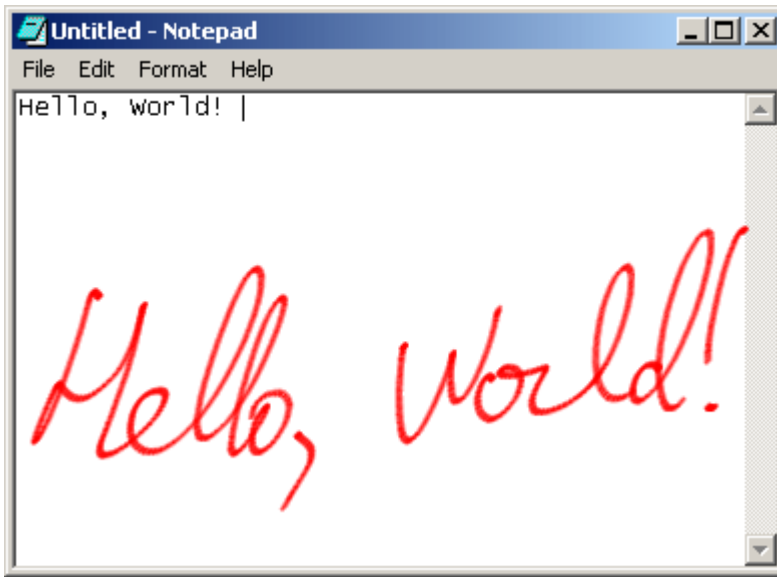
How Does ritePen Work?

ritePen receives your handwriting, stroke by stroke, from a pen-enabled device and passes the strokes to the advanced "third generation" riteScript® handwriting recognition engine, which converts your handwriting into text. You write as you normally do, in words and phrases, and riteScript technology automatically segments your handwriting into words and lines. When you finished writing, ritePen receives the recognized text from riteScript, deletes handwritten strokes from the screen, and enters the text into the active text-enabled application, placing the text at the current position of the cursor. ritePen also recognizes your **gestures** to perform

common operations like adding a space or a line break, deleting wrong symbols, or offering a list of answers. ritePen does not interfere with your navigation and control operations, such as pointing and clicking, dragging application windows, selecting portions of text, etc. When you write and encircle a word, ritePen interprets it as a **handwritten shortcut** and looks for that word in your list of pen macros to execute the corresponding action.

Entering Text



Launch ritePen by opening it from the Start>Programs menu>EverNote>ritePen. The ritePen notification icon  appears in the Windows Taskbar. Now ritePen is ready to accept your writing anywhere on the screen and convert it into text. Open any text-enabled application, for example, Notepad, and write a few words on the screen.



Note the screen cursor changing to the pen style as you start writing. Once you complete writing, the converted text appears in the Notepad and your handwriting disappears from the screen.

What if you want to drag a window of an application or scroll through a document? ritePen will not interfere with your actions in most Windows applications. In other words, if you drag an application window holding your pen on its title bar, or scroll the window using your pen, or press menu or toolbar buttons, your actions will not be interpreted as writing a new word. For this reason, you should always *start* a new portion of your *writing outside* title bars, scrollbars, toolbars or menus of application windows. However, you can freely *cross* all such bars and menus while you are writing.

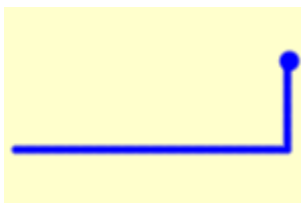
In order to *select* a word in the typed text, double tap on it. To select a fragment of the text, tap and hold at the beginning of selection area. Then drag the pen, as you typically do with a

mouse. The initial holding time is slightly longer than with a mouse, because ritePen needs a short time to realize that you intended selection and not writing. Sometimes, a line may be drawn through your selected fragment of the text; stop dragging at the end of your selection, continue holding the pen down until the line disappears and turns into the selection. If your work involves extensive text selection, you may choose to temporarily disable ritePen by tapping on its notification icon in the taskbar or ritePen **toolbar**. Its appearance will change to . Tap on the icon again to re-enable ritePen .

You may choose to use your digital pen as the only writing tool, while your mouse, touchpad, trackball and other "navigational" devices will not produce digital ink input even when ritePen's writing mode is on. To enable this feature, check the box *Use only pen for input* in *Settings>General*. Your pen will still perform intelligent navigation of the desktop as explained above.

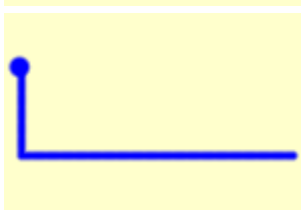
Gestures

ritePen allows basic pen-based text editing via simple gestures, so you can perform most common editing operations without touching the keyboard. Each gesture must be written in one continuous stroke, as shown in the table below. The starting dot shows the beginning point of each stroke.



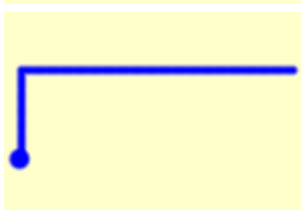
Line break (*down then left, horizontal part at least twice as long as the vertical one*)

Inserts line break at the current position of the text cursor in the active application.



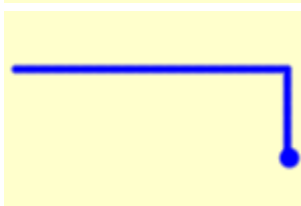
Space (*down then right, horizontal part at least twice as long as the vertical one*)

Inserts space at the current cursor position.



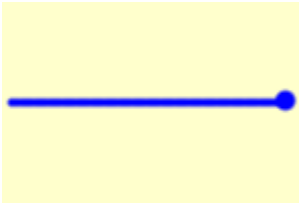
Tab (*up then right, horizontal part at least twice as long as the vertical one*)

Inserts tab at the current cursor position.



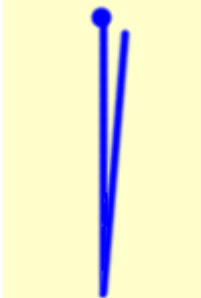
Undo (*up then left, horizontal part at least twice as long as the vertical one*)

Undoes the previous action(s).



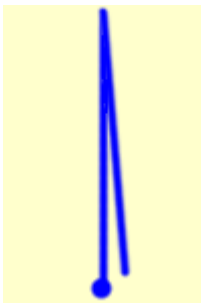
Backspace (*right to left, not too short, keep the stroke horizontal*)

Deletes the symbol immediately preceding the current position of the text cursor or the selected text in the active application.



WordMenu (*down then up, writing over the downward part; keep the strokes vertical*)

Retrieves the list of answers for all words for the most recent portion of your writing.



Punctuation pane (*up then down, writing over the upward part; keep the strokes vertical*)

Launches the pane with punctuation signs, special symbols and navigation keys. Click on a symbol to add it to the text at the current cursor position.

,	'	()	*	\$	↶	↷	✕
.	"	[]	&	£	→	←	PgUp
:	;	{	}	^	¥	Ins	Del	PgDn
-	+	<	>	%	€	Home	↑	End
/	\	_		©	®	←	↓	→
!	?	~	@	#	=	...	└	↶



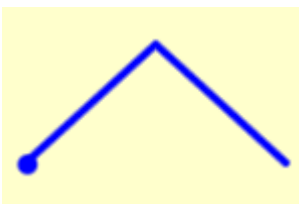
Copy (*left then right, writing over the leftward part; keep the strokes horizontal*)

Copies the selected object into the system clipboard (same as pressing Ctrl-C)



Cut (*right then left, writing over the rightward part; keep the strokes horizontal*)

Cuts the selected object into the system clipboard (same as pressing Ctrl-X).



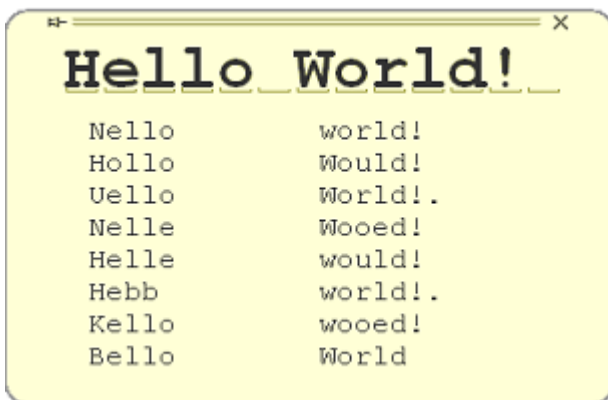
Paste (*right-up then right-down, symmetrical, at the angle of about 45 degrees*)

Pastes an object from the system clipboard to the current cursor position of the active window (same as pressing Ctrl-V).

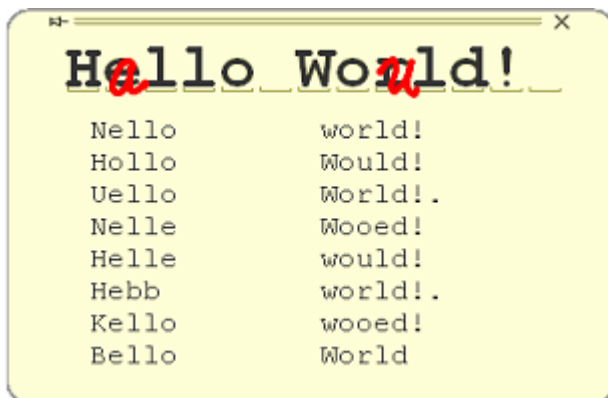
Additionally, the **Capitalization** gesture - a straight-up vertical stroke alternating the letter case, is available in the Word Menu as explained in the next section.

Word Menu

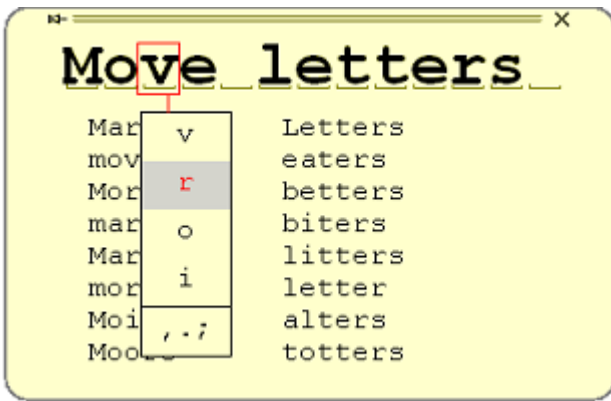
ritePen WordMenu displays the list of alternative recognition answers and allows correcting recognized text and selecting other answers for recognized words. It lists the best answer for each word in the top line and alternatives below in smaller font. Click on any item to substitute the top word with the chosen one.



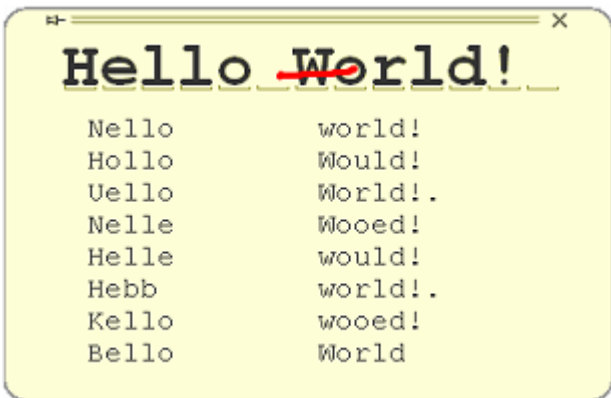
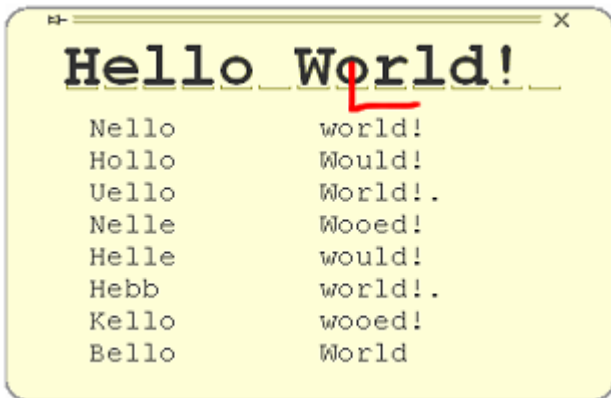
If there are no correct answers in the list you can correct words in the top (boldfaced) line by directly overwriting incorrect letters:



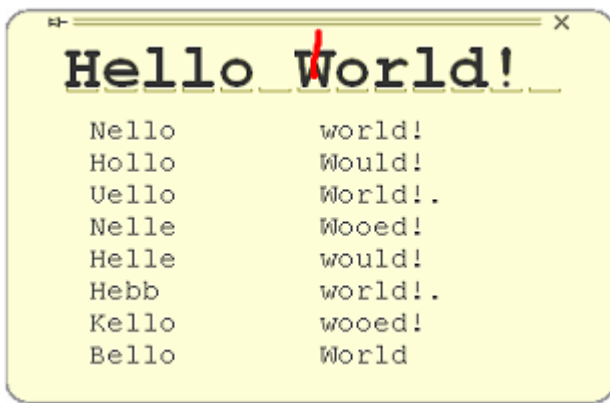
(When correcting multiple letters at once, we recommend writing them in the left-to-right order.) If you don't find correct words in the WordMenu but your top answer has just a couple of letters misspelled, you can try letter alternatives by clicking on such misrecognized letters, as illustrated below:



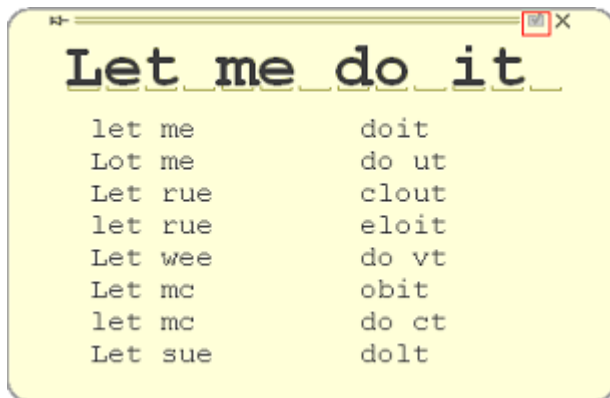
You can also use gestures to add space, remove letters, and capitalize them. All these gestures are "positional": the desired action happens at the point where the gesture was started. For example, to add a space before the letter, draw the *Space* gesture starting in the middle of the letter; to delete a letter, draw the *Backspace* gesture starting in the middle of that letter, as shown below:



Use the "capitalize" gesture (a line straight up) to alternate the letter case (this gesture started from the capital letter 'W' up will turn it into the lower case 'w').



- The WordMenu window normally appears near the current position of the mouse pointer and then slowly fades away (you can customize the fade-out time in [Settings>WordMenu](#)). You may pin its position to a desired location on the screen by clicking the "pin" icon in the left top corner of the window. After that, you may drag the window where you want it to be placed on the screen using the top bar.
- To make sure your changes in the Word Menu are automatically sent to the target application, check the "Auto apply changes" option in the *WordMenu* tab of the Settings dialog. If this option is disabled, a "checkmark" icon will appear in the top right corner of the WordMenu window; you would have to click on that icon to apply the changes once you are done with editing.



- Use the 'x' button in the top right corner of the WordMenu window to close it.

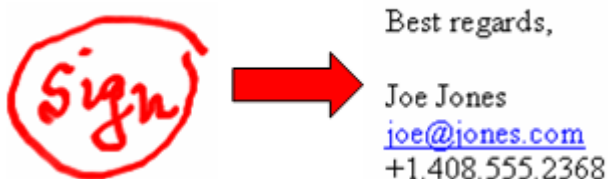
Handwritten Shortcuts

In addition to seamless data input, ritePen automates your routine desktop tasks such as application launch, opening documents, entering standard texts and many other operations. You can assign a **handwritten shortcut (pen macro, ink command)** to any such operation; then, all it takes to perform the operation is writing and encircling a shortcut. For example, if a

letter "h" is assigned to opening your home page in the default browser, then writing and encircling the letter will launch the browser and jump to the website as illustrated below.



Another helpful example is adding your signature to a document by writing and encircling the shortcut "sign":



You can also use handwritten shortcuts to abbreviate long and frequently used words, to open repeatedly used documents or paste frequently used texts, etc.

In addition to general text, handwritten shortcuts can display current date and time.

ritePen Pro has substantially expanded the capabilities of handwritten shortcuts. It allows emulating any keyboard activities, including special and functional keys, adds a few helpful commands, etc. For example, with Microsoft Outlook in the foreground, you can use a single handwritten shortcut to open a new email message, put a standard greeting and your signature into the message and position the cursor so you could immediately start typing recipient's name.

The body of the corresponding shortcut would look like:

```
{Ctrl+N}{Tab}{Tab}{Tab}Dear : {Enter}{Enter}Best regards,
```

Joe Jones

joe@jones.com

+1.408.555.2368

```
{Ctrl-Home}{Ctrl-Right}
```

In the above macro, the first line creates the new message (Ctrl+N), navigates to the message body by skipping the "CC" and the "Subject" fields (three Tab keystrokes), adds the greeting "Dear :" and skips two lines; then goes the signature; the last line of the macro returns the cursor to the beginning of the email (Ctrl+Home) and skips the word "Dear" (Ctrl+Right arrow) to position the cursor right before the colon sign to type recipient's name. So, if you have assigned an abbreviated name "msg" to this action, then writing and encircling the word "msg" will perform the whole action.

Creating and editing handwritten shortcuts is easy: use the **Macros** tab in ritePen Settings as explained below.

Context Sensitive Recognition

Many applications, especially handwritten forms, can benefit from context sensitive handwriting recognition. One of the challenges for handwritten forms entry is that many digits and letters look alike in handwriting and it is difficult to tell one from another without knowing the context. For example, if a user inputs middle initial I into the "Middle Initial" field of a form, it is difficult to say if an isolated vertical stroke is a capital "I" or a small "i" or a digit "1". At the same time, the knowledge that the stroke is an entry for the middle initial instantly eliminates the "1" and gives strong preference to the "I" over the "i". As another example, many people write the letter "S" and the digit "5" very similarly, while the capital letter "O" and the digit "0" are almost indistinguishable; so, handwritten "SOS" and "505" may look very close, which can affect recognition accuracy when entering purely numeric data or, say, Social Security Number.

ritePen Pro addresses this challenge by offering an advanced system for context sensitive recognition. It consists of four components:

- Pre-built **lexicons** provided by Ritescript are dictionaries and rules for recognizing special data types, including personal and geographical names, street addresses, phones, emails, etc.
- **Custom User Dictionaries** allow users to augment lexicons with user specific data such as employee lists, product codes, customer names, etc. ritePen Pro offers easy and powerful means of building user dictionaries and importing them from text files.

- **Recognition profiles** combine lexicons and custom dictionaries with pen input and text output options to create contexts.
- **Binding** assigns recognition profiles to fields of forms and to other application windows and ensure that the fields and applications with assigned profiles are always recognized with the appropriate contexts.

The following screenshot illustrates ritePen Pro's *binding mode*; it shows a couple fields of a Patient Registration Form with assigned recognition profiles, and the Binding Pane.



To use context sensitive recognition, follow three steps below:

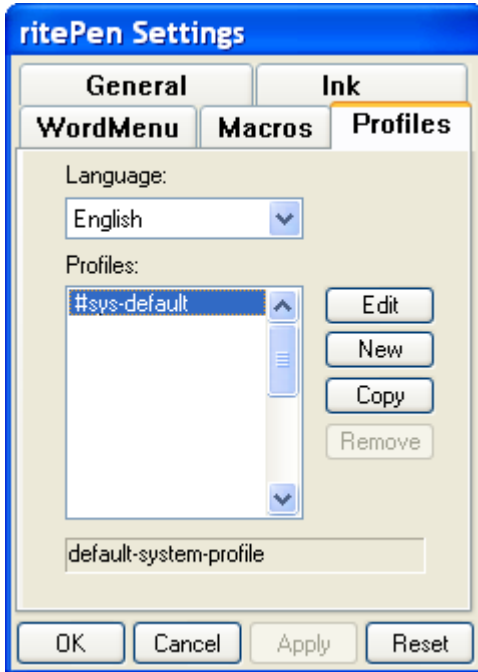
- Analyze your form or other application; determine special data types you wish to use with its diverse fields or elements. Collect necessary data to create custom user dictionaries such as employee list or product names (if needed). Define special pen input and text output options, such as entering handwriting in separate letters or typing the text in capital letters.
- Create new recognition profiles for each special data type using pre-build lexicons or custom user dictionaries and input/output options; or, write down previously created handwritten profiles applicable to the new task.
- Open ritePen's Binding Pane, scroll through fields of your form or other application, and assign recognition profiles to each such field where you need to enter special data types. Then close Binding Pane.

Now, your form is ready for context sensitive data input. You can find more details in the subsequent sections.

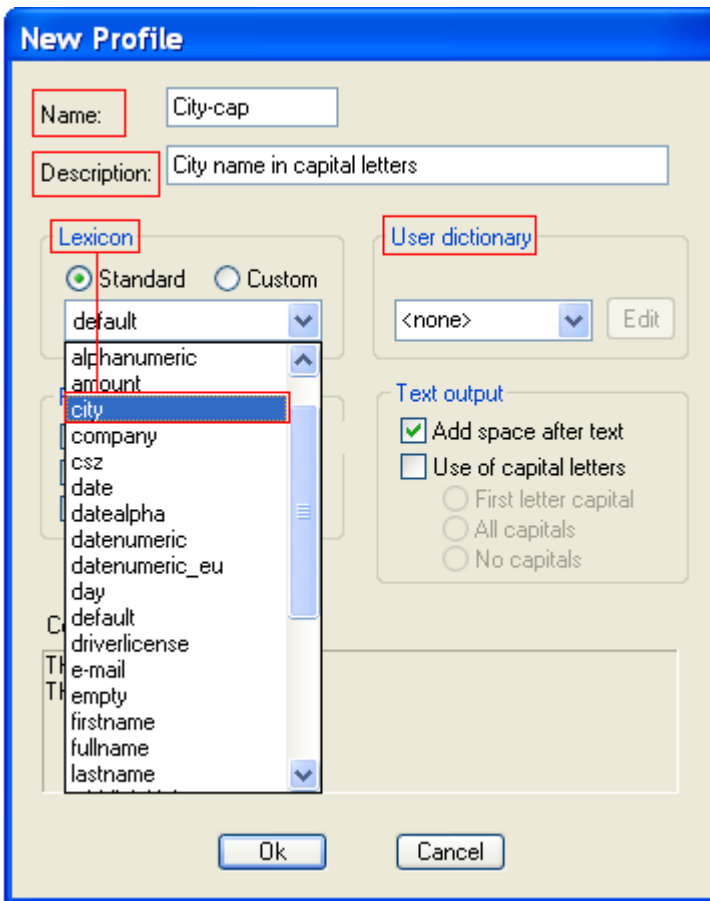
Important Note: ritePen uses the *default* lexicon and the *default* User Dictionary for recognizing generic texts (the user dictionary remains empty until you explicitly add words to it) . They are included in the non-editable "system" recognition profile *#sys-default*. Any other pre-built lexicon or custom user dictionary has to be included in a *user-defined* recognition profile and *bound* (assigned) to a specific application or form field to be in effect.

Creating Recognition Profiles

Open Profiles tab in ritePen Settings, select needed recognition language and press the "New" button.



In the "New Profile" dialog box, enter profile name and brief description. Then choose a pre-build or custom built lexicon as shown below.



If you wish to add custom user dictionary, type in its name and press "Edit"; or choose the previously built user dictionary from the list.



**Choose existing
User Dictionary**

(For details, see sections [User Dictionary](#) and [Settings>Profiles.](#))

To complete your recognition profile, define custom pen input and text output options if necessary. Default options are shown on the screenshot below.

The screenshot shows two panels of settings. The 'Pen Input' panel on the left contains four checkboxes: 'Separate letters' (unchecked), 'Single line' (unchecked), 'Single word' (unchecked), and 'Use Recognizer Fusion' (unchecked). The 'Text output' panel on the right contains three options: 'Add space after text' (checked), 'Use of capital letters' (unchecked), and three radio buttons for capitalization: 'First letter capital' (selected), 'All capitals' (unchecked), and 'No capitals' (unchecked).

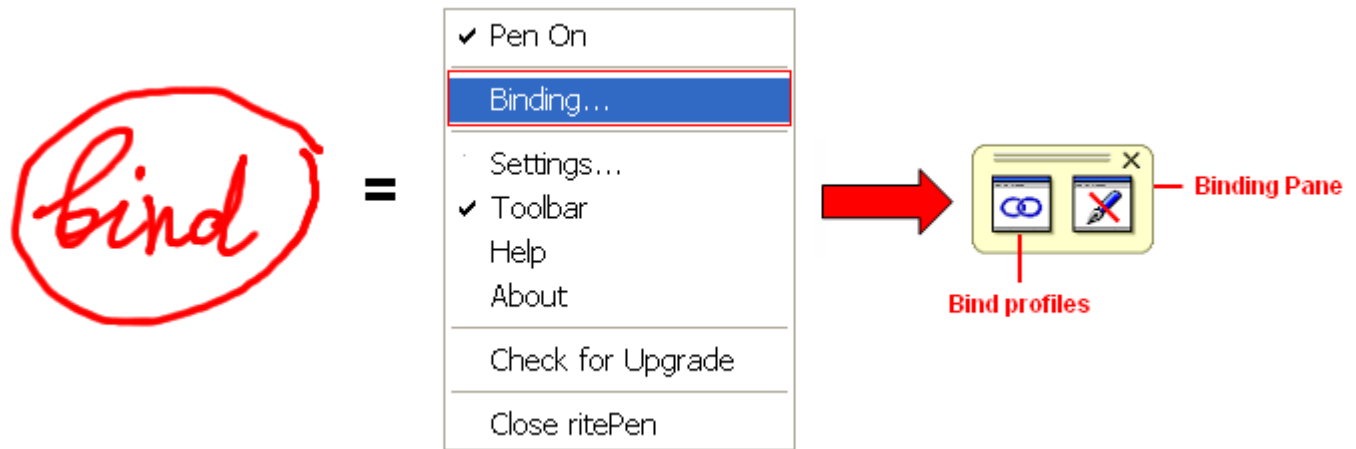
After you have created a recognition profile, its name instantly appears in the list and its description is displayed in the context help line at the bottom of the Settings>Profiles window.

The screenshot shows the 'ritePen Settings' dialog box with the 'Profiles' tab selected. The 'Language' dropdown is set to 'English'. The 'Profiles' list contains two entries: '#sys-default' and 'City-cap', with 'City-cap' selected. To the right of the list are buttons for 'Edit', 'New', 'Copy', and 'Remove'. Below the list is a text field containing 'City name in capital letters'. At the bottom of the dialog are buttons for 'OK', 'Cancel', 'Apply', and 'Reset'.

Now you can assign the profile to your applications and enable context sensitive recognition.

Binding Contexts to Applications

To apply context sensitive recognition to a field of a form or to another application, write the ink command "bind" or select the "Binding" item from the ritePen Menu. Binding Pane with two buttons will appear on your screen and ritePen will switch into "inspection mode".

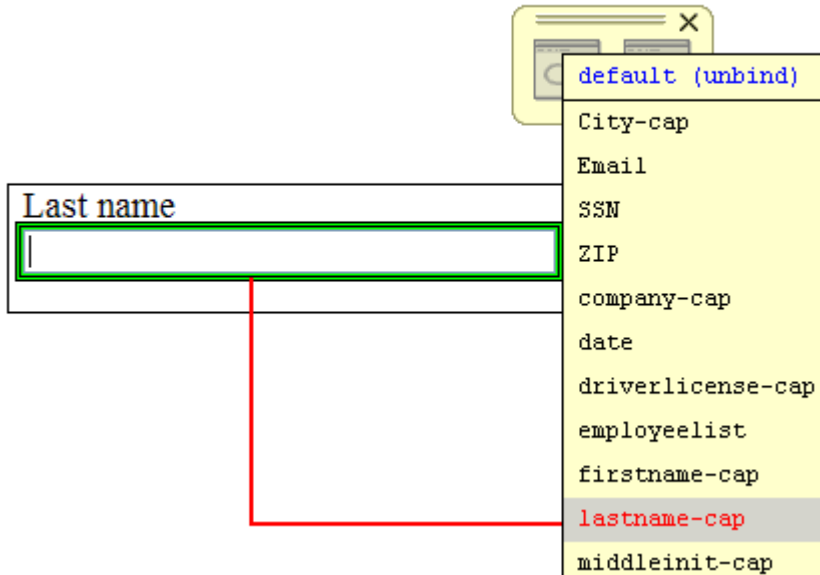


Note. Launching Binding Pane turns Pen Off mode. We highly recommend refraining from using any applications when Binding Pane is active - it is specifically designed for binding recognition profiles to applications.

In the binding mode, you can browse any applications and assign recognition profiles to text entry elements of applications and forms fields. When you select application windows and other elements, permitted items will appear in green frame, prohibited (such as application buttons or non-textual application windows) - in red frame, and items with already assigned profiles - in yellow frames. Profile names will be displayed near the corresponding windows as shown below.



Click on a text input window to which you want to assign a context, then press the "Bind profiles" button and select a recognition profile from the list.



After all contexts have been assigned to target fields, close the Binding Pane. You can now use context sensitive recognition.

Note. By default, recognition profiles for context sensitive fields are not displayed. You can temporarily or permanently enable such display by setting ritePen registry entry *showCurrentRecProfile* to 1.

There are certain *limitations* to your use of context sensitive recognition. ritePen identifies applications with assigned recognition profiles inspecting their diverse attribute. However, not all application windows provide such information and ritePen may not be able to uniquely identify some categories of application windows and fields. For example, current version of ritePen Pro cannot handle forms created in Microsoft Word. To overcome such limitations, software developers and end users may employ advanced binding technique presented in the [Appendix](#). It explains programmatic assignment of handwritten profiles and enabling context sensitive recognition for Web forms.

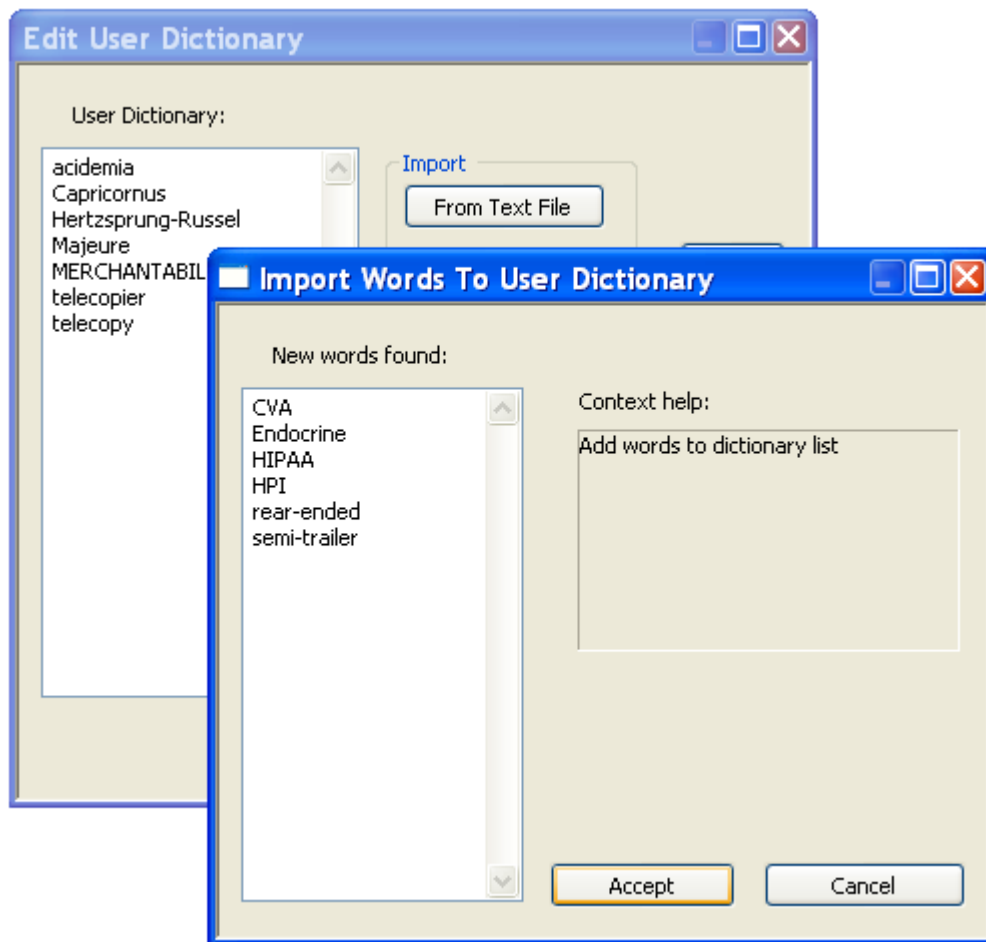
User Dictionary

ritePen recognizes your handwriting in any language using large Main Dictionary for that language. Such dictionaries come with ritePen and include many dozens or even hundreds of thousands of common words and proper names; they are sufficient for accurate recognition of generic handwritten texts. Additionally, ritePen Pro includes dozens of special lexicons to enable context-sensitive recognition. Still, many users need to recognize special or personal "terms",

such as drug names, personal emails, scientific terms, names of friends and co-workers, industry or company specific product names, etc.

To facilitate this need, ritePen includes an easy method of creating and editing custom **User Dictionaries** for any language and using them with recognition profiles. You can add words to the User Dictionary manually at any time; import then from text files, such as clinical reports, contracts, educational materials; import new terms directly from the Windows Clipboard or from the Microsoft Office Outlook's Personal Address Book; you can also edit the list of words. ritePen will automatically extract only new terms from the imported source and offer you a preview where you will see the words absent in the main dictionary or lexicon and in the previously created portion of the User Dictionary. With this incremental method of building User Dictionary based on your real-life experiences, you can avoid excessive research and overloading User Dictionary with large word sets that can slow down handwriting recognition and degrade its accuracy.

Below is an illustration of importing from the text file (in this case, clinical report).



On the screenshot, you can see the *User Dictionary* on the left and the list of new words extracted from a text file in the *Import Words To User Dictionary* window.

Details on building and editing User Dictionary are presented in the [Settings>Profiles](#) section below.

Customizing Writing Area

With ritePen, you can conveniently write anywhere on the screen. Sometimes, however, it is undesirable to write over certain applications windows, such as graphical programs where drawing may conflict with ritePen's "writing". ritePen is customized to work with popular drawing applications OneNote, Paint, InkSeine: it automatically disables writing mode on their drawing canvases. To disable ritePen's writing mode on other windows, use the Binding Pane explained in the section on context sensitive recognition. Call the pane by writing the "bind" handwritten shortcuts or by selecting "Binding" from the menu. Then select application window where you want to disable writing and press the "Disable Writing" button

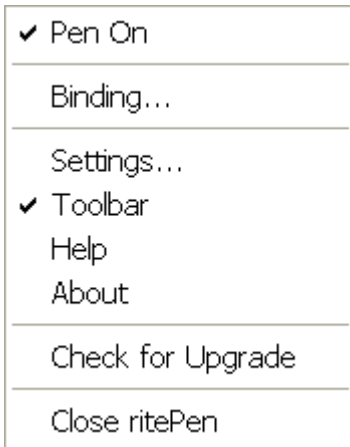


The target window will appear in crossed red lines. Repeatedly disable writing on all needed applications, then close Binding Pane. To re-enable writing, open Binding Pane select a disabled application window and click the button.

Important Note. Disabling application window for ritePen's writing does not mean that digital ink collected by ritePen will never appear on top on that window. It only means that the *starting point* of each handwritten fragment should be outside the window; once you started writing outside, you can continue on top of any window or navigational element until you stop and let ritePen translate your handwriting into text.

Main Menu

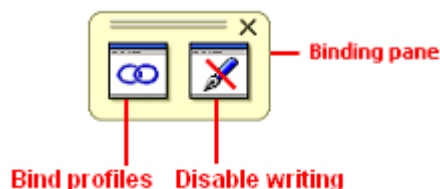
Right-click or tap and hold ritePen notification icon, or right-click ritePen Toolbar to open Main Menu.



- **Pen On** is checked when writing mode of ritePen is enabled and unchecked otherwise.
- **Binding** opens the **Binding Pane** for **assigning recognition profiles** to application windows and for **customizing writing area**.
- **Settings** opens the **ritePen settings** tabbed dialog, providing customization options.
- **Toolbar** allows displaying or hiding the ritePen **Toolbar**.
- **Help** displays this reference page.
- **About** displays copyright and version information about the product and its components and allows checking for product upgrades.
- **Check for Upgrade** connects to ritePen's online auto-upgrade system to check for available product upgrades.
- **Close ritePen** quits the application.

Binding Pane

After opening the Binding Pane, you can browse desktop applications and use the *Bind profile* button to assign recognition profiles to application windows, while the *Disable writing* button will disallow ritePen's writing mode on top of certain application windows.

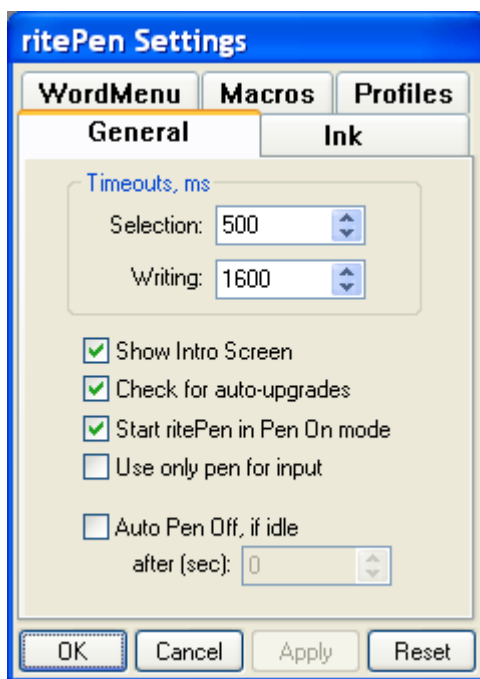


When you select an application window such as form field and press the *Bind profiles* button, the drop-down menu with **Recognition Profiles** opens allowing you to assign a context to the window.

Settings

After calling up the ritePen Settings dialog box, you can change the following settings: **General**, **Ink**, **Profiles**, **WordMenu**, and **Macros**.

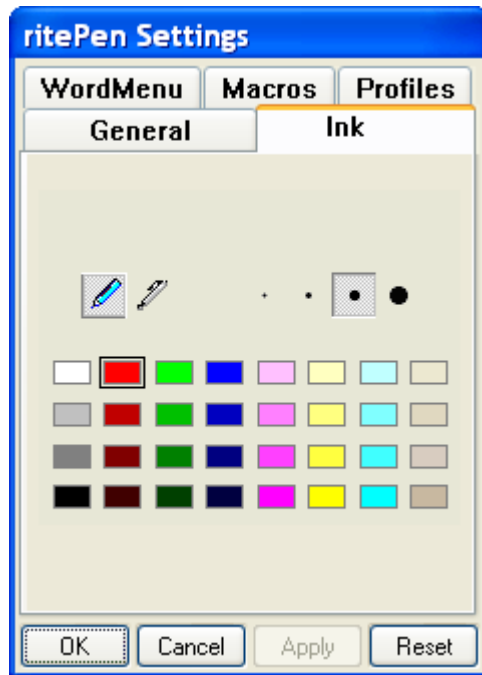
General



- **Timeout for Selection.** When you select a portion of text by pressing and dragging your pen across the selection, ritePen briefly draws an ink stroke. By changing the *Timeout for Selection*, you shorten the time that stroke appears on the screen before it reverts into selection.
- **Timeout for Writing.** When you are entering text using ritePen, the application recognizes your writing continuously. When you lift a pen after you have completed a portion of writing and want the text to appear in the target application, ritePen waits for a short while to give you the opportunity to "dot your i's and cross your t's". In order to speed up the recognition process, you may shorten this time interval. In case you shorten the *Timeout for Writing*, make sure that the timeout is still sufficient for you with your individual writing speed to put the dots/crosses/diacritic signs where they belong.

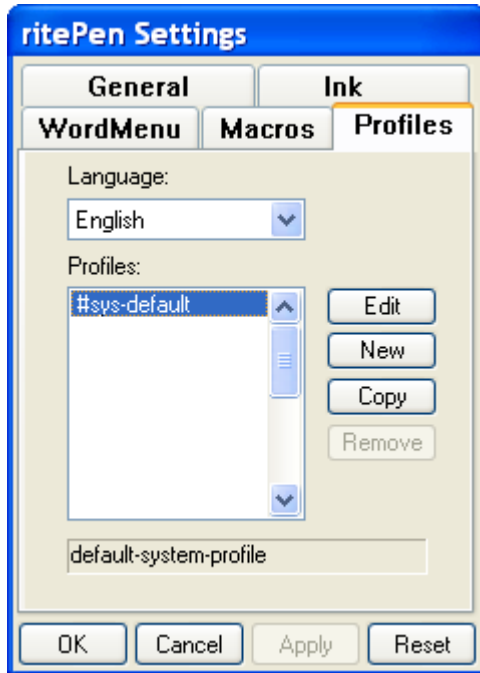
- **Show Intro Screen.** If selected, ritePen displays the introductory splash screen on application start.
- **Check for auto-upgrades.** If selected, ritePen periodically connects to the server and notifies you if new upgrades are available.
- **Start ritePen in Pen On mode.** This choice is active (check-marked) by default, so that starting ritePen initiates the Pen On mode and ritePen accepts and recognizes handwriting. Removing the checkmark instructs ritePen to start in the Pen Off (Mouse On) mode. To turn it on, click the ritePen tray icon to activate writing and recognition.
Note: You can also force ritePen to start in (or switch to) pen Off or On mode by specifying the command line key "/0" or "/1" after the name of its executable (e.g. "ritePen.exe /0" to switch the pen mode to off). Additionally, you can specify the parameter "/2" to toggle ritePen between the Pen Off and Pen On modes, which is especially helpful if you are using a hardware button to switch writing on and off. This method of switching ritePen mode can be used even if ritePen is already running (alternatively, you can send a pre-defined Windows message to the application to alter its state or query what state it is in now).
- **Use only pen for input.** When enabled, this option suppresses writing with a mouse, trackball, touchscreen and other navigational devices and allows writing only with the pen. This is helpful, for example, on convertible Tablet PCs and Ultra-Mobile PCs where users wish to fully utilize pen in the tablet mode and avoid writing in the keyboard mode.
- **Auto Pen Off, if idle.** When enabled, causes ritePen to automatically turn writing mode off after the specified time without writing has elapsed. This option is helpful if you are predominantly using your pen as a pointing and navigation tool and only occasionally input text via ritePen. Note that you have to turn back the pen mode manually.

Ink



- **Pen Style.** Clicking on the Pencil or Pen icon changes the appearance of handwriting on the screen between the standard "pencil" look and the calligraphy pen.
- **Pen Thickness.** Select pen thickness between Fine, Thin, Medium, or Thick.
- **Pen Colors.** Choose from 32 different ink colors.

Profiles



- **Language.** This version of ritePen can recognize English, French, German, Italian, Portuguese, Russian, and Spanish handwriting. The set of installed engines is displayed in the above box for the information purpose. The active language for which recognition is currently performed is defined by the layout of system keyboard currently active on your PC; for example, switching keyboard layout from English to French instructs ritePen to switch handwriting recognition engine between these languages. Recognition Profiles are created for each language separately; you have to choose the language prior to adding or editing a profile.
- **Profiles.** Displays the list of Recognition Profiles; except for the default system profile, they are created by users.
- **Edit, New, Copy, Remove buttons** allow manipulations with Recognition Profiles.
- **Context Help line** displays the description of the selected Recognition Profile.
- **New Profile**

This dialog box pops up after you press the *New* button in the *Settings>Profiles* tab. Its entries are discussed below.

New Profile

Name:

Description:

Lexicon

Standard Custom

default

User dictionary

<none>

Pen Input

Separate letters

Single line

Single word

Use Recognizer Fusion

Text output

Add space after text

Use of capital letters

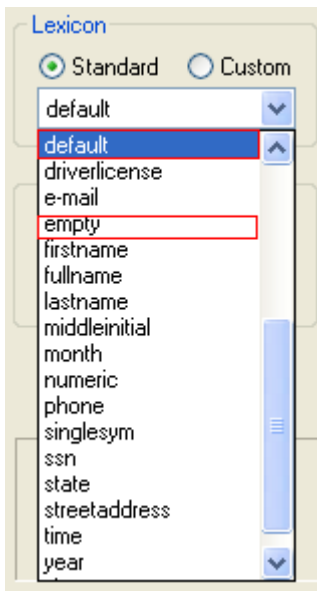
First letter capital

All capitals

No capitals

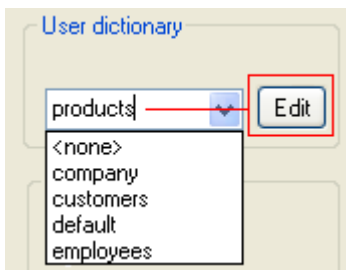
Context help:

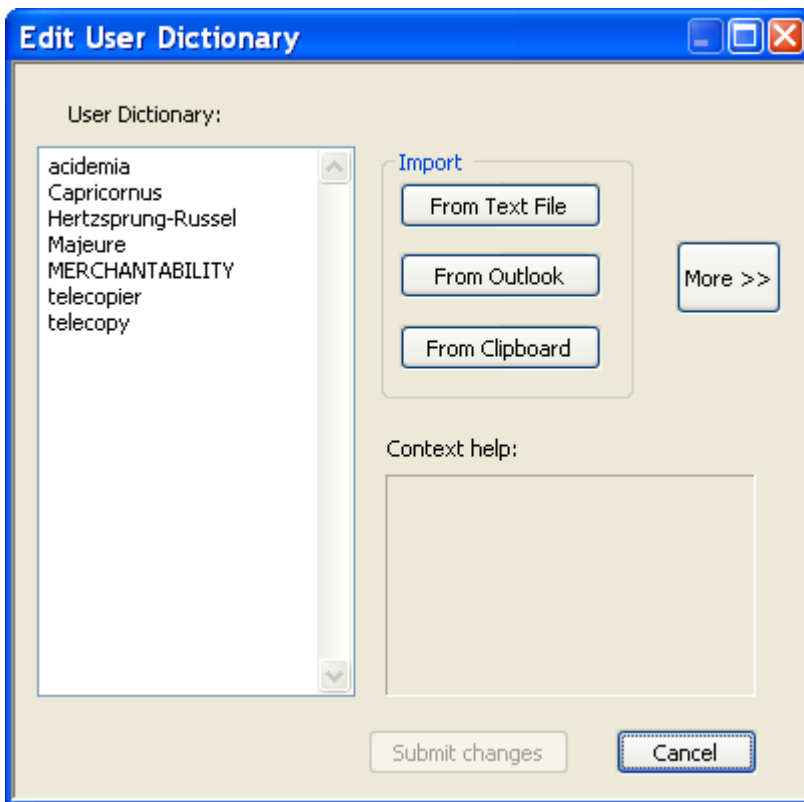
- o **Name** is the unique name of Recognition Profile. All contexts are identified by ritePen by names of *Recognition Profiles*.
- o **Description.** Add brief description to the profile; it will be displayed in the context help line in the Profiles window when a profile is selected.
- o **Lexicon.** Special data type used to recognize entries; it can be a dictionary (personal or geographical names, etc.) or a data template (phone, social security number, numeric only entries, etc.). Select from dozens lexicons coming with ritePen.



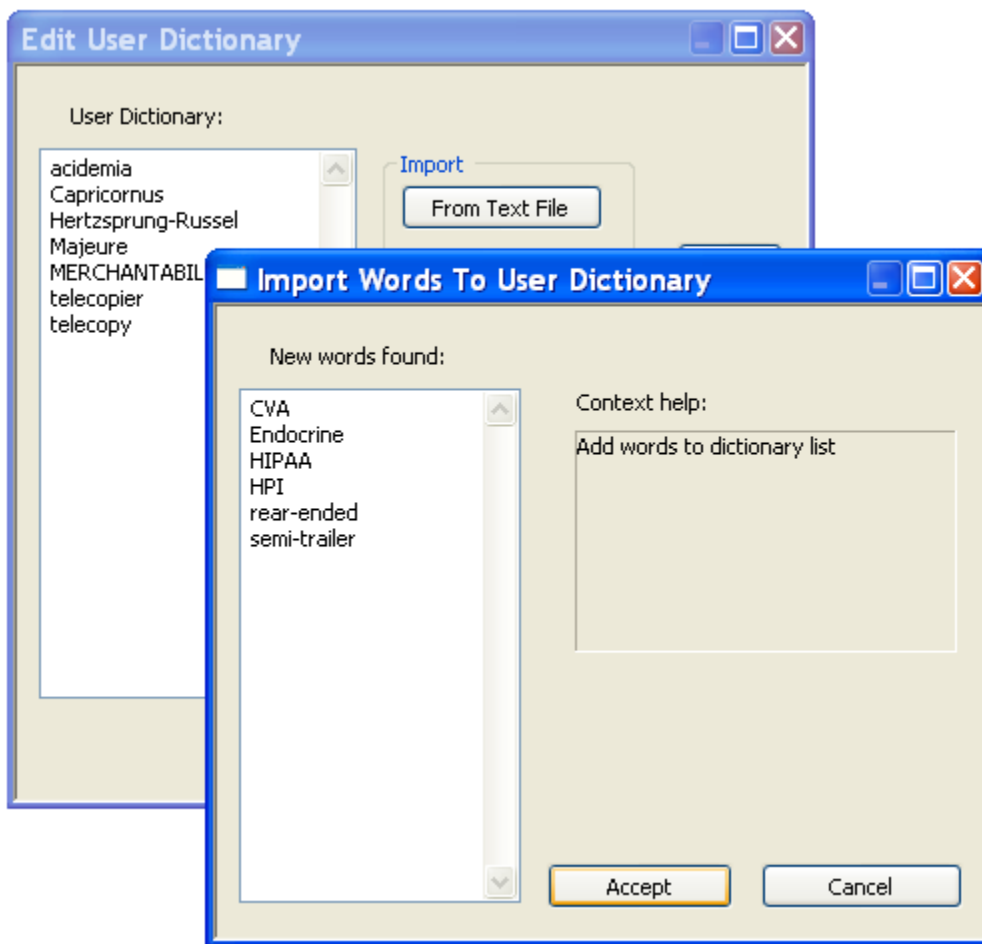
The *default* lexicon represents ritePen's main dictionary and is used for generic text recognition. The *empty* lexicon suppresses ritePen's own dictionary; use it when you need to recognize entries strictly with *custom User Dictionary*. Custom lexicons can also be created and added to ritePen using special riteLex utility available upon request.

- **User Dictionary.** You can add custom *User Dictionary* to the recognition profile to augment pre-build lexicons with personal or business specific terms (such as employee, customer or product list, etc.). You may choose one of previously built user dictionaries from the list or type in a new name and click Edit button to add words to the *User Dictionary*.



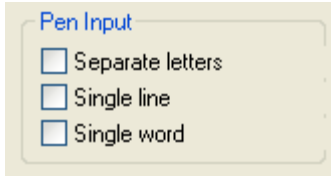


- **User Dictionary.** Editable list of dictionary entries on the left side of the panel. You can add, delete or correct words in the list like in a regular text editor.
- **Import section.** Allows importing words into the User Dictionary from text files, Outlook Personal Address Book, and Windows Clipboard.
- **More >>.** This button opens panel with additional controls to facilitate word importing from diverse text sources.
- **Context help:** Prompts context dependent actions as you browse through the Edit User Dictionary Panel.
- **[Import] From Text File button.** You can import words from any text source (clinical report, homework assignment, contract, etc.) saved as *.txt* file. When you click the "From Text File" button, you are offered file selection dialog. After you select the file, ritePen splits it into words, checks the presence of each word in the Main Dictionary and in the existing portion of User Dictionary, and lists all new words in the preview *Import Words To User Dictionary* window

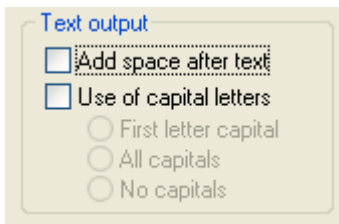


You can edit, remove or add new words in the preview window and add them to the User Dictionary by clicking the "Accept" button.

- **[Import] From Outlook button.** If you are using Microsoft Office Outlook, you can import all names and emails from your Personal Address Book into the User Dictionary. After pressing on this button, ritePen extracts names and emails from the address book, checks their presence in the existing vocabularies, and displays all new words in the "Import Words To User Dictionary" window, similarly to importing from text file. Same as previously, you can edit, remove or add new words in the preview window and add them to the User Dictionary by clicking the "Accept" button.
- **[Import] From Clipboard button.** Similarly to two previous items, you can capture the text into Windows Clipboard (for example, selected portion of a web page or a document) and press this button to add to User Dictionary all new words contained in that text.
- **Pen Input.** You can set up special pen input options for a recognition profile, such as writing only in separate letters, only in one line of handwritten text or allowing only single-word entry (suppressing word segmentation):



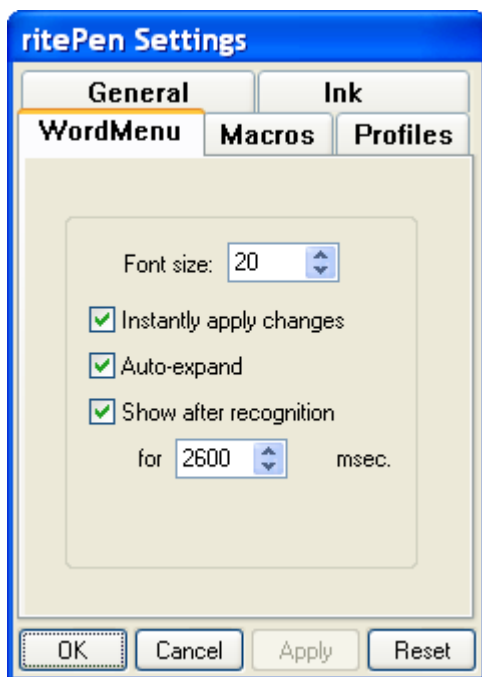
- **Separate Letters mode.** Check this box if you write in separate letters and never use cursive, connected handwriting (this option is especially important when you are filling out handwritten forms with grid or "comb" fields). This increases recognition accuracy for disconnected "separate letters" writing, but will fail the recognition of connected script.
- **Single line/Single word mode.** Check these boxes if you want to limit context sensitive handwriting with the new profile to writing in a single line or if the result should be a single term. This will suppress line/word segmentation by the recognition engine and may additionally increase recognition accuracy.
- **Enable Recognizer Fusion.** When ritePen works on a Tablet PC or on a Windows Vista PC, it fuses (combines) its riteScript handwriting recognition engine with the "embedded" system recognizer, thus improving the recognition accuracy compared with each of the two engines. You can optionally switch off the fusion of recognition engines, in which case your handwriting will be recognized by the riteScript engine alone.
Note: On non-Tablet PC and non-Windows Vista computers this option is not available and the item is grayed out. Recognizer fusion is currently implemented for English language only.
- **Text Output.** Similarly to customizing pen input option for a recognition profile, you can specify text output options, such as adding space after each recognized word or displaying recognized text in capital letters.



- **Add space after text.** When enabled, ritePen will add a space after each recognized word. You may disable this option to recognize certain data types, such as Web addresses or emails, where spaces between words are unwelcome. You may always add a space using the space gesture.
- **Use of capital letters.** No matter how you wrote a particular entry or how ritePen recognized small vs. capital letters, you may instruct the program to output your text with capitalized first letters, in all capitals, or without capital letters.

WordMenu

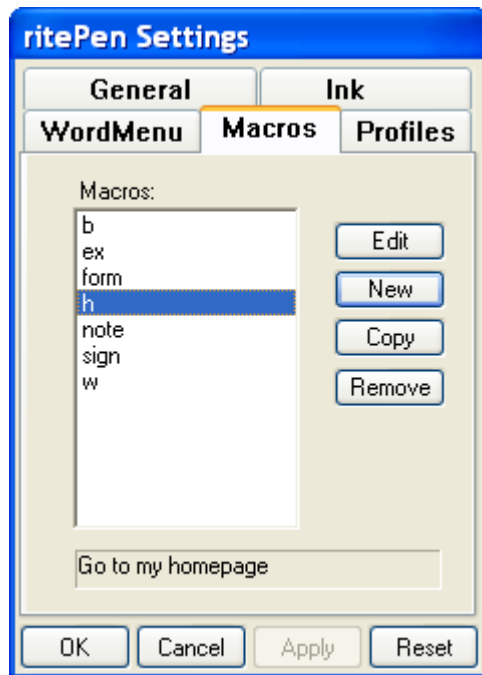
These settings control the behavior of the **WordMenu pop-up window** which allows quick correction of misrecognized words and selection of alternative answers from the list.



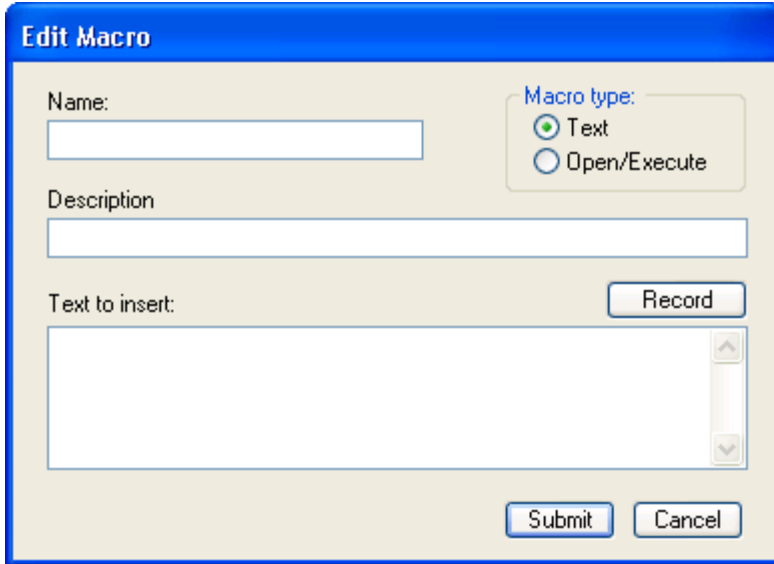
- **Font size.** Letter size for answers in the WordMenu.
- **Instantly apply changes.** When you make changes to the recognized text in the WordMenu window, they can be sent automatically to the target application. Alternatively, you can first make all changes and then click the "checkmark" icon in the top right corner of the WordMenu window to apply all changes in a single action.
- **Auto-expand.** When this option is checked, WordMenu will include all feasible recognition alternatives for each recognized word and enable selection from the list of alternatives. If unchecked, only a single line with top alternatives will be displayed; letters can be corrected manually as explained **above**.
- **Show after recognition.** If checked, the WordMenu window will pop-up after each ritePen's recognition session and will fade-off after the timeout indicated in the next line. If unchecked, WordMenu will not automatically appear on the screen: it will take a WordMenu **gesture** or a click on the WordMenu button in the **Toolbar** to call up the window.

Macros

These settings allow creation and editing of **Handwritten Shortcuts** as explained above.



- **Macros:** List of your handwritten shortcuts.
- **New.** Click this button to add a new shortcut.
- **Edit.** Select a shortcut you wish to edit and press this button to open editing panel.
- **Copy.** Copies the description and body of the selected shortcut into a new shortcut, allowing easy assigning of multiple names to the same macro.
- **Remove.** Select a shortcut and press this button to remove it from the list.
- **Context help line.** Displays the description of the selected shortcut.
- **OK/Cancel/Apply/Reset.** Standard action buttons (pressing "Reset" undoes all changes you've made after the Macro tab was opened).
- **Edit Macro.** This panel opens when you press the "New" button or the "Edit" button when a shortcut is selected in the list.
 - **Shortcut type.** Before entering the shortcut, use the radio buttons in the top right side of the panel to choose between the **"Text"** and the **"Open/Execute"** type of shortcuts. The first type enters text into the target application and the second one opens documents, websites, and applications.



- **Name.** Abbreviated name that you will be writing and encircling every time you invoke the shortcut action.
Note: In this version of ritePen, abbreviated *Name* of pen macro should be in English; you can use words in any language in the Text you wish to insert when the handwritten shortcut is executed.
- **Description.** Brief memo.
- **Text to insert (for the "Text" shortcut type).** Multi-line text that will be placed into the target text-aware application when you invoke the shortcut. In addition to text, in ritePen Pro you can use *any keystroke combinations* in the body of the macro. The following table shows all additional types of available keystrokes and commands and their formats.

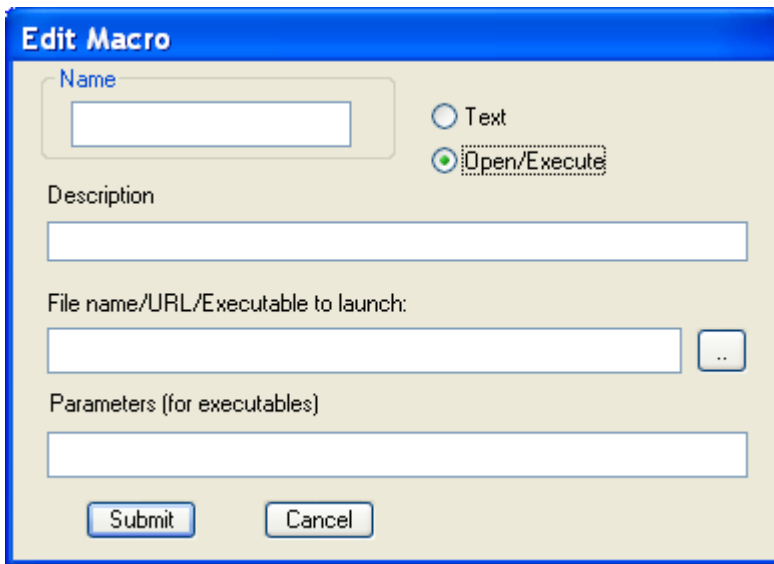
Keyboard modifiers	{Ctrl+...}, {Alt+...}, {Shift+...}, {Win+...}, {HexChar:...}, {HexVk:...}
Special symbols	{Home}, {End}, {PgUp}, {PgDn} navigational arrows - {Left}, {Right}, {Up}, {Down} {Del}, {Bksp}, {Ins}, {Tab}, {Enter}, {PrtScr}, {ScrLock}, {NumLock}, {Space} functional keys - {F1}-{F12}
Commands	<u>Delay execution of the macro by xxx ms</u> - {Delay:xxx} <u>Call ritePen Settings</u> - {Settings:General}, {Settings:General}, {Settings:Ink}, {Settings:WordMenu}, {Settings:Macros}, {Settings:Profiles} <u>Display Date and Time</u> - {DateShort} (MM/DD/YYYY), {DateLong} (Weekday, Month Day, YYYY), S{Time} (Hr:Min AM/PM) [^] DateShort [`] , [^] DateLong [`] , [^] Time [`] enclosed in "grave accents" have been retained for backward compatibility with version 3.0; we recommend converting them to the new syntax.

To facilitate input of special keystrokes and modifiers, ritePen Pro offers a recording mode:

- **Record button.** When you press this button, all your keystrokes are recorded directly into the body of the macro (*Text to insert*) in the ritePen macro format. If you made a mistake and need to delete a keystroke, press *Stop record* first.

Note. The recording mode does not offer a full-blown "macro recorder": it does not perform the actions corresponding to recorded keystrokes; you need to plan the sequence of keystrokes in advance and then use the *Record* button to simplify the job of entering the text of the macro.

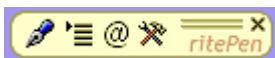
- **Edit Macro (for "Open/Execute" shortcut type).** This panel opens when you press the "New" or the "Edit" button and choose the "Open/Execute" shortcut type.





- **File Name/URL/Executable to launch (for "Open/Execute" shortcut type).** Type in, paste or select full path to file (such as *c:\projects\mydocument.doc*), full URL (for example, *http://ritescript.com*) or application name (for example, *winword.exe*) that will be opened when you run the shortcut.
- **Parameters (for executables).** Optional parameters to start the application with.

Floating Toolbar

Once you activate the always-on-top ritePen Toolbar, you can position it at any location on your screen by dragging by the double bar on its top right side. It will remember the position and will always appear there. Right-click anywhere on the bar to open the ritePen's **menu**.



- **Pen On/Off**
Clicking the Pen On/Off icon toggles between the Pen On mode  and the Pen Off mode  exactly as if you had clicked on the ritePen notification icon in the task bar.
- **Show WordMenu**
Clicking the Show Word Menu icon retrieves the list of answers for all words in the most recent portion of writing exactly as if you had made the "WordMenu" **gesture**.
- **Open Punctuation Pane**
Clicking the Add Punctuation Symbol icon launches the pane with punctuation signs and special symbols exactly as if you had made the "Punctuation pane" **gesture**.
- **Settings...**
Clicking the Settings icon calls up the ritePen Settings dialog box described in the ritePen **Settings** section above.

Auto-Upgrades

ritePen includes a convenient online auto-upgrade system which notifies you about new releases and upgrades. It is also used to offer instructional materials, tips, surveys and other information. The auto-upgrade system periodically connects to the ritePen auto-upgrade server and compares your installed version with the latest available version of ritePen. The auto-upgrade system does **not** capture or transfer any private info from your PC to the server. If the installed version of ritePen requires an upgrade, you will receive a pop-up notification with an upgrade offer and can instantly download the upgrade from the Ritescript website or purchase it from our online store. If you are not interested in the immediate upgrade, you may elect to be reminded later or skip the offer of this particular upgrade altogether. If your company's IT policies or personal preferences conflict with receiving the auto-upgrade info, you can disable the check for auto-upgrades in the Settings>General as explained above. You will still be able to check for upgrades manually from the "About" box or the "Check for Upgrades" item in the Main Menu.

Appendix. Advanced Binding Features

This section explains how software developers can programmatically assign ritePen Pro's recognition profiles to application windows from their own software applications and how to enable field identification in Web forms for context sensitive recognition.

Programmatic assignment of recognition profiles to application windows

At the beginning of each writing session, ritePen software analyzes the foreground "focus" window. If such window has the property *ritePenRecProfileProperty* set as an Atom then the value of this Atom is treated as an assigned recognition profile. If the profile name is known to ritePen (the profile has been previously created in the Settings>Profiles dialog), ritePen software will use this profile for recognition of the handwritten text entered during the "session". If the profile is unknown or the property is absent, the default system profile will be used for recognition. Below is an example:

```
//assign recognition profile "customers" to the window with the handle hWnd1
ATOM _customersAtom = GlobalAddAtom(_T("customers"))
....
SetProp(hWnd1, _T("ritePenRecProfileProperty"), (HANDLE)_customersAtom);
....
//release property and atom (usually before destroying the window)
RemoveProp(hWnd1, _T("ritePenRecProfileProperty"));
GlobalDeleteAtom(_customersAtom);
```

Notes. 1. In the current version of ritePen Pro, programmatic binding overrides manual binding for the same application window.

2. To display assigned profiles at the execution time, set ritePen's registry value *showCurrentRecProfile* to 1; profile names will be displayed in the "tip style" near the target application window.

Enabling context sensitive recognition in Web forms

ritePen software uses Windows system utilities to identify fields in Web forms and track assigned recognition profiles. To correctly identify field (input elements) in such forms, all fields used with ritePen's context sensitive recognition should be statically labeled. Below is an example:


```
<label for="Employer">Employer_Name</label>  
<input type="text" id="Employer" size="26" value="">
```

In this example, the field (input element) with the id "Employer" has the label "Employer_Name", which will be used by ritePen to identify the field once the recognition profile has been assigned and ensure that the right context is used to recognize handwritten entry into that field.

Ritescript (a division of Evernote Corp.)

710 Lakeway Drive #290

Sunnyvale, CA 94085

U.S.A.

[info at ritescript dot com](mailto:info@ritescript.com)

www.ritescript.com

Copyright © 2001-2008 Evernote Corp. All rights reserved.

ritePen, Ritescript and Evernote are registered trademarks of Evernote Corp. All other trademarks are recognized as the property of their respective owners.