# WritePad® 3.2 for Android

# **USER'S GUIDE**

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# **General Features**

### Overview

WritePad is an advanced input method for Android OS which aims to replace the onscreen keyboard with PhatWare's proven handwriting recognition technology and can be used for text input in any Android application. It integrates with any application allowing text input, such as email, SMS, notes, word processing, and others. WritePad is especially useful on Android Tablets, such as Samsung Galaxy Tab and Motorola XOOM, and Android phones such as Motorola Droid and others. WritePad features 4th generation handwriting recognition technology which supports practically any handwriting style, including cursive (script), print, and mixed for general text entry, numeric for entering numbers and phone numbers; and internet for entering email addresses and URLs. WritePad also has a built-in calculator, enabling users to write simple equations such as "22.3+15.66=" and WritePad will calculate the result.

The software analyzes pen strokes written in the designated WritePad area, then converts those pen strokes into text and sends the recognized text to the target application. It also allows easily switching between the handwriting recognition and the standard Android keyboard. The full built-in keyboard has an autocomplete function and a voice recognition feature. WritePad supports handwriting recognition in thirteen languages.

In the beginning, the recognition quality may depend on your style and how comfortable you feel writing on the screen with your finger; however the more you use it, the better it will become as the software will adapt to your patterns. To assist in recognition, WritePad has an auto-corrector, which automatically fixes common spelling and recognition errors and an editable user dictionary to improve recognition of custom words and names not included in the main dictionary.

**Note:** When reviewing screenshots below, please be advised that WritePad appearance may vary on your device depending the version of the Android OS and device screen size. For instance, on devices with smaller screens, such as Smartphones, the writing panel has only one writing row, while on most tables it has two rows as pictured on the screenshots in this document.

# System Requirements

- Android-powered Tablet or Smartphone
- Android OS 2.2 or later

#### Installation

• Go to the Google Play website - play.google.com

- In the search window, type WritePad.
- Touch the **Download** button.
- Follow the on-screen instructions to complete the installation.

# New Features in version 3

- Vastly improved multilingual handwriting recognition engine now supports eleven languages, including English, Dutch, Danish, French, Finnish, German, Italian, Norwegian, Portuguese, Swedish, and Spanish.
- Quickly switch between languages by holding the keyboard button above the writing panel.
- Improved keyboard look and performance.
- User Interface is now localized in 5 languages, including English, French, German, Portuguese, and Spanish.
- New option to import/export user dictionary and the Autocorrector list, allowing users to share recognizer data between applications and platforms.
- Overall performance and application stability improvements.
- A **Shorthand** feature that offers a quick and simple way to insert oftenrepeated text and performs standard editing commands by writing the Shorthand name in the Input Panel then tapping on the shorthand name that appears in the toolbar. You can add new or modified Shorthands using the Shorthand Editor.

# Using WritePad

#### Quick Start Guide

- To switch recognition modes, touch the **Mode** button <sup>Aa</sup> in the toolbar. Available modes are: Mixed, Upper Case characters only, Numbers only, and URL.
- To enter text, write on the input panel between the solid lines in your preferred handwriting style. (The input panel can support up to two lines of handwritten text, depending on the device and orientation.) You can write one or more words per recognition session, but always complete the entire word in each session and ignore intermediate results because the dictionary is used to

find best results. When you are done writing, touch the Return button insert the recognized text at the cursor location. If you always print, you may want to enable the **Separate Letters** option.

- If Auto Insert Results is on, an adjustable marker  $\bigtriangleup$  is displayed on the panel. Starting a new word on the left side of the marker (on top of previous writing) will automatically send the recognized text into the application and start a new recognition session. Using this option, you can keep writing until you are done, and only have to tap the Return button once (to enter the final line of text).
- If the Input Panel contains handwriting, the Return button inserts the recognized text at the current cursor location; otherwise it inserts the return

character. You can also use the Return gesture 🖛

• If the Input Panel contains handwriting, the Backspace button deletes the last stroke; otherwise it deletes the character to the left of the cursor. You

can also use the Backspace gesture 🔶

• If the Input Panel contains handwriting, the Space button clears the input panel and cancels the recognition session; otherwise it inserts the space

character. You can also use the Space gesture

- The Dot button **I** inserts the period at the current cursor location.
- If the recognizer returns an unexpected result, touch the incorrectly recognized word in the recognition results window to *view alternatives*.

- To use the built-in calculator, write something like 23.4+11.3= . The = symbol at the end of the equation is required to invoke the calculator.
- To adjust recognizer settings, touch the **Options** button in the toolbar.
- Touch the witton to quickly switch to the keyboard mode. Hold this button to bring up the language selection view. While in the keyboard mode, touch the microphone button to use voice recognition. Note that voice recognition works only in the language of the device locale.

For more details on this mode, see the Editing Text Using the Handwriting Panel.

Tips to Improve Recognition Quality

- The handwriting recognition engine and its dictionary are optimized for *the currently selected* language only. First of all make sure that the handwriting recognition for the correct language is selected. If you use words that are not in the main or user dictionary, such as rare names, we recommend adding these words to the user dictionary.
- Always complete the word in the current recognition session. Do not try writing part of a word per session, it will result in bad recognition quality, because partial words are not found in the dictionary.
- You can write multiple words in each recognition session; however if you always intend to write one word only, set the **Single Word Only** setting to ON (see the *Options*\_section).
- Write legibly. If you write 'n' like 'r', or 'u' like 'v', etc. use the **letter shape selector** to disable some unused letter shapes to further improve recognition quality. In some cases, you may also need to improve your writing style. The bottom line is, if other people cannot read your handwriting (without understanding the content) you cannot expect high recognition quality. Your handwriting does not have to be perfect, just readable.
- Always write on the screen horizontally, not at an arbitrary angle. To help you write horizontally, turn on **Show guidelines**.
- Do not attempt to correct your handwriting if you made a mistake while writing, the result will be unpredictable. If you made a mistake while writing, either tap the

Backspace button one or more times to remove the previous stroke(s), or use

the **Cut** gesture **Content** to cancel the entire recognition session and start again.

• If you always print your characters, use the **Separate Letters** mode. Note that if this option is on, you cannot connect characters.

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- Setting the **Only Known Words** switch to ON will improve the overall recognition quality, but this will make it impossible to write words, numbers, or any other character sequences that are not found in the user or main dictionary. If you make a spelling error in this mode the result is unpredictable, because the engine will try to find the closest word in the dictionary, which might not be the one you were trying to write.
- If you notice that a specific word is often recognized as a different word, add this word to the **Autocorrector** word list.

## Input Panel Toolbar





Options - Brings up the Options window.

Keyboard - Brings up the standard keyboard. To return to the Input Panel, just

touch the **second** icon on the keyboard. You can also touch and hold the keyboard icon to change languages.



You will get better text recognition depending on your style of writing. If you always print, you may want to enable the **Separate Letters** option.



#### Mixed (default)/Upper Case/Numerical/URL - If you are

writing strictly capital letters, numbers, or email address/URLs, you can switch recognition modes by tapping on this **Mode** button.

**Period** - Inputs the recognition session into the text label and inserts a period at the end.

**Space** - Inputs the recognition session into the text label and inserts a period at the end.

Backspace - Deletes the last handwriting stroke (not necessarily the last

character).

**Return** - When you are done writing, touch the **Return** button to insert the recognized text at the cursor location.

# Using Gestures

Gestures can be used for common operations such as *return*, *space*, *backspace* and *cut*. The gesture's action is always applied either to the words in the input panel, or if the input panel is empty, to the current cursor location or to the selected text. Write all the gestures inside the input panel. If you are in the middle of writing a word or a phrase and make a mistake you can use the **Backspace** gesture to delete the last stroke or the **Cut** gesture to delete all written strokes before the recognition occurs.



**Space:** Inserts a space. To insert the space character, use the short down-long right gesture. If the Input Panel is empty, it inserts a space at the current cursor location.



Tab: Inserts a Tab. To insert the tab character, use the short uplong right gesture. If the Input Panel is empty, it inserts a tab at the current cursor.

**Backspace**: Removes a character to delete the last stoke while writing. To perform the gesture, draw a horizontal line from right to left. If the Input Panel is empty, it deletes the character to the left of the cursor.



**Clear:** Removes the entire content in the Input panel. To perform the gesture, draw a horizontal line from right to left to right. If the Input Panel is empty, it removes the selected text.



**Return:** Similar to pressing enter on the keyboard. To insert the return character, use the short down-long left gesture. If text is already written in the input panel, using the Return gesture will immediately end the current recognition session and output the recognized text at the current cursor location. If the Input Panel is empty, it inserts a return at the cursor location.

# **Using Shorthand**

The Shorthand feature offers a quick and simple way to insert often-repeated text by writing a single word that is recognized as shorthand name. When a single written word is recognized as an existing shorthand name, a button appears on the Input Panel toolbar. If a user touches the button, the shorthand instead of the recognized word is inserted. To enable the Shorthand feature, go to the Options window and check Enable Shorthand (shorthands are enabled by default).

sign	sign	•	R L
sign.			

You can add new or modify existing User-Defined shortcuts using the Shorthand Editor, which is accessible from the Options window.

There are 3 built-in commands not visible to a user in the **Shorthand** editor interface (because they cannot be changed). They are "date", "time" and "dt".

- date Inserts the current date of the current locale at the current cursor location.
- **dt** Inserts the date and time of the current locale at the current cursor location.
- time Inserts the current time of the current locale at the current cursor location.

Note: To change the date and time format, use the device Settings->Date & Time and/or Settings->Language & Input.

Shorthand Editor

To use the Shorthand Editor, tap on the Options icon **we shorthand Editor**, tap on the Options window and select Edit Shorthand List.





From this window you can add new or modify existing User-Defined commands.

To add a new shorthand, tap on the  $\bigcirc$  icon. To change an existing shorthand, tap on the shorthand to be changed. The Shorthand Editor will appear.

Shorthand								
sign								
John Smith Manager ACME Corp. 123 First Street Palo Alto, CA 9430	1							
ОК	Cancel							

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In the top window, type in the shorthand command. In the bottom window, type in the text you want to appear in your document.

### Editing Text Using the Handwriting Panel

To enter text, write on the input panel in your preferred handwriting style (the input panel can support up to two lines of handwritten text, depending on the device and orientation). You can write one or more words per recognition session, but always complete the entire word in each session and ignore intermediate results because the dictionary is used to find best results.

**NOTE:** If you always print, you may want to enable the **Separate Letters** option for better results.

When you are done writing, touch the Return button to insert the recognized text at the cursor location for each line of handwriting.

This is the input panel				@ +
This i.	sthe	inpu	+ pa	Nel

If Auto Insert Results is ON, You can also start a new word on the left side of the

marker  $\checkmark$  on top of previous writing, which will automatically send the original line of recognized text into the document and start a new recognition session. Using this option, you can keep writing until you are done, and only have to tap the **Return** button once to enter the final line of text.

For instance, after you are done writing the first line, just start writing the next character to the left of the marker ...

This is how to keep				<b>ب</b> ی _
This	i s	how	+0	Keep
		<u> </u>		

The first line of text is automatically inserted into the document and clears the input panel screen so you can keep writing the second line...



The marker is adjustable. Just hold your finger against the marker and once a blue vertical line appears, move it right or left as desired.

If the recognizer returns an unexpected result, touch the incorrectly recognized word in the recognition results window to view alternatives.

Janel	Jamel	panel	]anet	Janey	Jane	Janeli	Mabel	Nagel	camel						
This is	the inp	out <mark>Jane</mark>							_						<b>4</b> 🔊 _
		1						1	1			 1 -	Ŧ		(
	1	h	1	5	1	2		T	he	10	JF	T .	J	an	10/
-		10 10	À	15 12	1		- 11			18 800		 		• • •	<u></u>

# Options

To go to the **Options** window, tap on



About, Tutorial, and Main Settings.

#### © PhatWare Corp.

WritePad Settings		About WritePad - Tap to see the current version and to go directly to the WritePad web site.
About WritePad		<b>WritePad Tutorial</b> - Tap to use the tutorial. Can also bring up the tutorial by tapping the WritePad icon on the home screen.
WritePad Tutorial		Language - Tap to select another language. The associated language dictionary will be used.
Main Settings		Vibration - If selected, some devices will slightly vibrate when pressing buttons and keys
Language > (EN)		on the keyboard.
Select Language		Notification - If selected, the WritePad icon
Vibration		will appear in the main Android toolbar. Tap to
If ON, vibration will enabled		open the <b>Options</b> window.
Notification If ON, notification will enabled	~	Show Suggestions - While in keyboard mode, multiple suggestions are made above the keyboard as you type. (If in input mode, touching
Show Suggestions If, ON, auto suggestions list will appear	<ul> <li>Image: A start of the start of</li></ul>	the incorrectly recognized word in the recognition results window will always enable the suggestions window, regardless of this setting.)
Auto Insert Results If ON, results will be added automatically	<ul> <li>Image: A start of the start of</li></ul>	Auto Insert Results - If ON, starting a new word to the left side of the marker <i>on top</i> of previous writing will automatically send the recognized

text into the document and start a new

the Handwriting Panel section.

recognition session. See the Editing Text Using

#### **Recognizer Settings**

**Recognizer Settings** Auto Learner the Recognition Alternatives to correct wrong If ON, recognizer will learn your handwriting patterns results in the beginning to accelerate the learning process. Auto Corrector If ON, common spelling errors automatically corrected Auto Corrector - Use this option to enable the Auto corrector feature. Auto corrector automatically fixes common spelling and Edit Autocorrector List recognizer errors. Edit Autocorrector List - To access the Letter Shapes List Editor section for more information. Add Space ~ use of unused letter shapes, which may help to If ON, a space is added at the end expedite the application's learning curve. See the Letter Shapes section for more information. Separate Letters If ON, do not connect individual letters Add Space - If selected, a space is added at the end of the recognition results when they are Single Word Only inserted into the document. If ON, write one word per recognition session Separate Letters - Use this option if you print

Auto Learner - If selected, WritePad will learn your handwriting patterns to attempt to improve quality of recognition. It is recommended to use

Autocorrector List Editor. See the Autocorrector

Letter Shapes - Allows disabling or reducing the

instead of using cursive and do not connect individual letters. If this option is selected, connected letters will not be recognized properly.

Single Word Only - Use this option if you always write only one word per each recognition session.

#### Dictionary Settings

#### **Dictionary Settings**

Only Known Words if ON, only dictionary words are recognized

User Dictionary if ON, user dictionary is enabled



Edit User Dictionary

Only Known Words - If selected, the recognition output will be limited only to the dictionary words. This improves quality of recognition but makes it impossible to write non-dictionary words. If this option is selected, numbers can only be entered in Numeric recognition mode.

User Dictionary - If selected, the user dictionary is enabled.

Edit User Dictionary - Tap to access the User Dictionary Editor. See the User Dictionary Editor section below for more information.

 $\checkmark$ 

-

#### Shorthand Settings

Shorthand Settings

Enable Shorthand If ON, shorthand feature is enabled.

**Edit Shorthand List** 

Enable Shorthand - If ON can insert oftenrepeated text and perform standard editing commands by writing a single word that is recognized as a shortcut. A button will appear on the Input Panel toolbar. If a user touches the button the shorthand-related text is inserted.

Edit Shorthand List - Tap to add new or modify existing User-Defined commands using the Shorthand Editor.

See the Using Shorthand section above for more information.

#### Handwriting Panel Settings

Handwriting Panel Settings

Background Color Choose background color

Show guidelines If ON, guidelines appear on the input panel.

Guidelines Color Choose guidelines color

Ink Width Select Ink width

Ink Color Choose Ink color **Background Color** - Tap to select a different input panel background color.

**Show guidelines** - If selected, will show horizontal lines on the input panel to assist in writing.

**Guidelines Color** - Tap to select a different color for the guidelines.

Ink Width - Tap to select the width of the writing ink.

Ink Color - Tap to select the color of the writing ink

#### Manage User Data

To access the User Data, touch the Manage User Data row in the Options view.



Export User Dictionary/Import from File

- The exported files can be stored in a shared directory so they can be exchanged with other devices or stored on a desktop computer. The user dictionary file format is a simple ASCII text file containing a single word per line, with no spaces.

**Export Word List/Import from File** - The Autocorrector file format is CSV (*comma separated values*). Each row contains a pair of words and optional flags (see the *Autocorrector Word List Editor* section).

**Reset Recognizer Settings** - This section allows you to reset the **User Dictionary**, **Autocorrector**, and **Auto Learner** to the default configuration (reverts to the original settings; all user modifications are lost).

#### Letter Shapes

The Letter Shapes option allows disabling or reducing the use of unused letter shapes, which may help to expedite the application's learning curve.

**NOTE:** If the handwriting works good for you already, we recommend that you do not disable any shapes, however if one of your letters is often recognized as another, you may be able to fix it by disabling one or more shapes.

To access the Letter Shape options, touch the Letter Shapes row in the Options view. The Letter Shapes window appears.



Scroll to the desired alphanumeric character, then tap on the desired shape to select it. To disable/enable the selected shape, tap once to indicate that the shape is rarely used (the  $\bigcirc$  symbol will appear next to the shape); tap a second time to indicate that the shape is never used (the  $\bigotimes$  symbol will appear next to the shape); tap again to re-enable the shape.

Note that some shapes may be combined in groups. Grouped shapes are always enabled/disabled together.

Autocorrector List Editor

To access the Autocorrector Word List Editor touch the **Edit Autocorrector List** row in the **Options** view. The **Edit Autocorrector List** will appear.

- To modify an existing word pair, touch the desired row.
- To add a new word pair to the word list, touch the <sup>©</sup> button.

When adding or modifying a word pair, the **Insert word pairs** or **Edit word pairs** window will appear. (If modifying an existing word pair was selected, the misspelled and correct word windows will be filled in.)



When adding or modifying a word pair, the following options can be used.

- If Always Replace is ON, the word is always replaced; otherwise the word is replaced only if the recognition engine alternatives contain the replacement word.
- If Ignore Case is ON, words are compared in lower case.
- If **Disabled** is ON, the word replacement is disabled. This is useful to disable a specific word replacement without removing it from the list.

#### User Dictionary Editor

The WritePad handwriting recognition engine requires a vocabulary for a higher recognition quality. Forcing the engine to recognize only words in the included dictionary (dictionary size depends on the selected language) improves overall recognition quality, but makes it impossible to write words that are not in the dictionary.

If you do not enable the **Only Known Words** option, it is recommended that you add any new words to the user dictionary that you may be using often, such as rare last and first names, company and product names, abbreviations, etc.

To access the User Dictionary Editor touch the **Edit User Dictionary** row in the **Options** view. The **Edit User Dictionary** will appear.



- To modify an existing word, touch the desired row.
- To add a new word pair to the word list, touch the <sup>1</sup> button.

When adding or modifying a word pair, the **Insert word** or **Edit word** window will appear.



• To delete a word, tap and hold your finger on the word to delete until the **Delete** button appears, then tap the **Delete** button.