Washra 4.1

Users Guide

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http://www.senamirmir.com

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Introduction

WashRa 4.1 provides a set of Ethiopic fonts and a keyboard layout for use with different application. It allows users to produce miscellaneous works with Unicode compatible programs. The fonts entirely support the Ethiopic standard included in Unicode 3.0. The keyboard layout is designed specifically for this purpose; unfortunately, the current version runs only under Windows 2000, XP, **Vista**, and 2003 Server. **MSKLC**¹ was used to generate the layout and it does have a couple of short-comings, but overall it works very well.

Compatibility

If you already have **WashRa 4.0** installed on your machine, you must uninstall entirely before you setup WashRa 4.1.

The fonts included in WashRa 4.1 are compatible with WashRa 4.0, but not with version 3.2 or earlier of WashRa's fonts. You shouldn't edit your old documents that were prepared with version 3.2 or earlier with version 4.1. If you are upgrading to WashRa 4.1, you can keep your fonts from the earlier version of WashRa in case if you need them. There will not be any conflict with the new ones. The WashRa 4.1 keyboard layout cannot be used to edit works generated with the previous versions.

¹ For more information, visit http://www.microsoft.com/globaldev/tools/msklc.mspx

Setup

WashRa 4.1 is distributed in two parts—WashRa Keyboard Layout and WashRa fonts. Both are distributed independent of one another, so that those who are interested only on WashRa fonts can have a simple access.

Downloading WashRa 4.1

- 1. As indicated above, WashRa is distributed in two parts as shown below.
 - a. WashRa Keyboard Layout: washra-keyboard-4.1.exe
 - b. WashRa Fonts: washra-fonts-4.1.exe
- 2. Download the two files from the following site. Unless otherwise, you have specified a different folder for download, they should be saved on the **Desktop**.

http://www.senamirmir.org/projects/typography/washra.html

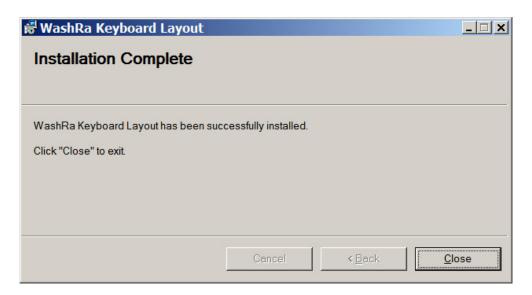
Installing WashRa Keyboard Layout

This section assumes that you have successfully downloaded the two WashRa's files and an easy access to them.

1. From the Desktop, locate the file "washra-keyboard-4.1.exe" and launch it by double clicking or by selecting it and pressing <Enter>. The setup program starts and displays the following dialog box.



2. Click the **Setup** button. The installation process takes a moment and when it is done the following dialog box is displayed; that is, the installation is successful.



Installing WashRa Fonts

 From the Desktop, locate the file "washra-fonts-4.1.exe" and launch it by double clicking or by selecting it and pressing <Enter>. The setup program starts and displays the following dialog box.



2. Click the **Setup** button. The installation process starts and displays the following dialog box.



3. From this point on, process the installation by clicking here and on the subsequent dialog boxes the **Next** button.

WashRa Fonts

WashRa is bundled with eleven Ethiopic fonts. All of them support the Ethiopic standard include in Unicode 3.0.

Font Names	Samples
Ethiopia Jiret	መልክአ ፊደል፤ አለቃ ኪዳን ወልድ ክፍሌ
Ethiopic Zelan	መኔክት ፊደኔ፤ ከተቃ ኪደነ ወኔድ ክፎኬ
Ethiopic WashRa Bold	መልክአ ፊደል፤ አለቃ ኪዳን ወልድ ክፍሌ
Ethiopic WashRa SemiBold	መልክአ ፊደል፤ አለቃ ኪዳን ወልድ ክፍሌ
Ethiopic Yigezu Bisrat Gothic	म्हित स्ता रहता क्रम इतहरू निर्मा
Ethiopic Hiwua	መልክአ ፌደቴ፤ አከቃ ኪዳነ ወልድ ክፍቴ
Ethiopic Fantuwua	սահոր ենթ։ րիծ ուզի արե ունբ
Ethiopic Yebse	መեንስ ፈደե፤ նեቃ ኪዳነ ወեድ ካፍե
Ethiopic Wookianos	መሐክአ ፊደե፤ አከቃ ኪዳነ መեድ ክፍե
Ethiopic Tint	ՍԱԽ ԴԻՐ ԶԵՐ ԵՐԻՐ ԱՐԵՐ ԱՐԵՐ ԱՐԵՐ
Ethiopic Yigezu Bisrat Goffer	व्यक्तिक क्षेत्रकार क्रिके भारत व्यक्ति स्व

Testing WashRa

WashRa 4.1 can be used with applications that support Unicode including MS Office, Open Office, Macromedia Dreamweaver, MS Outlook, Mozilla Thunderbird, and more. For this release, the only limitation is that the keyboard works only under Windows 2000, XP, VISTA, and 2003 Server. We can our installation using WashRa with MS Word and here is how.

- 1. Start MS Word. The step may differ from one version to another.
- 2. Under Word, select one of the WashRa fonts; for instance, "Ethiopic Hiwua".
- 3. Switch the keyboard to WashRa by pressing "Ctrl+Shift" or by using the Language Bar.
- 4. Enter the character as shown below.

ስገመታ	h,	hu	hi	ha	hy	he	ho
ውጤት	IJ	ሁ	Ч,	4	4	IJ	ľ

- 5. Each Ethiopic character is produced by a combination of two key strokes. At the first key stroke, nothing will be shown, but when second key stroke is completed, the intended character is displayed. If the two key strokes combination is not recognized, a wrong character will be displayed. This doesn't mean that the layout isn't working, but key strokes' sequence is incorrect.
- 6. If the result is as shown in the table, WashRa is working and the installation is successful; otherwise, the keyboard layout may not be set to WashRa a font is selected correctly.
- 7. To switch the keyboard layout "regular", press "Ctrl+Shift" or use the language bar.

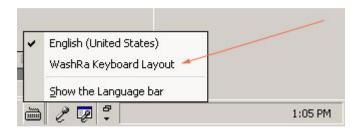
WashRa Keyboard Layout

WashRa's keyboard layout is compatible to a standard "101 keyboard" under **Windows 2000**, **XP**, **Vista**, or **2003** Server. In this section, we will discuss the layout in detail.

Switching Keyboard Layout

There are two methods to switch the keyboard layout from one to another. If you active more than two layouts, the switch takes order.

- 1. Using short-cut keys: Pressing "Ctrl+Shift" switches the keyboard back and fourth. This can be done as needed.
- 2. Using language bar: Another option is, of course, to use the language bar which list active layouts.



Key Strokes Composition

Obviously, we cannot make a one-to-one map between 101 keyboard and Ethiopic characters, because the later has more than 300 characters. By composing two keys strokes, however, we can solve the problem.

1. The 1st order (Ge'ez Bate) of each Ethiopic character family is treated as "base-character" and a key stroke is designated for each one of them. For each basic-character to reach its final order, it needs to be qualified by a set of key strokes that are identified here as "qualifier-keys" and they include ",", "u", "i", "a", "y", "e", and "o". This table illustrates the basic principle of the key stroke composition their mapping to the characters.

	1 st	2 nd	3 rd	4^{th}	5 th	6 th	7^{th}
Keys	h,	hu	hi	ha	hy	he	ho
Results	U	ሁ	ય	Ч	ч	IJ	ľ

2. The qualifier keys also are assigned to their own 1st order Ethiopic characters.

3. The six characters family known as "Dikala Fidelat" are entered as shown below.

	1 st	2 nd	3 rd	4^{th}	5 th	6 th	7 th
Keys	g1	g2	g3	g4	g5	g6	g7
Results	ጉ		ጒ	ጓ	ጔ	ጉ	

4. The 4th order dikala fidelat;

Keys	1/	m/	r/	s/	u/	b/	
Results	ኳ	ሟ	ሯ	ሷ	Д	Й	• • •

5. Ethiopic punctuation marks;

Keys		1	**	;	:	[]
Results	::	:	÷	<u>:</u>	:-	«	»

6. Ethiopic numbers;

Keys	1	2	3	4	5	6	7	8	9	0
•	ğ	Ĕ	Ę	Ĭ	፫	፯	፯	ጟ	Ħ	Ĭ.
~	Ţ	Ä	Ŏ	ā	Ч	ጟ	E	預	፯	贸

A general table illustrating the WashRa keyboard system.

	1^{st}	2^{nd}	3 rd	4 th	5 th	6 եհ	7 th	8 th	wa	ŢΜ	wa	wee	We	
	,	u	i	a	У	е	0	/	1	3	4	5	6	
h	υ	Ŋ	Ч.	4	ሄ	ีย	v							
1	٨	ሉ	λ.	٨	ሌ	ል	ሎ	ў .						
H	ф	ሑ	<i>д</i> г.	ሐ	ሔ	À	ф							
m	ØD	ØD•	Ф.	ъ	ሜ	ø	ф	ሟ						
<u>S</u>	W	w	ખ્	Ч	υL	p	y	쐿						
r	۲.	ሩ	b	Ŀ	lo	C	C	ሯ						
s	ά	Ů.	ሲ.	ሳ	(h	λ	Ų	ሷ						
u	ñ	Ϋ́	ï.	ሻ	ሼ	ñ	ሻ	Й						
q	ф	ф	ę	ф	ф	ቅ	ቆ		ф	ф.,	ቋ	, g	ቀኣ	
 Q	ቐ	華	Ą	Þ	Ą	ф	ቖ		Æ	ኞ ሩ	ቛ	Ŗ	ቝ	
b	U	U	n.	ղ	Ռ	ብ	ր	Ò.						
 <u>B</u>	ij	ij.	ň.	កុ	ij	'n	ţţ	Й						
t	ተ	ቱ	ቲ	ታ	ቴ	ት	ቶ	ቷ						
 С	ቸ	Ŧ	ቺ	ቻ	ቼ	ች	ቾ	迕						
 У	1	ኍ	1.	<i>;</i>)	ъ	ጎ	ኆ		ďo	ተ	ኋ	ኌ	ኍ	
n	ን	ኍ	፟	ና	ኔ	7	ኖ	ኗ						
N	ን	<i>ች</i>	ኚ	ኛ	ኜ	7	ኞ	ţ						
 a	አ	ሉ		አ	ሌ	እ	ኦ	ሽ						

												Ø		
	1^{st}	2^{nd}	3^{rd}	4 th	$5^{ m th}$	6 th	7^{th}	8	wa	wi	wa	Wee	We	
	,	u	i	a	У	е	0	/	1	3	4	5	6	
k	ħ	ኩ	ħ.	η	ħ.	ħ	ħ		ሎ	ኵ	ኳ	դ	ሎ	
<u>K</u>	ሽ	ጉ	ሽ.	ሽ	ኼ	ሽ	ሽ		'n	ዅ	ዄ	Ъ	ዅ	
W	Ø	Ф.	P	Ф	В	ው	Р							
0	0	o	Q.	9	o _b	Ò	۶							
 Z	Н	ዙ	H.	н	Н	Н	н	Ц						
 <u>Z</u>	Н	Ħ	ዢ	ዣ	Ж	Ħ	ዠ	ዧ						
 i	የ	Ŗ	ę,	ę	R	ß	۴							
đ	ደ	ዱ	Я.	Ŗ	ይ	ድ	ዶ	Ř						
 D	ዾ	ġ,	Å.	Ŗ	ዾ	ጵ	Ŗ	Ŗ.						
 j	ጀ	ጁ	Ŗ.	Ŗ	Ŗ	ድ	ğ	ğ						
 g	7	ጉ	7.	,	г	7	ጎ		Ъ	ጕ	4	λ,	ጕ	
 <u>G</u>	ጎ	た	7.	ኃ	ኄ	ሻ	វ							
 x	M	ጡ	M.	ጣ	ጤ	ጥ	ጠ	ጧ						
 С	ጨ	a	வ.	ጫ	Сb	æ	СРР	ஒ						
 <u>P</u>	я	ጱ	ጰ.	ধ	ጴ	ጵ	8							
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р	Т	Ŧ	T	ŗ	ፔ	Т	Т							

WashRa Layout

