

Kurdistan IT

Unified Keyboard for Kurdish language

Mapping, Unicode and Layouts

To	All
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1. About this document

The purpose of this document is defining the Unified Keyboard for Kurdish language.

2. Introduction

Developing a unified keyboard has become an important necessity, today Kurdish language suffers from the use of various Unicode characters for the Kurdish alphabet and a need has risen.

A unified keyboard which will become the standard for different computing platforms and operating systems to adopt and adhere too.

In order to map Kurdish letters with character codes, the Kurdish Academy, the Kurdish IT group and the Department of Information Technology of KRG held a meeting recently, participated by linguists and university lecturers from information technology and language domains. Decisions were made regarding the alphabet, the duties were to an extend open, in this document the technical specifications will be described, keyboard layouts will be outlined and detailed technicalities to be included.

3. Keyboard

3.1. Character codes

Kurdish letters and corresponding Unicode values are shown in Table 1:

1	ئ	U+0626	14	ژ	U+0698	27	ن	U+0646
2	ا	U+0627	15	س	U+0633	28	و	U+0648
3	ب	U+0628	16	ش	U+0634	29	ۆ	U+06C6
4	پ	U+067E	17	ع	U+0639	30	ه	U+0647
5	ت	U+062A	18	غ	U+063A	31	ه	U+06D5
6	ج	U+062C	19	ف	U+0641	32	ی	U+06CC
7	چ	U+0686	20	ڤ	U+06A4	33	ئ	U+06CE
8	ح	U+062D	21	ق	U+0642			
9	خ	U+062E	22	ک	U+06A9			
10	د	U+062F	23	گ	U+06AF			
11	ر	U+0631	24	ل	U+0644			
12	ړ	U+0695	25	ښ	U+06B5			
13	ز	U+0632	26	م	U+0645			

Table 1: Kurdish alphabet Unicode values

The Unicode values for numbers are in Table 2:

0	٠	U+0660	5	٥	U+0665
1	١	U+0661	6	٦	U+0666
2	٢	U+0662	7	٧	U+0667
3	٣	U+0663	8	٨	U+0668
4	٤	U+0664	9	٩	U+0669

Table 2: Kurdish (Arabic) numbers Unicode values

3.2. Arabic Letters Character codes

To remove the need for switching between keyboards and also to assist users write names and words in Sorani with the need for Arabic letters such as (ص – U+0635) we use the same character codes used in Arabic Unicode table 600. For convenience we relist them in Table 3.

ي U+064A	ط U+0637	ؤ U+0624	ث U+062B	آ U+0622	ذ U+0630
إ U+0625	أ U+0623	ك U+0643	ض U+0636	ص U+0635	ظ U+0638
ة U+0629					

Table 3: Arabic alphabet listed as they appear in the QWERTY layout, see 3.3.1

1.1.Characters¹

Characters are the same as other languages, apart from question mark and coma, which are different from Latin. The values for most common characters can be found in Table 3

!	@	#	\$	%	^
U+0021	U+0040	U+0023	U+0024	U+0025	U+005E
+	_)	(*	&
U+002B	U+005F	U+0028	U+0029	U+002A	U+0026
`	#	{	}]	[
U+0027	U+0023	U+007D	U+007B	U+005B	U+005D
´	=	¿		~	:
U+0060C	U+003D	U+0061F	U+007C	U+007E	U+003A
"	.	/	>	<	;
U+0022	U+002E	U+002F	U+003E	U+003C	U+003B
\	_	`	©	¨	§
U+005C	U+005F	U+0060	U+00A9	U+00A8	U+00A7
´	»	.	°	®	«
U+00B4	U+00BB	U+00B7	U+00B0	U+00AE	U+00AB
´					
U+002C					

Table 3: Kurdish (Arabic) punctuation characters

¹www.utf8-zeichentabelle.de

3.3.3 Mapping with Unicode

€ U+20AC	١ U+0661	٢ U+0662	٣ U+0663	٤ U+0664	٥ U+0665	٦ U+0666	٧ U+0667	٨ U+0668	٩ U+0669	٠ U+0660	- U+002D	= U+003D	Backspace
Tab	ق U+0642	و U+0648	ه U+06D5	ر U+0631	ت U+062A	ى U+06CC	ئ U+0626	ح U+062D	ۆ U+06C6	پ U+067E	{ U+007D	} U+007B	\ U+005C
Caps	ا U+0627	س U+0633	د U+062F	ف U+0641	گ U+06AF	ه U+0647	ژ U+0698	ک U+06A9	ل U+0644	؛ U+061B	' U+0027	Return	
Shift		ز U+0632	خ U+062E	ج U+062C	ڤ U+06A4	ب U+0628	ن U+0646	م U+0645	، U+060C	. U+002E	/ U+002F	Shift	
Control		Alt		Space							Alt	Control	

Table 4-1: Mapping for English based with Unicode's

With Shift:

~ U+007E	! U+0021	@ U+0040	# U+0023	\$ U+0024	% U+0025	^ U+005E	& U+0026	* U+002A	(U+0028) U+0029	_ U+005F	+ U+002B	Backspace
Tab	` U+0060	وو U+0648 U+0648	ي U+064A	ر U+0695	ط U+0637	ئ U+06CE	ء U+0621	ع U+0639	ؤ U+0624	ث U+062B	[U+005D] U+005B	, U+002C
Caps	آ U+0622	ش U+0634	ذ U+0630	إ U+0625	غ U+063A	ه U+0647 U+200C	أ U+0623	ك U+0643	ل U+06B5	:U+003A	" U+0022	Return	
Shift		ض U+0636	ص U+0635	چ U+0686	ظ U+0638	ى U+0649	ة U+0629	- U+0640	< U+003E	> U+003C	? U+003F	Shift	
Control		Alt		Space							Alt	Control	

Table 4-2: Mapping for English based with Unicode's – with Shift