



CRULP Khovar 2 Level (2L) Keyboard Layout
V1.0 for Windows

March 24, 2010

CENTER FOR RESEARCH IN URDU LANGUAGE PROCESSING
NATIONAL UNIVERSITY OF COMPUTER AND EMERGING SCIENCES, LAHORE,
PAKISTAN

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Revision History

Name	Change Date	Version	Description of Changes
Ahmed Muaz	24-03-2010	1.0	Initial document

1. Introduction

The CRULP Khowar 2 Level (2L) Keyboard Layout v1.0 is developed to support Khowar characters to be typed easily along with Urdu characters. This keyboard is based on the “Urdu Phonetic 2 Level (2L) Keyboard Layout v1.0”. The layout of the keyboard is similar with the Urdu keyboard. The only difference is support of additional characters for Khowar Language.

Center for Research in Urdu Language Processing (CRULP) released “Urdu Phonetic 2 Level (2L) Keyboard Layout v1.0” for Microsoft platform in December 2009. The layout was based on extended version from InPage to incorporate Unicode character set for Urdu. Same as Urdu, Khowar keyboard has two (Base and Shift) faces. Six Khowar Characters

have been mapped on shift face. Currently four characters چ (U+076F), چ (U+076E),

ش (U+0770) and ژ (U+0771) are not fully supported by rendering engines so

temporary Unicode values are borrowed for these characters. It enables user to type these characters as joiners. A new version of NafeesPakistaniWebNaskh (v2.0) has also been released in which support of these characters has been incorporated. This font is downloadable at

<http://crulp.org/software/localization/Fonts/nafeesPakistaniWebNaskh.html>

The users of Windows 2000, Windows XP, Windows Vista and Windows7 can install this keyboard and use it for Khowar Typing.

2. Khowar Support in Nafees Pakistani Web Naskh

Following table elaborates the actual and borrowed Unicode values. The borrowed Unicode values are used in NafeesPakistaniWebNaskh font v2.0 which provides full support of these Khowar characters as joiners.

Table1. Khowar characters and their Unicode values

#	Khowar Character	Actual Unicode	Borrowed Unicode	Shape of Borrowed Unicode
1	چ	076F	06FB	ض
2	ش	0685	supported	
3	ط	076E	06A0	ع
4	ء	0681	supported	
5	ٹ	0770	06A5	ا
6	ژ	0771	06B7	ت

3. CRULP Khowar Keyboard 2 Level (2L) Layout v1.0



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Figure1. Base Version



Figure2. Shift Version

1 بِسْمِ اللّٰهِ الرَّحْمٰنِ الرَّحِیْمِ ○