

## PROBLEMS/ ISSUES WITH KHOAR UNICODE

Accommodation of Khowar in the Unicode, and the introduction of fonts and keyboard layout for it, has made life a lot easy for Chitrali Writers. However some problems have emerged while working with these. The problems/ issues are briefly discussed here.

1. Khowar has got six additional characters beside all the Urdu characters. The six characters have been included in the UNICODE, and assigned UNICODE values but only two characters are presently fully supported. Temporary values have been borrowed for the remaining four characters, to make them renderable. These four characters are renderable in only one Font (NafeesPakistaniEbNaskh v2.0). In other fonts, characters of a very different kind are rendered, making the language meaningless.  
All the six additional Khowar character need to be made fully supported in rendering engines, so that these characters are renderable in any font.
2. With the borrowed values, these characters are rendered as joinders. This issue becomes serious in case of ڙ (borrowed value U+06B7) which is basically a non-joinder character. This problem will be solved if the Khowar characters are made fully supported.
3. Khowar keyboard layout works with only one font (NafeesPakistaniEbNaskh v2.0). In other fonts. One has to find and install this font to make his computer able to render these characters correctly. The said font is a Naskh Font while Khowar writers and readers are used to Nastaleeq Fonts. This issue will also be resolved if these character are made fully supported in UNICODE.
4. The sign ط in the four Khowar characters (ج-چ-ڙ-ش) is very small, and difficult to identify even in font size 16. The size of the said sign needs to be increased.
5. اعراب (أ ا ا) are not correctly rendered when used with the Khowar characters.  
Modification in the font is needed.

Technical help will be welcomed to resolve these issues.

Below are the Keyboard layout and Unicode values for Khowar Characters.

