

Arabic Keyboard Setup Under Xfree86 4.1 and KDE

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Abstract

This document aims to describe the basic setup procedure for getting an Arabic keyboard working correctly under KDE ≥ 3 , and XFree86 ≥ 4.1 . That is not to say that it may not work on earlier versions of either system, but rather that it has only been tested under this configuration.

Introduction

It seems that a great many people would like to get a functioning Arabic keyboard under Linux/KDE, but due to a lack of documentation they are unable to do so. Furthermore, even if they are able to get the information needed the amount of time needed to figure out how to get a functioning setup can be daunting, and most would rather just give up. Hopefully by providing an easy setup procedure and all the required files this problem can be eliminated and people can instead focus on using Linux/KDE for real jobs.

Requirements

This setup was tested on Mandrake 8.1 Final with the following configuration:

1. XFree86 4.1
2. KDE 3.0 CVS (c. 17/10/2001)
3. QT 3.0
4. A function Arabic key map from Mandrake's XFree86 RPM

Installation

1. Download the file named "ar" from wherever you got this document.
2. As root, copy this file to the "/usr/X11R6/lib/X11/xkb/symbols/" directory. You can do so by typing in "cp ar /usr/X11R6/lib/X11/xkb/symbols/" at the command prompt from wherever you decided to save the key map.
3. Using your favorite editor, edit the file named "xfree86" in the "/usr/X11R6/lib/X11/xkb/keymap/" directory, and add the following text to it:

```
xkb_keymap "ar" {  
    xkb_keycodes {include "xfree86"};  
    xkb_types {include "default"};  
    xkb_compatibility {include "default"};  
    xkb_symbols {include "en_US(pc105)+ar"};  
    xkb_geometry {include "pc"};  
};
```

You can add it after any group that has the same format as it. One way to edit this file is to type in "emacs /usr/X11R6/lib/X11/xkb/keymap/xfree86" and add it after the 'default xkb_keymap "us" {' group.
4. This only applies if you have the KDE CVS sources and are comfortable dealing with source code. If you don't, have them then you will have to press the <Alt> key every time you would like to type something in Arabic. Find the line that says "encs[] = {" in the "rules.cpp" file in the "kdebase/kxkb" CVS source directory, and add a line that says '{"ar", "ISO8859-6", 1},' to that structure. Then type in "make", and as the root user type in "make install" to have your changes take effect.

Usage

Under KDE, you need to go to the “*KDE Control Center*”, and select the “*Peripherals*” tree and “*Keyboard*” node. Under the “*Layout*” tab, un-check the “*Disable keyboard layouts*” check box, and check the “*ar Arabic*” check box. Under “*Primary Layout*” drop down menu you can choose which of the keyboard layouts you would like to be your default. After clicking apply, you are done. You may switch your keyboard layout at any time by pressing <Ctrl> + <Alt> + 'k' at any time, by clicking on the “*KDE Keyboard Tool*” that will appear on the “*KPanel*”, or by right clicking the “*KDE Keyboard Tool*” icon and selecting the language you would like to type with.

Conclusion

Hopefully you have found this document of some use. Most of this information should become outdated once all the problems are ironed out of KDE 3. Until then, for those who would like to remain on the cutting edge of Arabic typing, or would like to assist in the development of better support for Arabic under the new KDE, this is the only way that I am aware of to do so. This document would not have been possible without the FarsiKDE project.

References

- [1] <http://www.farsikde.com/keyboard.html> - The FarsiKDE project's mini-howto on setting a Farsi keyboard under KDE 3 CVS. These guys basically said all there is to say on the subject.
- [2] <http://www.linux-mandrake.com> - This is my distribution of choice, and is the one that I managed to get a working key map from. I have tried many other key maps off the Internet unsuccessfully and probably would have given up had they not so nicely provided one.