LangBox International

LANGBOX™ For Arabic

THE PRODUCT

LANGBOX-ARA is an extension to the UNIX™ operating system Kernel, designed specially to support the Arabic language. A virtual driver is added to the kernel, processing on exceptional basis the Arabic characters at the TTY I/O flow level. A special shell and a variety of commands are added to complete the package.

After the installation of **LANGBOX-ARA** on your system, Arabic is supported (in addition to English), with keyboard mapping, system messages, screen and display management, collating sequences, and date and time routine services.

TRANSPARENCY

LANGBOX-ARA will permit staff in your office to share and use existing UNIX applications in Arabic with little or no adjustment. With LangBox International's load and go transparency, a user can obtain an English word processor, data base manager, spreadsheet or any 8-bit clean application and use it immediately, without any modification of the application, in Arabic. He/She can even mix Arabic and English characters and text within the same document, with a simple keystroke.

BENEFITS

For the User

- Use the best existing "English-only" applications in Arabic with no modification.
- Dynamically switch between Arabic and English.
- Enter UNIX commands in Arabic or English.
- Receive system messages in Arabic or English.
- Dynamically select screen directionality.
- No need to purshase specific or dedicated bilingual terminals

For the Developer

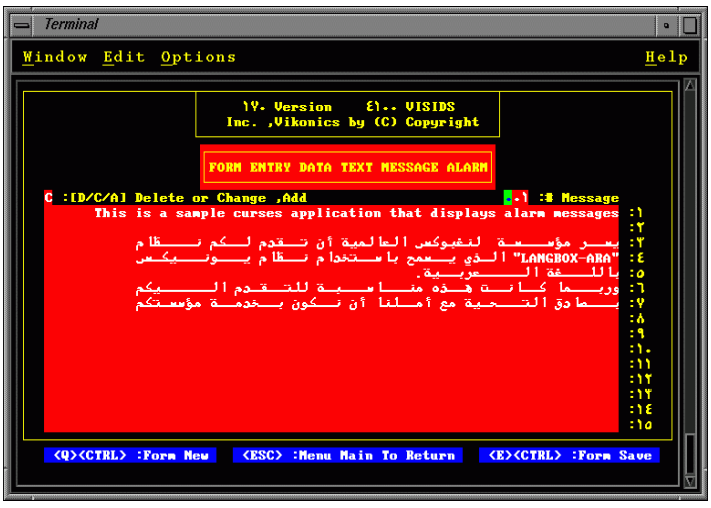
- Develop Arabic products and bilingual applications without bilingual programmers.
- Move existing "English-only" applications into the Arabic world.
- Develop applications that meet the highest Arabic standards.

For the Distributors and VARs

- Open new markets with new products/systems that meet local requirements.
- Expand your customer base with bilingual product offerings.

For the Manufacturers

- Enhance your total offering to the Arabic markets.
- Address international opportunities through our special LangBox International cooperation program.



Here is some shell sessions under the LANGBOX-ARA environment.

THE LANGBOX-ARA FEATURES

- **Bilingual keyboard:** The keyboard mapping may be switched to English or Arabic by a simple keystroke. Arabic letters are indicated by keyboard stickers.

- **Character codeset:** The following character codesets are supported under LANGBOX-ARA:
  - ISO 8859-5 (ASMO 708)
  - ASMO 449+

- **Kernel support of Input/Output processing.**

- **LANGBOX-ARA Commands and Utilities**
  Two kinds of commands are added under the **LANGBOX-ARA** bilingual environment.

  1) The **LANGBOX-ARA** shell:
  LANGBOX-ARA offers national shells allowing:
  - The keyboard mapping.
  - The setting of environment variable.
  - The context analysis.
  - The screen management and the display processing depending on the language selected.

  These shells are: **esh** and **eksh** for English; **ash** and **aksh** for Arabic. Also **araexec** forks a system shell

  2)The bilingual **LANGBOX-ARA** and UNIX commands and utilities

  Those commands and utilities are the following:

  a) **LANGBOX-ARA** specific: acharset, aload, amode, arabic, asmo449, combo, context, dataproc, english, hindi, neutral, nocontext, nohindi, wordproc, adisp, aind, axtract, axec, afps, asetup, amask.

  b) Bilingual UNIX-like: aed, alp, avi, avedit, aa2ps…

  These commands return national (English or Arabic) state or error messages depending on the shell selected.

- **Bilingual function libraries:** The extended UNIX function libraries are the following:
  - C library
  - Arabization library: This new function library is specially added for internationalization of applications and string extraction.

X WINDOW DISPLAY SUPPORT

All terminal emulation windows based on X Window and its library are supported. This includes xterm, SCOterm on Open Desktop of SCO, shelltool and cmdtool on Open Window of Sun...etc.

STANDARDS

LANGBOX-ARA fully emulates a VT220 terminal and supports ISO 8859-6 and ASMO 449+ codesets.

OPERATING SYSTEM

Ported to SCO UNIX System V 3.2.4, SGI IRIX 5.2 to 6.3, SUN OS 4.1.1 and SUN Solaris 2.3 to 2.6 and Sun Solaris X86 2.6, IBM AIX 3.1 and 3.2 on RISC System /6000, CDC EP/IX 2.1.1, Data General DG/UX 5.40, Intergraph CLIX 3.1, etc. X Window xterm and other windowed terminal emulators on these systems are fully supported under a VT220 emulation.

HARDWARE SUPPORTED

All equipment running any above mentioned version of UNIX. For display devices and terminals, support is available for: Wyse Model 60, Esprit Opus 3n1, HP 700/43, DEC VT320, D412+ Bull Questar 305.
For printers, support is available for IBM proprinter II and III, EPSON LQ, FUJITSU DL, Genicom 1040 and 4440, Dec LA75+, HP Deskjet plus, HP laserjet plus, and Postscript.
On PC's (80386/486), the EGA or VGA cards are supported with the virtual screens. PC multiplexor board like BELL ICC, SPECIALIX SI, COROLLARY 8/tc, COMPUTONE Intel Port II, DIGIBOARD Digichanel C/CON-16, WYSE 995, FLICT AT 8/16 are also suppported.

PACKAGING

LANGBOX-ARA consists of a core system supplied in binary machine readable format on floppies, QIC tapes, CDROM or Web downloadable compressed file, together with documentation, and local keyboard stickers.

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