Arabic/Persian Script with Debian GNU Linux

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Some Frame Title

- This text only apears in the presentation form

First, Let's Parse the Title
Scope And Purpose
Model
Philosophical and Moral Dimensions
Distribution and Support

Part I

Introduction

Part I: Introduction

1. First, Let's Parse the Title
   - Convivial Perso-Arabic Script with Debian GNU/Linux
   - Part of ByStar User Environment
2. Scope And Purpose
   - Goal and Direction
   - Non Goals
3. Model
4. Philosophical and Moral Dimensions
   - Our Approach: The Convivial Quadrant
   - Libre/Propitary and Convivial/Industrial Software
   - Libre/Propitary and Convivial/Industrial Internet Services
   - Libre/Propitary and Convivial/Industrial Software-Service Continuum
5. Distribution and Support

Convivial Perso-Arabic Script with Debian GNU/Linux.

- Convivial: Not in the American/English sense of the word. In its Globish sense as introduced by Ivan Illich in "Tools For Conviviality".
  Expressing the correct relationship between "Tool User", "Tool" and "Tool Maker".
  In this context, in Geek lingo: emacs and TeX.
- Perso-Arabic Script: Text processing in:
  - The Persian family of languages: (Farsi, Dari, Urdu, Pashto/Afghanic, Sindhi, Kashmiri, Uighuric)
  - The Arabic family of languages: (Arabic, Maghribi, Jawi/Old-Malay)
- Debian GNU/Linux: A paricular rev./generation (Squeeze/6.0) providing a stable and consistent libre platform.

Part of ByStar User Environment.

- What is the ByStar Federation of Autonomous Libre Services?
- What is the ByStar User Environment?

Goal and Direction.

- To create a healthy, strong and complete environment for producing documents in Arabic/Persian script
- Totally open and CopyLeft
- An asset for humanity
- In harmony with Debian GNU/Linux
- Multi-Lingual Editing Capabilities – Persian/Farsi, Arabic, Chinese, Hendi, Latin
- Given Debian and a local repository (persian.bybinary.org), provide everything.
- A pedagogical tool for language learning

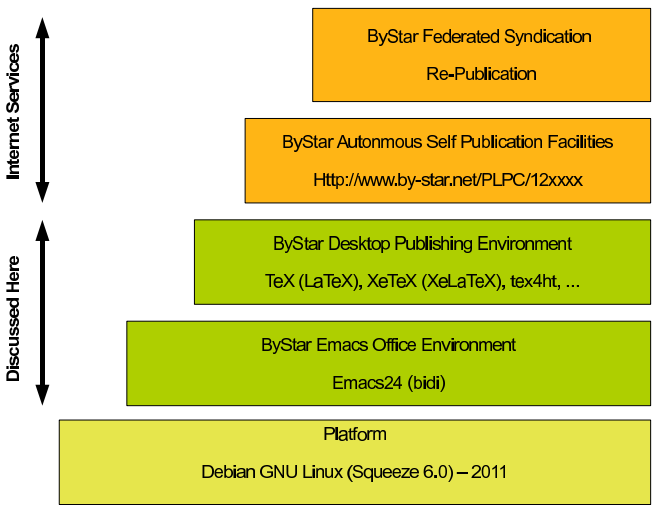
Non Goals.

- Ease of Use
- Purity of Persian or Arabic input system

Model.

- Platform (Debian)
- User Environment (Emacs24 with bidi, ByStar EOE)
- Desktop Publishing (XeLaTeX, XePersian, tex4ht)
- Autonomous Self Publication Facilities (ByStar)
- Federated Syndication – Re-Publishing

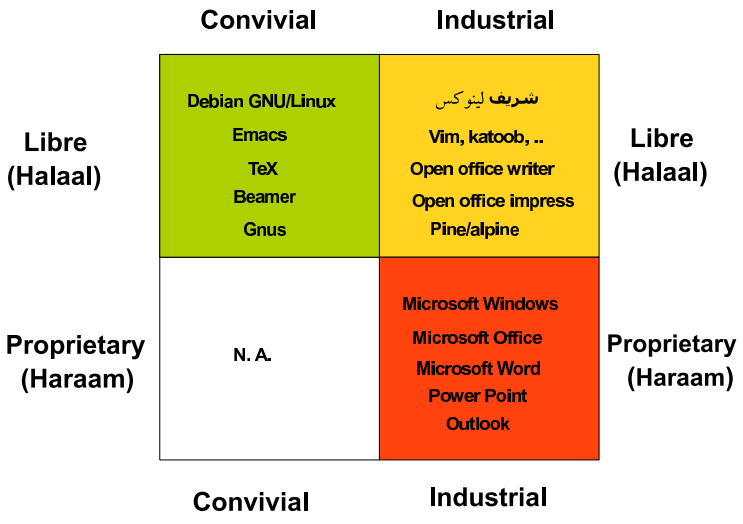
End-To-End Solf Pubilcation Model



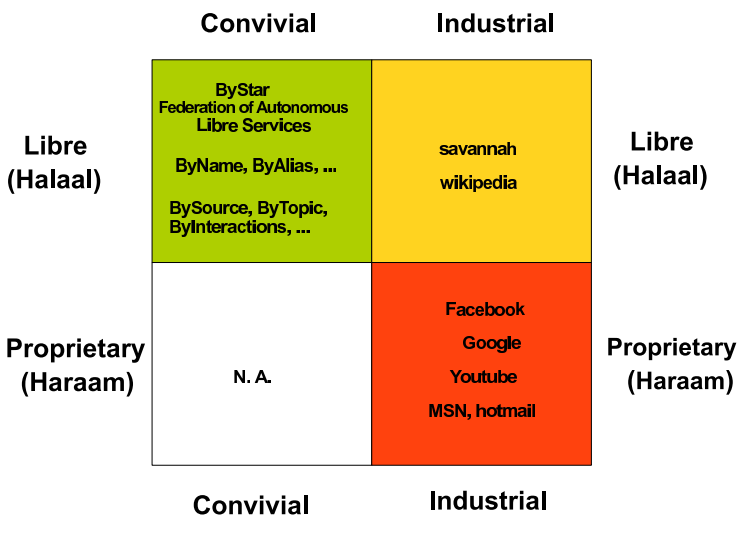
3 Choices For Perso-Arabic Script Software.

1. Microsoft Word, ... – Proprietary and Industrial.
2. Open Office Writer, ... – Libre but Industrial.
3. Emacs and XeTeX – Convivial.

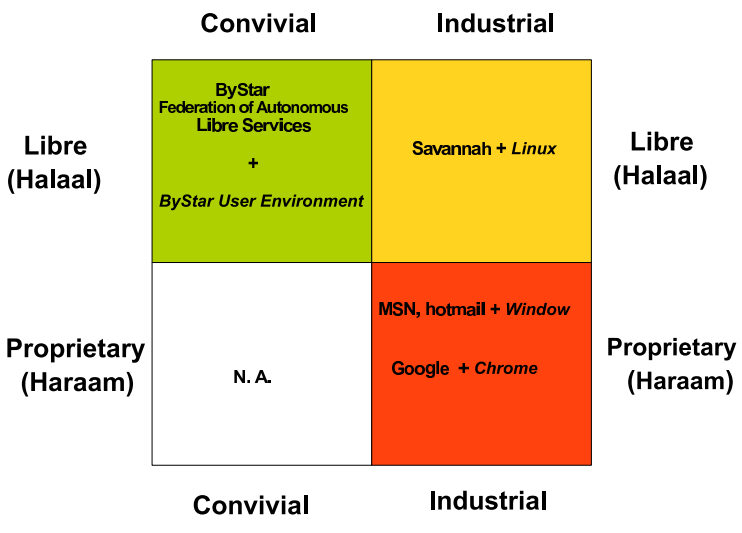
Libre/Proprietary and Convivial/Industrial Software Quadrants



Convivial Internet Services Quadrants



Convivial Software and Services Continuum



Distribution and Support.

- Part of ByStar User Environment. Recommended.
- A La Carte. Here is the information. You are on your own.

Part II

Platform

Part II: Platform

6 Debian Gnu Linux
- Debian Squeeze (6.0) and Ubuntu 11.04

Debian Squeeze (6.0) and Ubuntu 11.04.

- Debian Squeeze (6.0)
- Ubuntu 11.04

Nothing less will do beacuse bidi was missing in emacs and XePersian was not quite ready until 2010.

- ByStar User Environment

Part III

ByStar Emacs Perso-Arabic User Environment

Part III: ByStar Emacs Persian/Arabic User Environment

7 What Is Emacs?
- Emacs24 and bidi

8 What Is ByStar?
- ByStar User Environment

9 Perso-Arabic Emacs User Environment
- Extra Fonts for Emacs
- Emacs Input Methods
- Persian Transliteration
- Multilingualization (M17n) of Spelling Dictionaries
- M17n of Thesaruses
- M17n of Dictionaries
- Bidi and Emacs Packages Problems

Emacs24 and bidi.

- emacs-snapshot is not part of Squeeze, get it from ...
- Persian fonts
- Persian input methods
- Arabic input methods
- Persian spell checkers

ByStar User Environment.

- Point to relevant docs.

Extra Fonts For Emacs.

- Persian: XB Zar, ...
- Arabic: Lateef, ...

Emacs Input Methods.

- Native Keybaords: Arabic M-: (set-input-method 'arabic) (set-input-method 'farsi)
- Transliteration: Persian M-: (set-input-method 'farsi-translit)
- Predictive Phonetic Input (PPI): e.g., pinglish

Persian Transliteration.

Generated with M-: (describe-input-method 'farsi-translit)

Multilingualization (M17n) for Spelling Dictionaries.

ispell/aspect used with multiple dictionaries.

- Persian/Farsi aspell dictionaries
- Arabic aspell dictionaries

M17n of Thesaruses.

dict protocol used with multiple thesaruses.

- Persian/Farsi thesaruses
- Arabic thesaruses

M17n of Dictionaries.

dict protocol used with multiple dictionaries.

- Persian/Farsi dictionaries
- Arabic dictionaries
- eng-arabic + arabic-eng
- eng-farsi + farsi-eng

Bidi and Major Emacs Packages.

- Gnus – Bugs: Summary buffer messed up
- Supercite:
- When bidi is on, arithmetic segments should remain left to right.
- m17n library: lengthened characters at the end of a word.

Part IV

Desktop Publishing

Part IV: Desktop Publishing

10 Persian/Farsi XeLaTeX
- XePersian

11 Html Generation
- tex4ht

XePersian.

- XB Zar Fonts

tex4ht.

- htxelatex is missing. Needs work.

Part V

ByStar Autonomous Self-Publication

Part V: ByStar Autonomous Self-Publication

12 ByStar Libre Content Publication Facilities
- lcntProc.sh

lcntProc.sh.

- Point to relevant PLPC.

Part VI

Federated RePublication

Part VI: ByStar Autonomous Self-Publication

13 Federated Syndication
- ByTopic.org

ByTopic.org.

- ByTopic.org.

Part VII

Some Examples

Part VII: Some Examples

14 Persian
- Persian and English
- Persian and English
- Arabic with some English in it

Persian and English.

- Gharbzadegi
- This articleFa.tex and presentationFa.tex

Enlglish and Persian.

- This articleEn.tex and presentationEn.tex

Arabic with some English in it.

- TBD

Part VIII

Direction Statement and ToDO List

Part VIII: Direction Statement and ToDO List

15 TODO List
- Collaboration and Possible Next Steps
- ToDo List

Collaboration and Possible Next Steps.

- Get a ByName.net acct
- Install Debian Squeeze on your computer
- Install ByStar User Environment with matching ByName.net on your computer.
- Use the ByStar Perso-Arabic Script
- Report Bugs and suggest improvements
- Assist in completing this manual – particularly the Arabic parts

ToDo List.

- XeLaTeX for tex4ht
- Persian Dictionaries – None found at this time
- Persian Thesaurus – None found at this time
- Pinglish for emacs
- eng-persian dictionary
- persian-eng dictionary

Colophon

- Produced with Halaal Software and Halaal Internet Services.
- It uses LaTeX, beamer, ByStar, Blee, Emacs, ...