

# OSS localization in Mongolian

B. Batpurev, CEO, InfoCon Co.,Ltd  
Mongolia

Regional Conference on Localized ICT Development &  
Dissemination Across Asia PAN Localization project  
Technology session

Vientiane, Laos from 11th - 16th January, 2009

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  - ICT development
- PAN localization project in Mongolia
  - “OSS Localization” - InfoCon Co., Ltd
  - “Speech to text” - Mongolian University of Science and Technology
  - “NLP processing” - National University of Mongolia
- OSS localization in Mongolian
  - ‘Epiphany’ Web Browser
  - ‘Evolution’ Email Client
  - ‘Pidgin’ chat software
  - ‘SeaMonkey’ - All-in-one internet application suites
- Localization tools
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# About Mongolia



- Info & data

- Capital – Ulaanbaatar
- Official language – Mongolian
- Government – parliamentary republic
- Time zone - +8 UTC
- Population – 2.6 million
- Land – 1.5 million square km
- Literacy rate – 97.8%
- Livestock – 40.3 million
- GDP per capita – 3200 USD





# ICT development in Mongolia

- Policy
  - Communications Regulatory Committee (1995)
  - National Information Technology Park (2003)
  - Establishment of Information Communications Technology Authority (2004)
  - E-Mongolia national program (2005)
  - Outsourcing master plan (2007)
- Infrastructure
  - 4 mobile operators serving 1.2 million users
  - Over 30 ISPs
  - Fiber optic backbone network laid throughout the country (over 10,000 km)
- ICT industry
  - As of 2006, ICT sector contributes 7 percent of the total GDP (including telecommunications)
  - There are over 100 software development companies
- Human resource
  - ~10,000 worker
  - Over 200 tertiary education institutions, over 8,000 students studying on ICT majors



# PAN localization project in Mongolia

- Main objectives:
  - Localize SeaMonkey, Epiphany, Evolution and Pidgin in Mongolian (InfoCon Co.,Ltd)
  - Build a corpus for Mongolian language, Text typology, lemmatization and morpho-syntactic annotations. (National University of Mongolia)
  - Mongolian Speech recognition tool (Mongolian University of Science and Technology)





# OSS localization

- GNOME - The Free Software Desktop Project
  - [www.gnome.org](http://www.gnome.org)

## Mongolian

Release	User Interface	Graph	Documentation
GNOME 2.26 (Development)	32% (14014/9340/19578)		0% (0/0/21275)
GNOME 2.24 (stable)	35% (14673/8979/18245)		0% (0/0/21254)
GNOME 2.22 (old stable)	39% (16155/8152/16475)		0% (0/0/21901)
GNOME 2.20 (old stable)	44% (16638/7599/12920)		0% (0/0/20670)
GNOME 2.18 (old stable)	47% (16657/6891/11161)		0% (0/0/18045)
GNOME 2.16 (old stable)	53% (17025/6325/8465)		0% (0/0/14385)
GNOME 2.14 (old stable)	54% (17417/7116/7298)		0% (0/0/11485)
GNOME-Office Productivity Applications	1% (194/239/9727)		-
GNOME Infrastructure	0% (0/0/911)		0% (0/0/866)
Extra GNOME Applications	1% (640/270/37635)		0% (0/0/6571)
GNOME Fifth Toe (Extra software)	8% (660/324/7099)		0% (0/0/1371)
freedesktop.org (non-GNOME)	0% (0/0/2131)		-



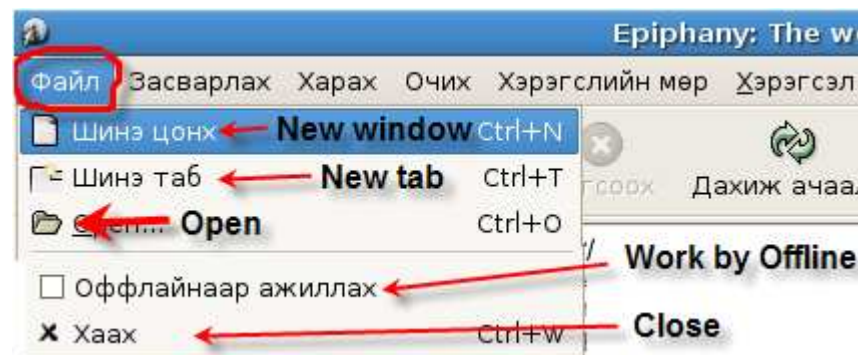
# 'Epiphany' Web Browser

- Epiphany translation status – 100%

Installation manual  
has been developed  
in Mongolian

User interface and  
documentation in  
Mongolian

```
Файл Боловсруулах Хара
Configuring locales
[ ] lv_LV ISO-8859-13
[ ] lv_LV.UTF-8 UTF-8
[ ] mg_MG ISO-8859-15
[ ] mg_MG.UTF-8 UTF-8
[ ] mi_NZ ISO-8859-13
[ ] mi_NZ.UTF-8 UTF-8
[ ] mk_MK ISO-8859-5
[ ] mk_MK.UTF-8 UTF-8
[ ] ml_IN UTF-8
[ ] mn_MN UTF-8
[ ] mr_IN UTF-8
[ ] ms_MY ISO-8859-1
gooyo@debian:~$ locale
LANG=mn_MN
LC_CTYPE="mn_MN"
LC_NUMERIC="mn_MN"
LC_TIME="mn_MN"
LC_COLLATE="mn_MN"
LC_MONETARY="mn_MN"
LC_MESSAGES="mn_MN"
LC_PAPER="mn_MN"
LC_NAME="mn_MN"
LC_ADDRESS="mn_MN"
LC_TELEPHONE="mn_MN"
LC_MEASUREMENT="mn_MN"
LC_IDENTIFICATION="mn_MN"
LC_ALL=
```





# 'Evolution' Email Client

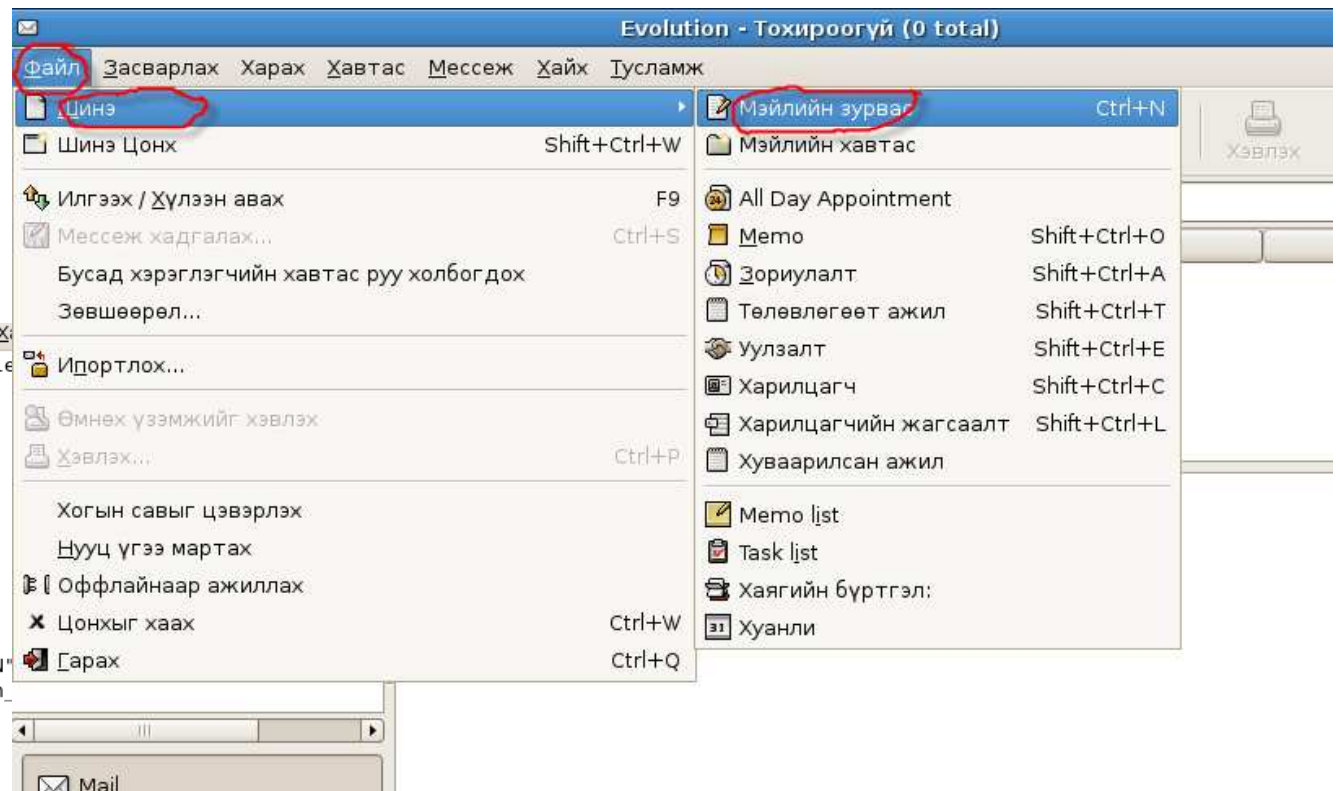
- Evolution translation status – 100%

User interface and documentation in Mongolian

Installation manual has been developed in Mongolian

```
Configuring locales
[ ] lv_LV ISO-8859-13
[ ] lv_LV.UTF-8 UTF-8
[ ] mg_MG ISO-8859-15
[ ] mg_MG.UTF-8 UTF-8
[ ] ml_IN ISO-8859-13
[ ] ml_IN.UTF-8 UTF-8
[ ] mn_MN UTF-8
[ ] mr_IN UTF-8
[ ] ms_MY ISO-8859-1
[ ] mn_MN UTF-8

Файл Боловсруулах X
gooyo@debian:~$ locale
LANG=mn_MN
LC_CTYPE="mn_MN"
LC_NUMERIC="mn_MN"
LC_TIME="mn_MN"
LC_COLLATE="mn_MN"
LC_MONETARY="mn_MN"
LC_MESSAGES="mn_MN"
LC_PAPER="mn_MN"
LC_NAME="mn_MN"
LC_ADDRESS="mn_MN"
LC_TELEPHONE="mn_MN"
LC_MEASUREMENT="mn_MN"
LC_IDENTIFICATION="mn_MN"
LC_ALL=
```



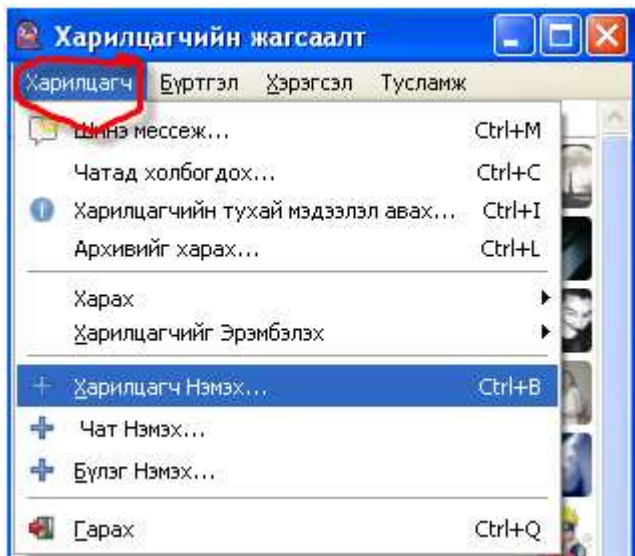
# 'Pidgin' multi-protocol chat software

- Localization status -100%

## Supported Languages

Pidgin is translated into many different languages, thanks to the generous contributions of our volunteer translators. You may be glad to know that Pidgin is already translated into **Mongolian!**

Pidgin 2.5.3 localized in Mongolian language



Installation and user manuals are developed in Mongolian language



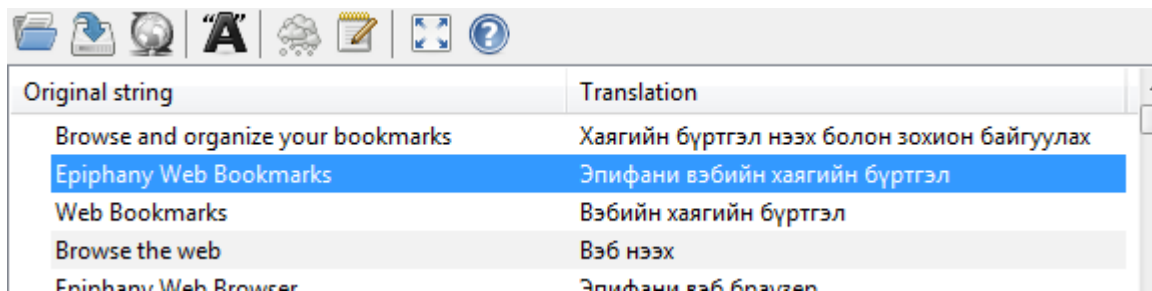
# 'SeaMonkey' all-in-one internet suite

- Seamonkey consists:
  - Browser ("Navigator")
  - Mail & Newsgroups
  - Composer (HTML, CSS etc.,)
  - IRC Chat ("ChatZilla")
- Why SeaMonkey?
  - Cross platform so Windows, Mac users can benefit
- Localization status
  - About 10,000 strings
  - 80% completed (finish by June 2009)

# Localization tools

- Glossary

Local glossary - PoEdit

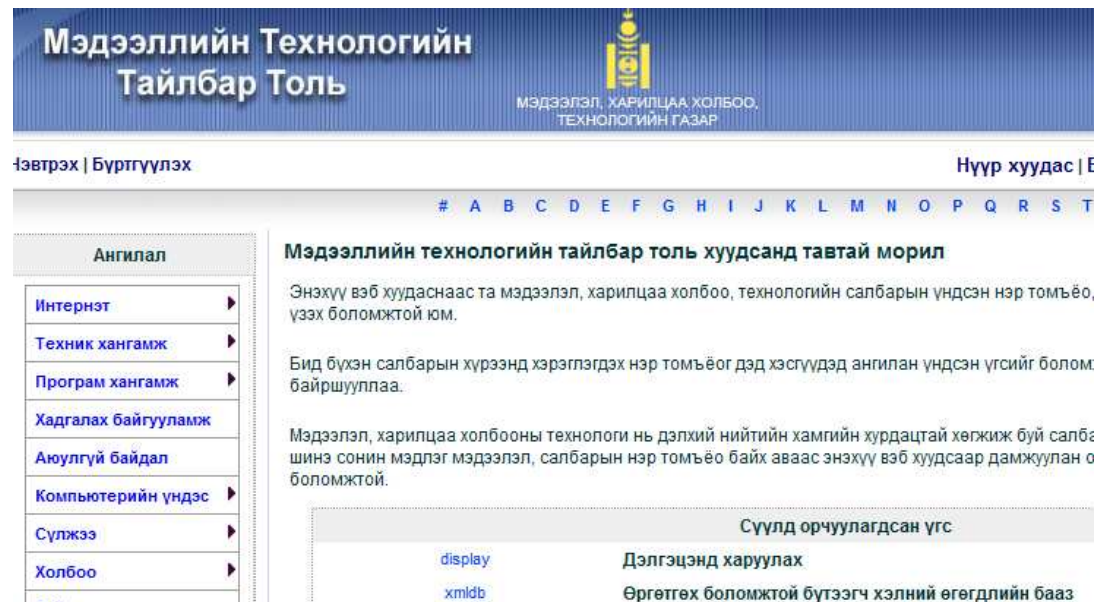


Original string	Translation
Browse and organize your bookmarks	Хаягийн бүртгэл нээх болон зохион байгуулах
Epiphany Web Bookmarks	Эпифани вэбийн хаягийн бүртгэл
Web Bookmarks	Вэбийн хаягийн бүртгэл
Browse the web	Вэб нээх
Epiphany Web Browser	Эпифани вэб браузер

- Cross platform.
- Plural forms support
- Un-translated records are highlighted
- References shows context of the word
- Translation memory for frequent phrases and Spellchecking
- Localized into Mongolian

## Internet glossary

- [www.itdic.edu.mn](http://www.itdic.edu.mn)
- Online discussions
- IT terms submitted from various translation initiatives in Mongolia



Мэдээллийн Технологийн Тайлбар Толь

МЭДЭЭЛЭЛ, ХАРИЛЦАА, ХОЛБОО, ТЕХНОЛОГИЙН ГАЗАР

Хэвтрэх | Бүртгүүлэх Нүүр хуудас | E

# A B C D E F G H I J K L M N O P Q R S T

**Ангилал**

- Интернэт
- Техник хангамж
- Програм хангамж
- Хадгалах байгууламж
- Аюулгүй байдал
- Компьютерийн үндэс
- Сүлжээ
- Холбоо

**Мэдээллийн технологийн тайлбар толь хуудсанд тавтай морил**

Энэхүү вэб хуудаснаас та мэдээлэл, харилцаа холбоо, технологийн салбарын үндсэн нэр томъёо, үзэх боломжтой юм.

Бид бүхэн салбарын хүрээнд хэрэглэгдэх нэр томъёог дэд хэсгүүдэд ангилан үндсэн үгсийг боломжтой байршууллаа.

Мэдээлэл, харилцаа холбооны технологи нь дэлхий нийтийн хамгийн хурдацтай хөгжиж буй салбар шинэ сонин мэдлэг мэдээлэл, салбарын нэр томъёо байх аваас энэхүү вэб хуудсаар дамжуулан олох боломжтой.

**Сүүлд орчуулагдсан үгс**

display	Дэлгэцэнд харуулах
xml:db	Өргөтгөх боломжтой бүтээгч хэлний өгөгдлийн бааз

# Other localized software in Mongolian

- CMS: PHPNUKE, JOOMLA, PHPBB, 4images, Drupal etc.,
- LMS: Moodle, DoceboLMS, WebCT etc.,
- Internet tools: Thunderbird, Firefox etc.,
- Others: Gnome, Openoffice etc.,

# Localizing software



- Translation of terms in given context is very important
  - Notebook? Are you talking about computer ? Or Book of plain paper? Or Software?
- Best to involve many people in translation process to get appropriate translation of terms
  - Online public discussions and glossary
  - Consultations with IT teachers and professionals
- Translators need to have deep understanding of the subject
  - Not all translators understand IT jargons! ( Ethernet - is a family of frame-based computer networking technologies for local area networks)
- Experts of the given language should be consulted
  - There are words in your language that you may not heard before!
- Some words can be adopted without translation
  - Computer (English) = Компьютер (Mongolian)

# Summary

- OSS Localization in Mongolian:
  - Evolution – 100%
  - Epiphany – 100%
  - Pidgin – 100%
  - poEdit – 100%
  - SeaMonkey – 80% (will be complete by June 2009)
- Translated software are available online
- Online translation glossary is maintained
- Terms translation working group is created

# Any questions?

## Thank you

