TRANSLATION OF OPENSOLARIS

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Agenda

- goal of this presentation
- introduction to Sun's Globalization department
- software globalization today
- challenge of OpenSolaris translation
- computer-aided translation
- Pootle
- current translation model issues
- proposed solution
- demo
Goal

• introduce Sun's Globalization department
• describe the current issues of OpenSolaris translation
• demonstrate the proposed solution
Mission of Sun's Globalization

“Together we open Sun to the world.”

Mimi Hills
Director, Globalization
Sun Microsystems, Inc.
Introducing Sun's G11n Department

- ~200 members
- 8 countries
- 12 cities
- $\frac{1}{4}$ based in Prague
Introducing Sun's G11n Department

- we deliver Sun's products to the global market:
  - Solaris OS
  - Java Enterprise System
  - Java Technology
  - and others
Software Globalization Technical Topic

http://developer.sun.com/global
Software Globalization Today

• locale = language + territory + encoding (en_US.UTF-8)
• globalization = internationalization + localization
• internationalization:
  > preparing software application for global market
  > involves separating source code from locale-specific text
  > each programming language uses different format of text file
• localization:
  > customization of software for use in the specified locale
  > translation of software resources
Challenge of OpenSolaris Translation

• decentralized translation model
  > translations of OpenSolaris major components are delivered by their communities (Gnome, Mozilla, OpenOffice)
  > scope: user interface, documentation, WWW
  > translated text files are stored in various workspaces

• 11 core locales are fully translated, the rest is translated only partially
  > core locales: French, Spanish, German, Swedish, Italian, Brazilian Portuguese, Russian, Japanese, Korean, Traditional and Simplified Chinese
  > other locales have partial or no support
Computer-aided Translation (CAT)

- CAT supports and facilitates the translation process
- necessary features of CAT SW for large-scale translation:
  > translation memory
  > alignment
  > project management
  > filtering
- free, open-source tools are not powerful enough
Pootle

• open-source, multi-platform (Python) web application
• currently serves community translation of OpenOffice and OpenSolaris
• simple translation editor with easy access
• limited support for text resource file formats requires a lot of maintenance work, which is not transparent
• translation memory not shared
Pootle Screenshot

http://pootle.sunvirtuallab.com/
Current Translation Model Issues

• text resources are scattered across various workspaces
  > OpenSolaris workspace for O/N and Installer
  > JDS workspace for desktop applications
  > Documentation workspace for docs and on-line help

• separate translation of SW messages, docs and WWW

• cannot build a package for testing after the translation is delivered
Our Objective

• utilize the powerful features of Idiom WorldServer, our internal globalization management system
• provide a simple web interface to the community
• translate both software messages and documentation
• deploy translated text resources every day
Proposed Community Translation Model

OpenSolaris Community -> Community Translation Interface -> WorldServer

Community Translation Interface

http://cti.sunvirtuallab.com/

IPS repository

SUNW packages builder

OpenSolaris Messages Workspace

original text -> translation
Benefits

• all globalization tasks are handled by WorldServer
• shared translation memory
• translation process standardized
• usable not only for OpenSolaris, but also for other open-source communities (NetBeans, Java ES etc.)
• both on-line and off-line access
DEMO
Translation step-by-step

1. String identification
2. Translate
   2. Choose project
   3. Identify file with string
   4. Make translation
3. Build l10n package
4. Install package
   1. Set IPS authority http://www.sunvirtuallab.com:11001
   2. Install/upgrade package
5. Test new translation
Translation work-flow

Community member -> Community Translation Interface

translating

Message repository

Initialized from CTI

Build machine

IPS repository
String identification
Translate 1

Community Translation Interface

Projects » How to translate » Contact us » Register or sign in »

Homepage

» Projects

CAN YOU SPEAK LANGUAGES?
JOIN US AND BECOME A TRANSLATOR

Welcome to Community Translation Interace!

Are you ready to contribute to your open-source community with translations? Then you are the right place. Here you can join your fellow community users and translate OpenSolaris or any other open-source project to the language of your choice.

The Community Translation Interface is currently in beta testing phase and it supports translations for OpenSolaris.org community only. The translation scope has been limited to command-line messages, but the whole OpenSolaris documentation will follow soon.

Please do not hesitate to contact us and send us your comments or suggestions for improvement.

http://www.sunvirtuallab.com/cti
Translate 2 - choose project & translate
Build package

```
  18
  SUNW_OST SGS.po
  43
  SUNW_OST ZONEINFO.po
  28
  SUNW_OST_UCBCMD.po
  40
  SUN4.po
  36
  SUNW_OST_NETRPC.po
  39
  PCI.po
  13
  SUNW_OST OSLIB.po
  14
  SUNW_OST SYSOSPAM.po
  29
  AMD.po
  9
  SUNW_OST OSCMD.po
```

build 110n packages

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Install package 1 - set authority

```
robert@komunita:~# pkg authority
  AUTHORITY
  community.ips (preferred)
  URL
  http://www.sunvirtuallab.com:11001/
```

http://pkg.sunvirtuallab.com
Install package 2 - packagemanager
Install package 3
Test new translation
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