開
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열린
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libre
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ಮುಕ್ತ
livre
libero
ముక్త
开放的
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nyílt
⠕⠏⠑⠝
פתוח
オープン
livre
ανοικτό
offen
otevřený
öppen
открытый
வெளிப்படை

open

USE IMPROVE EVANGELIZE

Translation of OpenSolaris

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Sun Microsystems

Agenda

- Introduction
- OpenSolaris and Locale Data Objects
- DEMO: Creating a new locale
- Translation of OpenSolaris

Software Globalization Today

internationalization (i18n):

- the process of designing software so that it can be adapted (localized) to various languages and regions
- preparing software application for global market

localization (l10n):

- is a process of adapting software for specific languages and regions
- translation of software resources

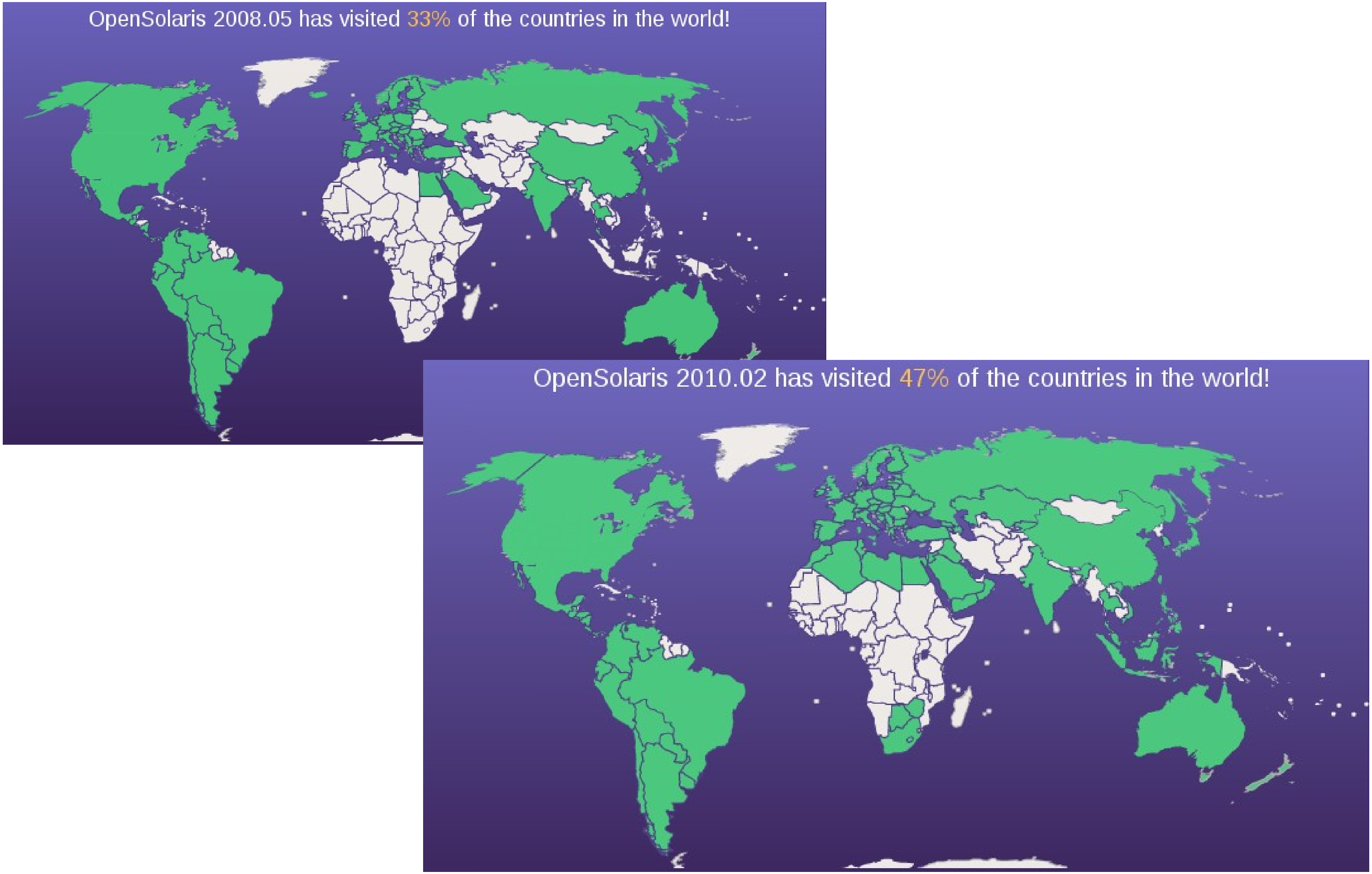
globalization (g11n):

- internationalization + localization

OpenSolaris Locale Support

- What is Locale?
  - library containing data specific to each language and territory (date, time formats, sorting rules, currency…) - e.g. de_DE.UTF-8
  - Utilities, functions change their behavior according to current locale setup
  - *locale; locale -ck LC_ALL; localedef; ...*
- Why is it important?
  - Basic component for internationalizing applications, including application translations, …
  - Developer/User – no need to take care of locale customs, data
- Data Source
  - CLDR project (Unicode consortium): http://cldr.unicode.org
  - Ensures the latest data; ver. 1.7.1 (OSo build 125)

Locale Coverage in OpenSolaris



OpenSolaris 2008.05 has visited 33% of the countries in the world!

OpenSolaris 2010.02 has visited 47% of the countries in the world!

Locale Coverage in OpenSolaris

Approach

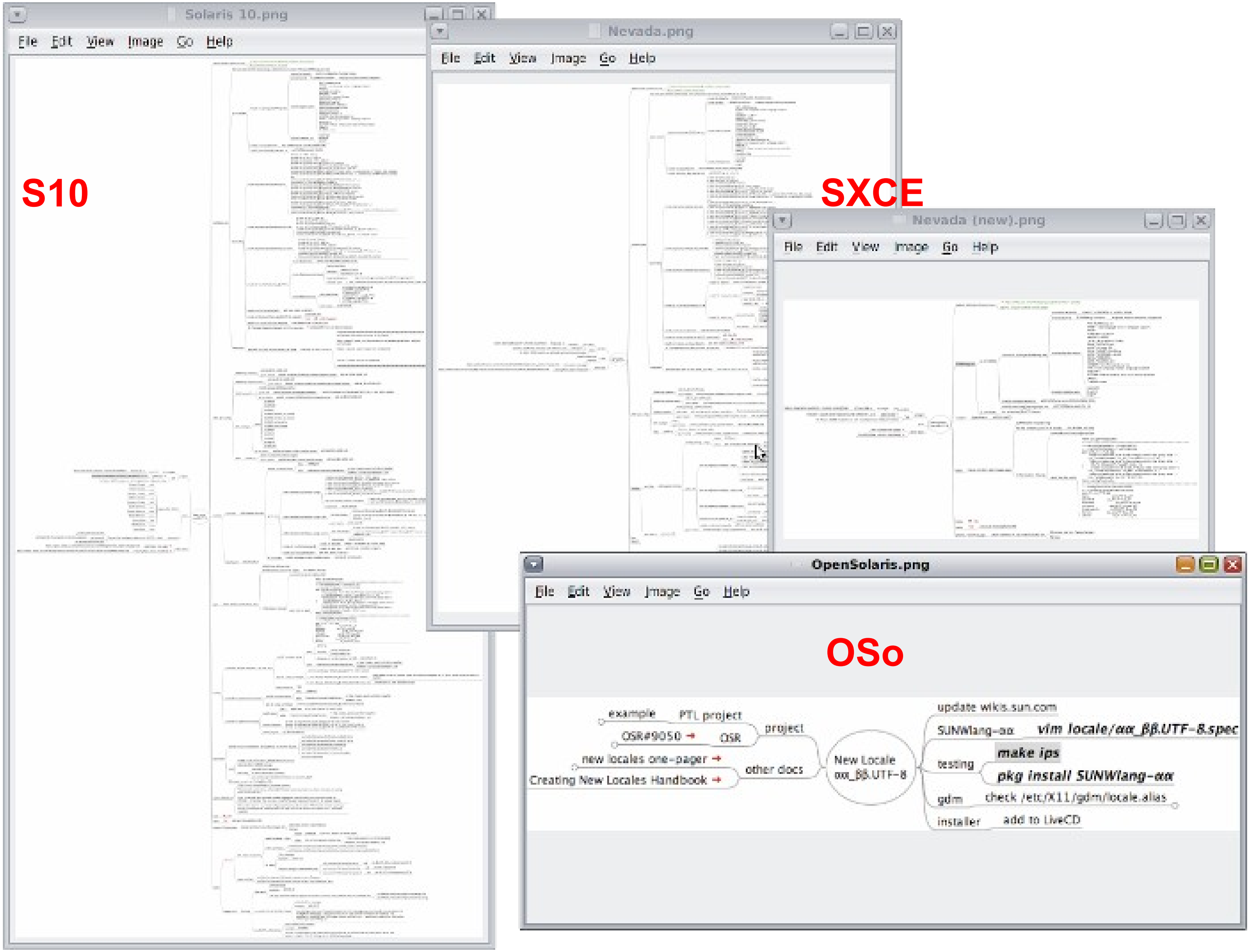
- new locales based on UTF-8 only *SUNWlang-XX{aa}*
- sustain non-UTF-8 based locales (IPS repo) *SUNWlang-XX-extra*
- **enable to create/modify locale and contribute back to OpenSolaris**

Coverage

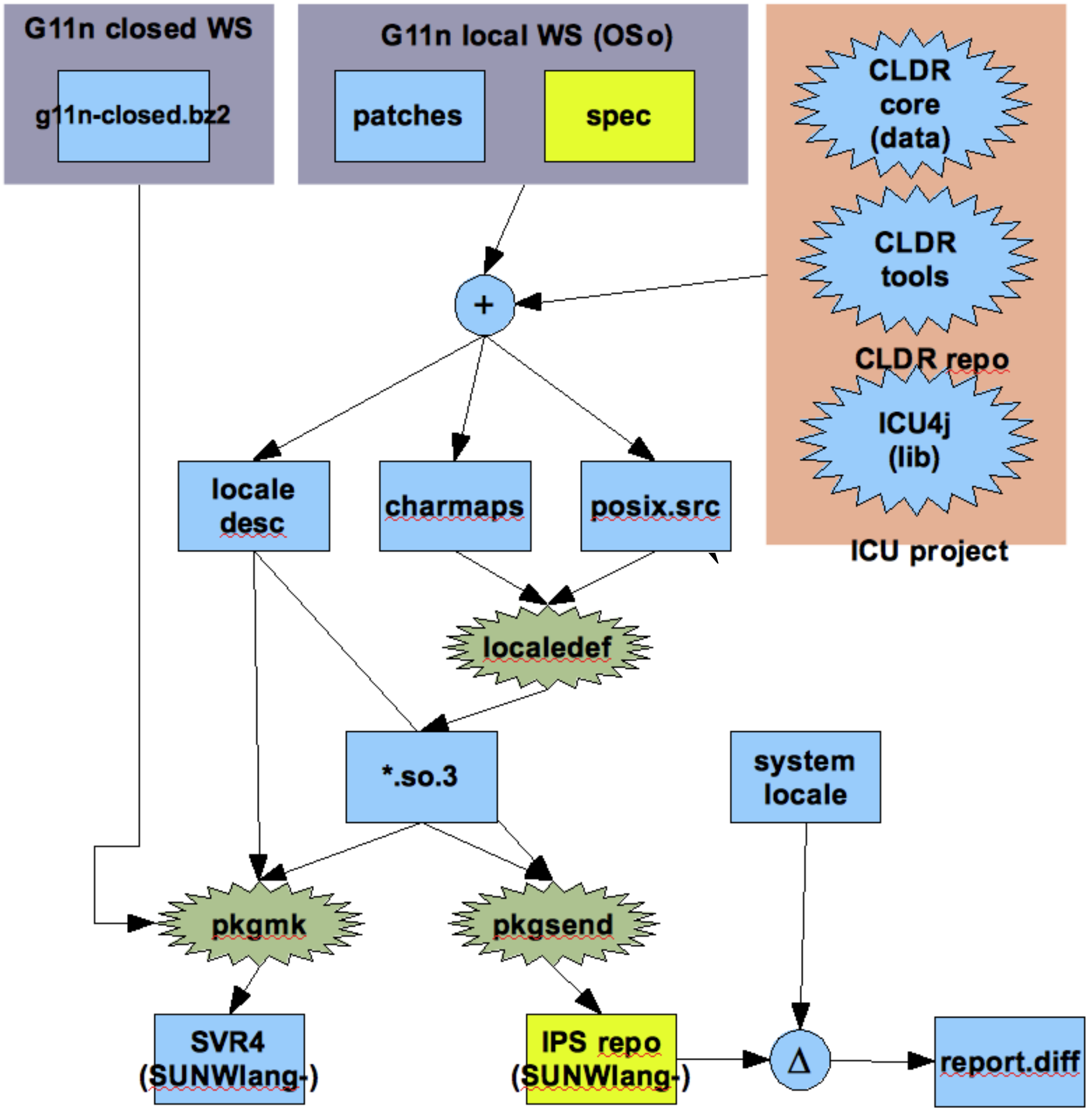
- ~ 50% of all countries
- 80% of population

version	# UTF-8	# non-UTF-8
S9 UR8	37	162
S10 FCS	41	166
OS 2008.05	93 (17)	126
OS 2009.06	101 (17)	126
OS 2010.03 (b125)	~50 (117)?	126

New Locale Creation – is it difficult?


Solaris 10.png
File Edit View Image Go Help
S10
Nevada.png
File Edit View Image Go Help
SXCE
Nevada (new).png
File Edit View Image Go Help
OpenSolaris.png
File Edit View Image Go Help
OSo
example
PTL project
project
OSR#9050 →
OSR
new locales one-pager →
other docs
Creating New Locales Handbook →
New Locale
αα_ββ.UTF-8
update wikis.sun.com
SUNWlang-αα
vim locale/αα_ββ.UTF-8.spec
testing
make ips
pkg install SUNWlang-αα
gdm
check /etc/X11/gdm/locale.alias
installer
add to LiveCD

New Locale Creation Process in OpenSolaris


G11n closed WS
g11n-closed.bz2
G11n local WS (OSo)
patches
spec
CLDR core (data)
CLDR tools
CLDR repo
ICU4j (lib)
ICU project
+
locale desc
charmaps
posix.src
localedef
*.so.3
system locale
pkgmk
pkgsend
SVR4 (SUNWlang-)
IPS repo (SUNWlang-)
Δ
report.diff

Requirements

- sstudio (cc); ant; gmake; hg
- [local IPS server]
- g11n-locale WS

Process

- IN:
  spec – locale spec. files (./locale dir)
- OUT:
  SUNWlang-XX pkg (IPS repo)

DEMO: How to Create New Locale in 5 minutes?

Yale
Sun
www.sun.com
NOTICE

DEMO: Creation of oc_FR.UTF-8 locale

Requirements:

- pfexec pkg install SUNWmercurial SUNWgmake SUNWant sunstudio
- export CC=/opt/sunstudio12.1/bin/cc
-
  ```
  pfexec svccfg -s application/pkg/server setprop
          pkg/inst_root=/export/home/tester/repository
          pkg/port=10000
  ```
  IPS server configuration
- pfexec svcadm [enable|restart] pkg/server - IPS server enable/startup

Clone G11n locale repository:

- hg clone ssh://anon@hg.opensolaris.org/hg/nv-g11n/locale

Create a new spec. file:

- touch ./locale/oc_FR.UTF-8.spec

Build:

- gmake – creates all existing locales (for locale/*)
- gmake PKG_REPO=http://localhost:80 PKGS=SUNWlang-xx **ips**
- **gmake ips**

DEMO: Changing the currency for oc_FR.UTF-8

Modify spec. file:

- cat ./locale/oc_FR.UTF-8.spec

```
cldr_variant   oc_FR@currency=FRF
pkg_name        this_is_my_package
```

Build:

- **gmake** PKG_REPO=http://localhost:80 **ips**
- **gmake doc** - see ./build/report_diff.html

Translation of OpenSolaris

Translation of OpenSolaris

- Our Focus
  - SW components
  - Documentation
  - Help pages
  - Wikis (e.g. opensolaris.org) and other materials (like Newsletters, etc.)
- Expectations ('Ideal' process)
  - Easy to access, easy to start
  - Focus on Translation, not to deal with technical aspects (file formats, integration date, …)
  - Ensure good quality and translation consistency
  - Possibility to test translations before delivery into WS

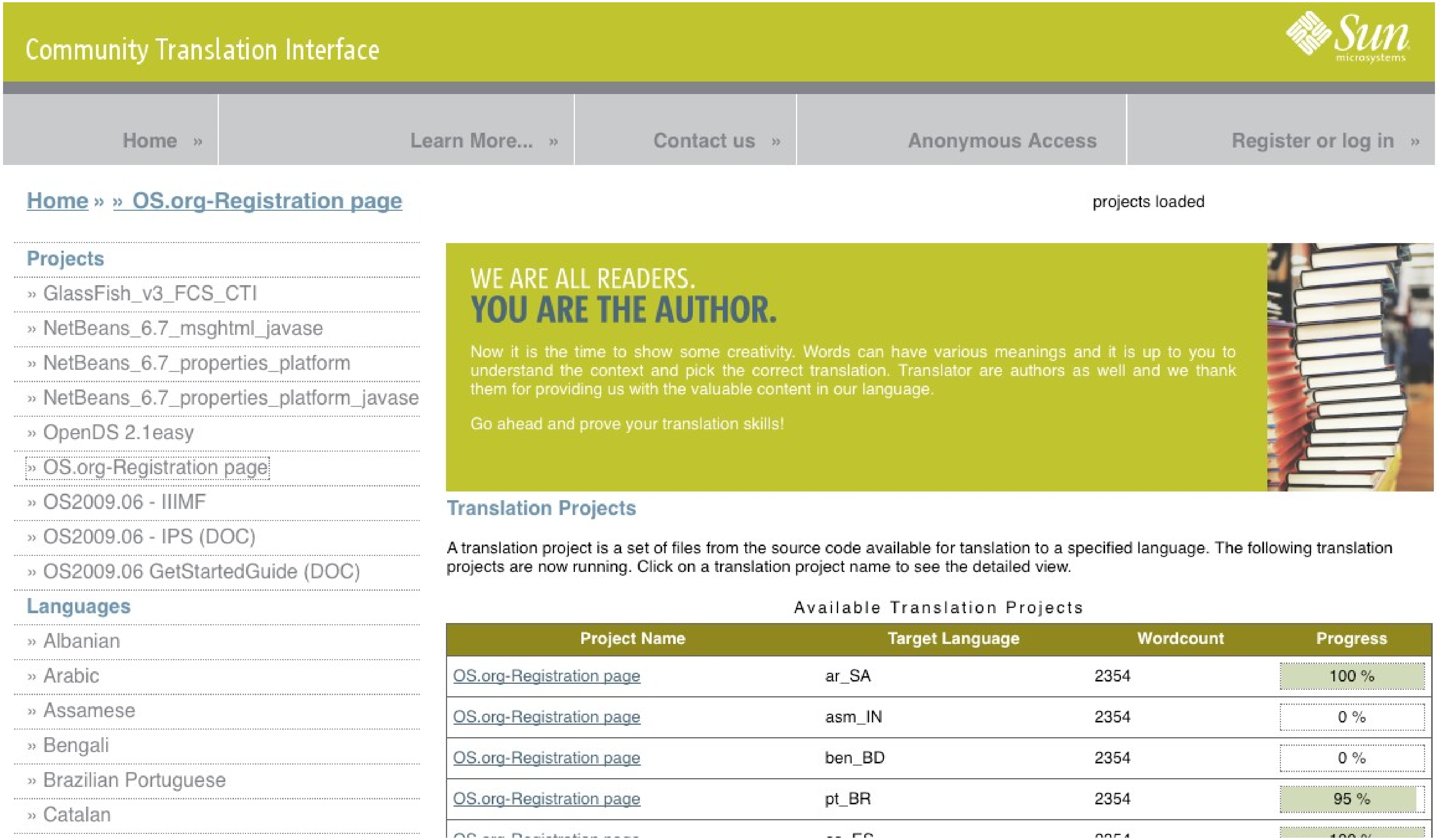
History

- Previous Challenges
  - Many different projects (GNOME, OO.o, Mozilla.org)
  - Distributed WS for OS.o (JDS, G11n, SFW, ...)
  - Various File formats

- Translation with CTI (Community Translation Interface)
  - One central tool for OS.o translations (all parts: SW, Doc, …)
  - Just Web-browser (online editing)
  - Leveraging Rich Functionalities (like TM, TD, …)
  - No on-demand translation
  - http://cti.sunvirtuallab.com

    http(s)://translate.sun.com/cti

CTI - http(s)://translate.sun.com/cti



Home » » OS.org-Registration page

projects loaded

Projects
- » GlassFish_v3_FCS_CTI
- » NetBeans_6.7_msghtml_javase
- » NetBeans_6.7_properties_platform
- » NetBeans_6.7_properties_platform_javase
- » OpenDS 2.1easy
- » OS.org-Registration page
- » OS2009.06 - IIIMF
- » OS2009.06 - IPS (DOC)
- » OS2009.06 GetStartedGuide (DOC)

Languages
- » Albanian
- » Arabic
- » Assamese
- » Bengali
- » Brazilian Portuguese
- » Catalan

WE ARE ALL READERS.
YOU ARE THE AUTHOR.

Now it is the time to show some creativity. Words can have various meanings and it is up to you to understand the context and pick the correct translation. Translator are authors as well and we thank them for providing us with the valuable content in our language.

Go ahead and prove your translation skills!

Translation Projects

A translation project is a set of files from the source code available for tanslation to a specified language. The following translation projects are now running. Click on a translation project name to see the detailed view.

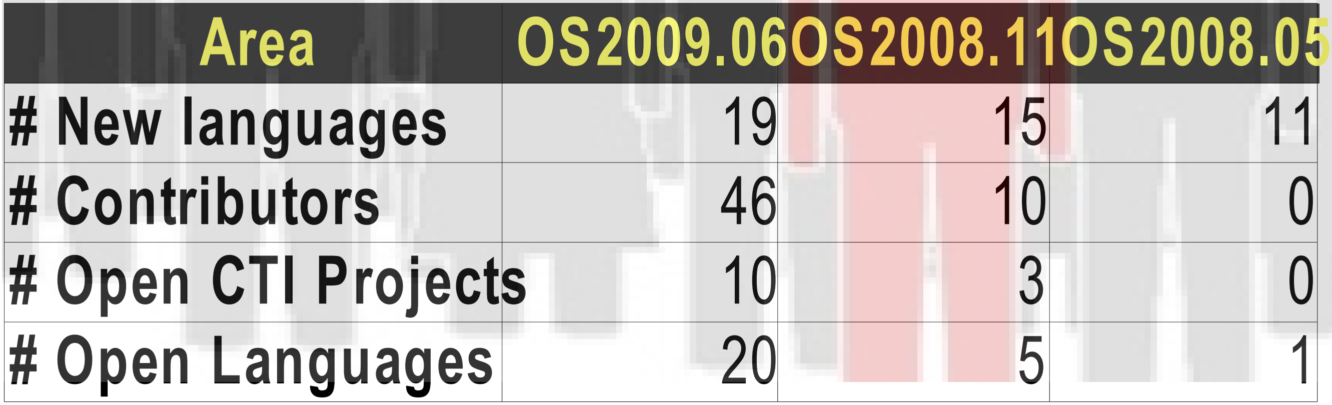
Available Translation Projects

Project Name	Target Language	Wordcount	Progress
OS.org-Registration page	ar_SA	2354	100 %
OS.org-Registration page	asm_IN	2354	0 %
OS.org-Registration page	ben_BD	2354	0 %
OS.org-Registration page	pt_BR	2354	95 %

OS.o L10n Teams

http://www.opensolaris.org/os/community/int_localization/

- 27 l10n groups under l10n/i18n OSo community
- Arabic, Bulgarian, Catalan, Traditional & Simplifies Chinese, Czech, Dutch, French, German, Greek, Hungarian, Indian, Indonesian, Italian, Japanese, Korean, Malayalam, Polish, Brazilian, Russian, Slovak, Spanish, Serbian, Tamil, Turkish, Vietnamese
- 10 'supported' languages by Sun



Area	OS2009.06	OS2008.11	OS2008.05
# New languages	19	15	11
# Contributors	46	10	0
# Open CTI Projects	10	3	0
# Open Languages	20	5	1

What next?

Future

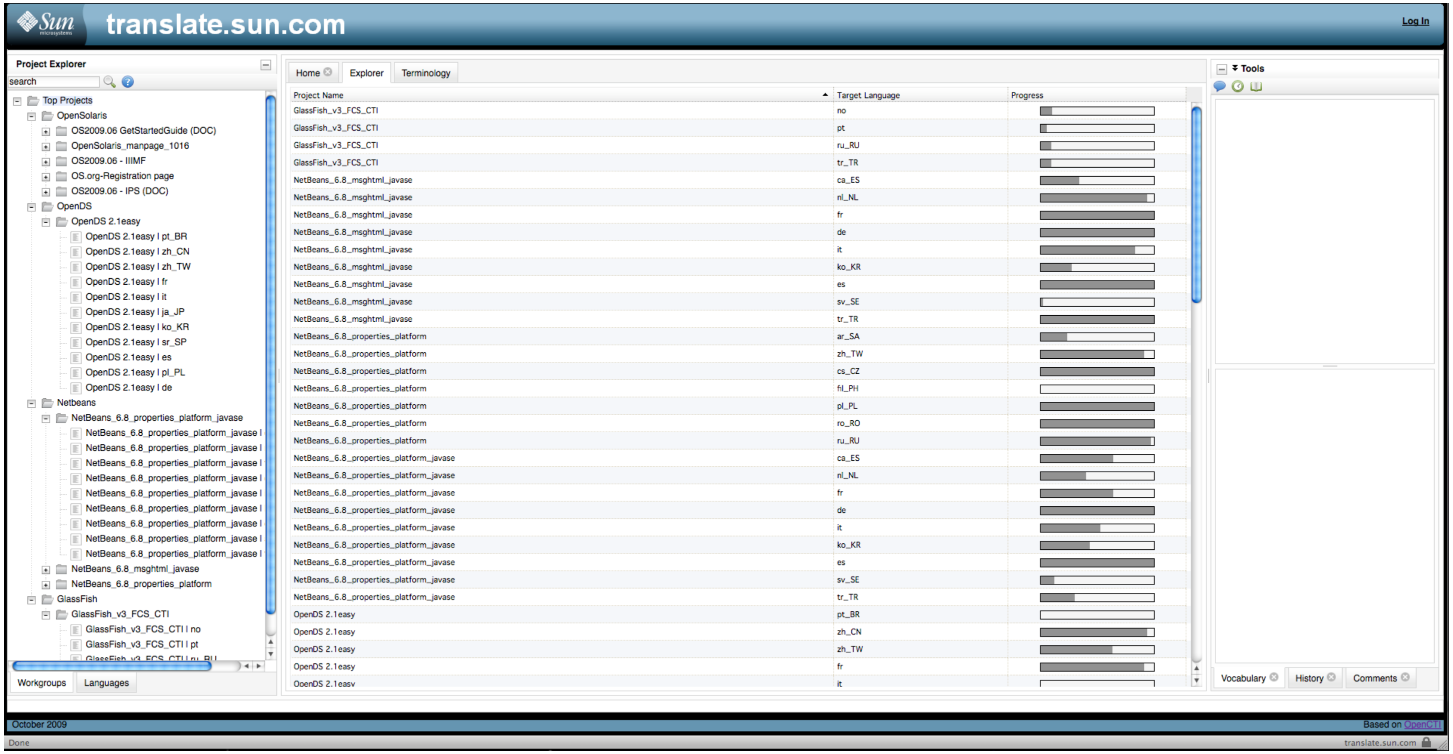
- Improve **Quality** of Translations
  - tools
  - community education
- Improve CTI usability and features
- Try to increase the number of contributors
- Different content than SW messages and OLH
  - Documentation
  - Wiki content
    (e.g. Auth. module for OS.org sites)

Announcement

Sun OpenCTI

http(s)://translate.sun.com/opencti

- starting 11/2009 (**Beta**)
- based on OpenCTI project (http://kenail.com/projects/cti)
- developed by student team (local Technical University)



- Top Projects
  - OpenSolaris
    - OS2009.06 GetStartedGuide (DOC)
    - OpenSolaris_manpage_1016
    - OS2009.06 - IIIMF
    - OS.org-Registration page
    - OS2009.06 - IPS (DOC)
  - OpenDS
    - OpenDS 2.1easy
      - OpenDS 2.1easy l pt_BR
      - OpenDS 2.1easy l zh_CN
      - OpenDS 2.1easy l zh_TW
      - OpenDS 2.1easy l fr
      - OpenDS 2.1easy l it
      - OpenDS 2.1easy l ja_JP
      - OpenDS 2.1easy l ko_KR
      - OpenDS 2.1easy l sr_SP
      - OpenDS 2.1easy l es
      - OpenDS 2.1easy l pl_PL
      - OpenDS 2.1easy l de
  - Netbeans
    - NetBeans_6.8_properties_platform_javase
      - NetBeans_6.8_properties_platform_javase l
      - NetBeans_6.8_properties_platform_javase l
      - NetBeans_6.8_properties_platform_javase l
      - NetBeans_6.8_properties_platform_javase l
      - NetBeans_6.8_properties_platform_javase l
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      - NetBeans_6.8_properties_platform_javase l
      - NetBeans_6.8_properties_platform_javase l
      - NetBeans_6.8_properties_platform_javase l
    - NetBeans_6.8_msghtml_javase
    - NetBeans_6.8_properties_platform
  - GlassFish
    - GlassFish_v3_FCS_CTI
      - GlassFish_v3_FCS_CTI l no
      - GlassFish_v3_FCS_CTI l pt
      - GlassFish_v3_FCS_CTI l ru_RU

Project Name	Target Language	Progress
GlassFish_v3_FCS_CTI	no	
GlassFish_v3_FCS_CTI	pt	
GlassFish_v3_FCS_CTI	ru_RU	
GlassFish_v3_FCS_CTI	tr_TR	
NetBeans_6.8_msghtml_javase	ca_ES	
NetBeans_6.8_msghtml_javase	nl_NL	
NetBeans_6.8_msghtml_javase	fr	
NetBeans_6.8_msghtml_javase	de	
NetBeans_6.8_msghtml_javase	it	
NetBeans_6.8_msghtml_javase	ko_KR	
NetBeans_6.8_msghtml_javase	es	
NetBeans_6.8_msghtml_javase	sv_SE	
NetBeans_6.8_msghtml_javase	tr_TR	
NetBeans_6.8_properties_platform	ar_SA	
NetBeans_6.8_properties_platform	zh_TW	
NetBeans_6.8_properties_platform	cs_CZ	
NetBeans_6.8_properties_platform	fil_PH	
NetBeans_6.8_properties_platform	pl_PL	
NetBeans_6.8_properties_platform	ro_RO	
NetBeans_6.8_properties_platform	ru_RU	
NetBeans_6.8_properties_platform_javase	ca_ES	
NetBeans_6.8_properties_platform_javase	nl_NL	
NetBeans_6.8_properties_platform_javase	fr	
NetBeans_6.8_properties_platform_javase	de	
NetBeans_6.8_properties_platform_javase	it	
NetBeans_6.8_properties_platform_javase	ko_KR	
NetBeans_6.8_properties_platform_javase	es	
NetBeans_6.8_properties_platform_javase	sv_SE	
NetBeans_6.8_properties_platform_javase	tr_TR	
OpenDS 2.1easy	pt_BR	
OpenDS 2.1easy	zh_CN	
OpenDS 2.1easy	zh_TW	
OpenDS 2.1easy	fr	
OpenDS 2.1easy	it	

Sun OpenCTI

CTI -vs- Sun OpenCTI

- Operating on the same data (user accounts, translation projects)

- New Sun OpenCTI provides more & enhanced features
  - Fuzzy matches
  - Terminology & Glossary available
  - New Glossary terms /Changes proposals
  - Project Infrastructure (Bug Tracking, Discussion forums, ...)
  - Possibility to contribute back to editor
  - ...

Resources

- Tools:
  - http(s)://translate.sun.com/cti
  - http(s)://translate.sun.com/opencti
- Blogs:
  - http://blogs.sun.com/sunwg11nprg
  - http://blogs.sun.com/cti
- Community:
  - http://www.opensolaris.org/os/community/int_localization
- Sun Software Globalization Home:
  - http://developers.sun.com/global

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Thank you!

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http://blogs.sun.com/cti
http://blogs.sun.com/sunwg11nprg

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