

Localization at Mozilla

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Mozilla

- Non-profit organization dedicated to keeping the power of the Web in people's hands.
- Global community of users, contributors and developers working to innovate on your behalf
- Dedicated to free and open source software, open standards, user privacy, transparency

Firefox desktop & mobile



Thunderbird





Firefox OS

And much more!

- Persona
- Marketplace
- Webmaker
- Mozilla Popcorn
- Bugzilla
- ...

Community Snapshot

- 189 locales listed on wiki
- 109 localisations exist in version control
- 94 official Firefox localisations
- 100% volunteer effort
- Median number of committers per locale: 1

Community Snapshot



Why I localize

<http://youtu.be/1b2yKhA7eDM>

Why I localize

“I wanted to do something which had an impact on others. This is difficult to do when you are a student and all your work is something which is graded and then forgotten. Contributing to an open source project was my way of having an impact.”

“Nowadays is easier to find software available in you own language, the real challenge is to deliver a professional quality product and prove that an Open Source community driven by volunteers is capable of doing it.”

“I was intrigued by the web-style XUL-based UI design and found that I could just edit a couple of text files to change the strings to German, which was fantastic compared to any other software I knew.”

“Now I also do it to give back to Mozilla.”

“Minority languages need a presence on the Internet to enhance their raison d’etre and to provide a source of support and pride for their speakers.”

The Regional L10n Team

- Groups of volunteers sharing common language and common goals.
- Responsible for:
 - Division of labor within the team
 - Tool selection
 - Resource selection/creation
 - Guerilla marketing
 - Community building
 - Hosting Mozilla-sponsored events
 - Delivery commitments
- Mozilla l10n teams are different from your average crowdsourcing community.

L10n Drivers

Provide support for adding and maintaining localizations of Mozilla projects by providing volunteer L10n teams with:

- **Tools**
- **Guidance**
- **Infrastructure**
- **Advocacy**
- **Documentation**
- **Recognition**

L10n Drivers serve as both the gatekeeper and communication bridge.

Rapid Release Process

- New version every six weeks
- Four distinct branches at all times
- Mozilla central: "nightly" builds, unstable
- Mozilla aurora: more stable, string frozen
- Mozilla beta: ready for release
- Official release: stable, most widely used
- "Merge day" every six weeks

Rapid Release for localizers

- Smaller workload every six weeks (100-300 new strings)
- Generally just one source repo to maintain
- Most locales work on Mozilla Aurora
- A few high-power teams work on Central

The Dashboard

- Comprehensive info about each locale
- Linked from <https://l10n.mozilla.org/teams/>
- Each channel of each product
- Signoff for release
- Lists pending issues in bugzilla
- Shows status of web site translations

Scope

- Firefox: about 37000 words in 7100 strings
- TB: additional 24000 words in 4700 strings
- 385 .dtd files
- 245 .properties files
- Small assortment of others
- Bookmarks, search engine plugins, etc.
- Each new releases will introduce between 100 - 300 new strings.

Details: .dtd files

```
<!ENTITY newtab.pageTitle "New Tab">
<!ENTITY newtab.undo.removedLabel "Thumbnail removed.">
<!ENTITY newtab.undo.undoButton "Undo.">
<!ENTITY newtab.undo.restoreButton "Restore All.">
<!ENTITY newtab.undo.closeTooltip "Hide">

<!ENTITY newtab.pageTitle "Cluaisín Nua">
<!ENTITY newtab.undo.removedLabel "Baineadh an
mhionsamhail.">
<!ENTITY newtab.undo.undoButton "Cealaigh.">
<!ENTITY newtab.undo.restoreButton "Athchóirigh Uile.">
<!ENTITY newtab.undo.closeTooltip "Folaigh">
```

Details: .properties files

newtab.pin=Pin this site at its current position
newtab.unpin=Unpin this site
newtab.block=Remove this site
newtab.show>Show the new tab page
newtab.hide=Hide the new tab page

newtab.pin=Feistigh an suíomh seo san áit ina bhfuil sé
newtab.unpin=Dífheistigh an suíomh seo
newtab.block=Bain an suíomh seo
newtab.show=Taispeáin an leathanach cluaisín nua
newtab.hide=Folaigh an leathanach cluaisín nua

Access Keys

```
<!ENTITY portrait.label "Portráid">
```

```
<!ENTITY portrait.accesskey "P">
```

```
<!ENTITY landscape.label "Tírdhreach">
```

```
<!ENTITY landscape.accesskey "T">
```

Entities, Window Sizing

```
<!ENTITY safeModeDialog.title "Mód Sábháilteachta &brandShortName;">
```

```
<!ENTITY window.maxWidth "400">
```

```
<!ENTITY startSafeMode.label "Tosaigh sa Mhód Sábháilteachta">
```

```
<!ENTITY resetProfile.label "Athshocraigh &brandShortName;">
```

Plural Handling

```
addonsInstalledNeedsRestart=Beidh #1 suiteáilte tar éis  
duit #3 a atosú.;Beidh #2 bhreiseán suiteáilte tar éis  
duit #3 a atosú;Beidh #2 bhreiseán suiteáilte tar éis duit  
#3 a atosú;Beidh #2 mbreiseán suiteáilte tar éis duit #3 a  
atosú;Beidh #2 breiseán suiteáilte tar éis duit #3 a atosú
```

```
popupWarning.message=Níor lig #1 don suíomh seo  
preabfhuinneog a oscailt.;Níor lig #1 don suíomh seo #2  
phreabfhuinneog a oscailt.;Níor lig #1 don suíomh seo #2  
phreabfhuinneog a oscailt.;Níor lig #1 don suíomh seo #2  
bpreabfhuinneog a oscailt.;Níor lig #1 don suíomh seo #2  
preabfhuinneog a oscailt.
```

Tools Philosophy

Aim: Allow localizers the liberty to use the L10n tools and resources of their choice when participating in Mozilla L10n, but promoting the use of tools that fit the following criteria:

L10n tools must allow (for):

cooperation (sharing and distributing a workload among various independent contributors),

collaboration (multiple contributors engaging in solving a problem),

attribution (giving credit where it's due),

interoperability (contributing to a L10n effort with one tool without blocking the ability to contribute through use of another tool),

discoverability (finding contributions to a L10n effort),

federation (receiving contributions from independent tool installations).

Tools

- In practice, these file format details are hidden from localizers
- Mozilla Translator (offline editor)
- Narro (web-based)
- Pootle (web-based; demo later)
- translate-toolkit (roundtrip to PO format)

Translation Memory

- Diversity of tools \Rightarrow diversity of TMs
- Built into web-based tools
- PO compendia (e.g. Irish)
- Or nothing at all :(

transvision.mozfr.org

Source Locale: en-US Default

Target Locale: ga-IE Default

Repository: release Default

Search in: Strings

Advanced Search options: Case Sensitive Wildcard (*) Whole Word Perfect Match

plugin

plugin in en-US:

Entity	en-US	ga-IE
browser > chrome > browser > browser.properties activateAllPluginsMessage.label	Activate All plugins <source>	Gníomhachtaigh Gach Forlíontán <source> <report a bug>
browser > chrome > browser > devtools > gclicommands.properties addonListPluginHeading	The following plugins are currently installed: <source>	Tá na forlíontáin seo a leanas suiteáilte: <source> <report a bug>
browser > chrome > browser > browser.properties vulnerablePluginsMessage	Some plugins have been deactivated for your safety. <source>	Díghníomhachtaíodh forlíontáin chun do shlándáil a chosaint. <source> <report a bug>
browser > chrome > browser > browser.dtd playPluginCmd.label	Activate this plugin <source>	Cuir an forlíontán seo i ngníomh <source> <report a bug>
browser > chrome > browser > browser.properties PluginVulnerableNoUpdate	This plugin has security vulnerabilities. <source>	Tá fabhtanna slándála san fhorlíontán seo. <source> <report a bug>
browser > chrome > browser > browser.dtd hidePluginCmd.label	Hide this plugin <source>	Folaigh an forlíontán seo <source> <report a bug>
browser > chrome > browser > browser.properties outdatedpluginsMessage.updateButton.label	Update Plugins ... <source>	Nuashonraigh Forlíontáin... <source> <report a bug>
browser > chrome > browser > browser.properties	The %S plugin has crashed.	Thuaríteáil forlíontán %S.

Version Control

- Mozilla uses mercurial (hg) for most products
- Test drive TortoiseHg client for Windows
- Read-only clone (replace "fr" with your lang)

`http://hg.mozilla.org/releases/l10n/mozilla-central/fr/`

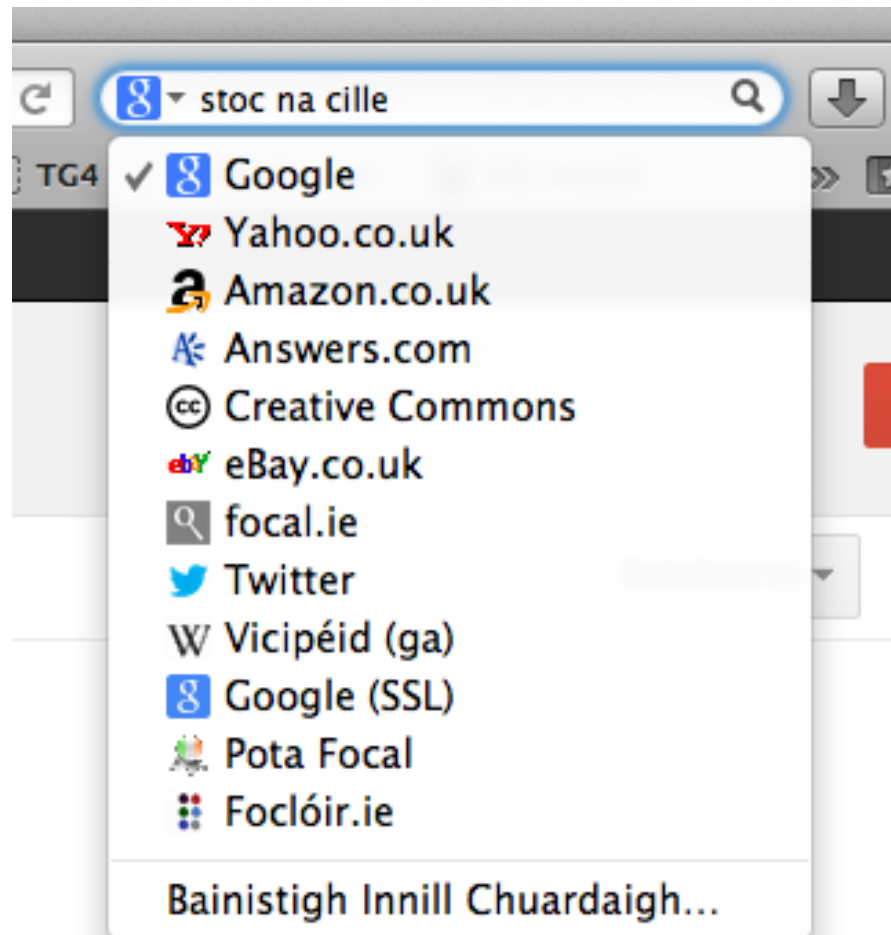
`http://hg.mozilla.org/releases/l10n/mozilla-aurora/fr/`

`http://hg.mozilla.org/releases/l10n/mozilla-beta/fr/`

Productization

- I10n is more than just translation
- Goal: provide users with useful and relevant content in their language or for their region
- Goal: demonstrate product features

Productization: Search Plugins



Productization: Protocol Handlers

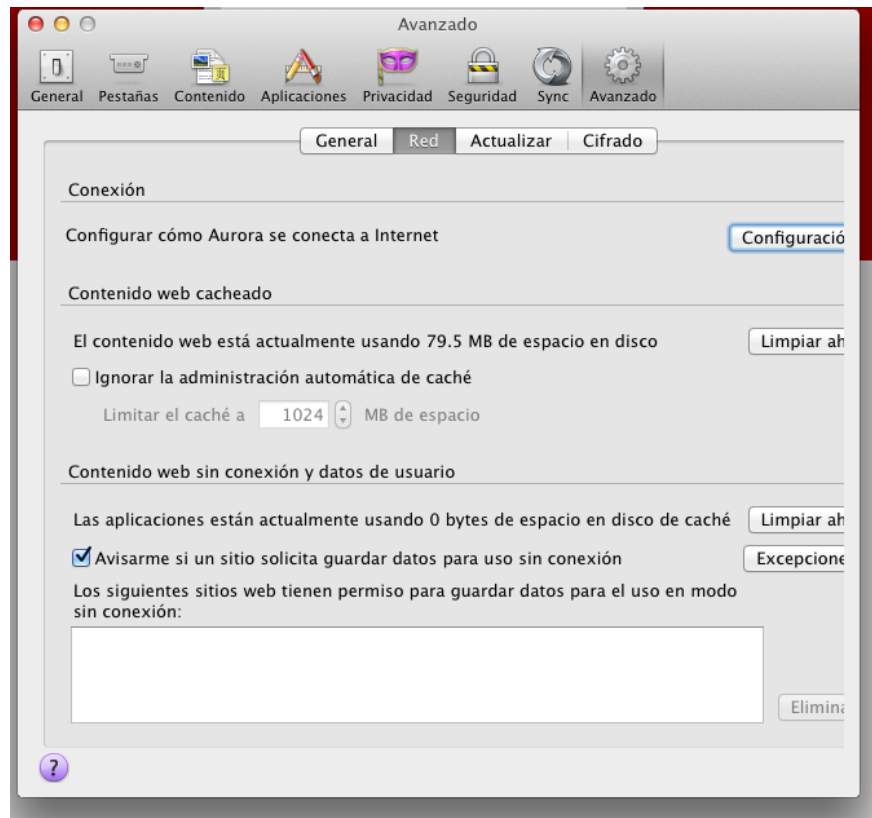


L10n Quality Assurance

- Community testers
- Rapid release channels: "powers of 10"
- Dedicated testers, proofreaders on l10n teams
- Language-specific resources (e.g. for Irish)

Mozmill: Automated UI Tests

- e.g. cut-off text in windows



Transvision: Access Key Conflicts

8 potential accesskey errors

Label entity	Label value	Access key	Access key entity
<code>calendar > chrome > calendar > calendar-event-dialog.dtd</code> <code>task.from.label</code>	Tosach:	B	<code>calendar > chrome > calendar > calendar-event-dialog.dtd</code> <code>task.from.accesskey</code>
<code>mail > chrome > messenger > chat.properties</code> <code>buddy.authRequest.allow.label</code>	Ceadaiigh	W	<code>mail > chrome > messenger > chat.properties</code> <code>buddy.authRequest.allow.accesskey</code>
<code>mail > chrome > messenger > addressbook > abCardOverlay.dtd</code> <code>AIM.label</code>	AIM:	r	<code>mail > chrome > messenger > addressbook > abCardOverlay.dtd</code> <code>AIM.accesskey</code>
<code>mail > chrome > messenger > messenger.dtd</code> <code>sortByFromCmd.label</code>	Ó	F	<code>mail > chrome > messenger > messenger.dtd</code> <code>sortByFromCmd.accesskey</code>
<code>mail > chrome > messenger > messengercompose > messengercompose.dtd</code> <code>fromAddr.label</code>	Ó:	r	<code>mail > chrome > messenger > messengercompose > messengercompose.dtd</code> <code>fromAddr.accesskey</code>
<code>mail > chrome > messenger > messengercompose > composeMsgs.properties</code> <code>learnMore.label</code>	Tuilleadh Eolais...	m	<code>mail > chrome > messenger > messengercompose > composeMsgs.properties</code> <code>learnMore.accesskey</code>
<code>mail > chrome > messenger > messengercompose > composeMsgs.properties</code> <code>bigFileShare.label</code>	Nasc	l	<code>mail > chrome > messenger > messengercompose > composeMsgs.properties</code> <code>bigFileShare.accesskey</code>
<code>toolkit > chrome > global > printdialog.dtd</code> <code>frompageInput.label</code>	ó	r	<code>toolkit > chrome > global > printdialog.dtd</code> <code>frompageInput.accesskey</code>

How you can get involved

- Contact the I10n team for your language
- Start a new team!
- Download and test Mozilla Aurora
- Translate products
- Translate web sites
- Provide localized help pages

addons.mozilla.org

Kevin Scannell | Uirlís | Feidhmchláir Eile | mozilla

BREISEÁIN

EISÍNTEACHTAÍ | TÉAMAÍ | BAILIÚCHÁIN | TUILLEADH...

Lorg breiseáin →

TAISCÉAL

- Mór-Le-Rá >
- Éileamh Is Mó >
- Rátálacha Is airde >

CATAGÓIRÍ

- Bainisteoireacht Íosluchtaithe >
- Breiseáin Shóisialta >
- Cluaisíní >
- Cluichí agus Siamsalocht >
- Dealramh >
- Foláirimh agus Nuashonruithe >
- Forbairt Gréasáin >
- Fothaí, Nuacht, agus Blaga... >
- Grianghrafanna, Ceol agus ... >
- Leabharharcanna >
- Príobháideacht agus Síndáil >
- Siopadóireacht >

Lig Do Scíth

Add-ons that help you on your travels!

- FoxClocks**
FoxClocks let you keep an eye on the time around the world.
- Simple Currency C...**
Auto conversion of US Dollar, Euro, British Pound and Russian Rubles prices to your local currency on any web ...
- Forecastfox Weather**
Get international weather forecasts from AccuWeather.com and display them in any toolbar or statu...

Eisínteachtaí Mór-Le-Rá Uile »

- FootieFox**
Fothaí, Nuacht, agus Blagadóireacht
★★★★★ (78)
- Simple Timer**
Foláirimh agus Nuashonruithe
★★★★★ (71)
- Update Scanner**
Leabharharcanna
★★★★★ (122)
- DownThemAll!**
Bainisteoireacht Íosluchtaithe
★★★★★ (1,288)
- YouTube Anywhere Player**
Cluichí agus Siamsalocht
- FoxyProxy Standard**
Bainisteoireacht Íosluchtaithe

ÉILEAMH IS MÓ Uile »

- Adblock Plus**
15,814,917 úsáideoir
- Video DownloadHelper**
6,882,669 úsáideoir
- Firebug**
3,182,714 úsáideoir
- Greasmonkey**
2,262,904 úsáideoir
- Easy YouTube Video Down...**
2,242,334 úsáideoir

L20n: Next Generation Localization

- New I10n architecture developed at Mozilla
- Libraries for developers
- Flexible and powerful file format for localizers
- Walkthrough: <http://l20n.org/>

Pontoon

- <https://pontoon-dev.mozillalabs.com/>
- Web-based WYSIWYG editor.
- Aimed at web I10n.
- Django hooks enable use outside of Mozilla.

Firefox OS Localization

- Presents new opportunities and challenges.
- Spreads linguistic presence of more languages into the mobile realm.
- Firefox OS aimed at developing markets.
- Challenges