

How to internationalize your code

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Hello.



Hallo.

привет.

أهلا وسهلا

I18n

- Dos and don'ts

Internationalisation

i18n

- ✦ Read The Friendly Manual
- ✦ MediaWiki internationalization guide
- ✦ <https://www.mediawiki.org/wiki/i18n>
- ✦ Updated frequently!

Internationalised

MyExtension.i18n.php:

```
$messages['en'] = array(  
    'sum' => 'Enter the sum:',
```

```
$messages['nl'] = array(  
    'sum' => 'Voer het totaal in:',
```

MyExtension.php:

```
echo wfMessage( 'sum' );
```


Localisation

L10n

- ✦ The translations in i18n files can be edited by hand, but in practice it is done through <https://translatewiki.net>

Translated but not localised

MyExtension.i18n.php:

```
$messages['en'] = array(
    'date' => 'Date: $1',
```

```
$messages['ja'] = array(
    'date' => '日付 : $1',
```

MyExtension.php:

```
$date = "$month/$day/$year";
echo wfMessage( 'date', $date );
// en: Date: 11/10/2012
// ja: 日付 : 11/10/2012
```

Localised

MyExtension.i18n.php:

```
$messages['en'] = array(  
    'date' => 'Date: $1',
```

```
$messages['ja'] = array(  
    'date' => '日付 : $1',
```

MyExtension.php:

```
$date = dateFormat( $day, $month, $year );  
echo wfMessage( 'date', $date );  
// en: Date: 11/10/2012  
// ja: 日付 : 2012-11-10
```

i18n

- Do i18n now.

18n

- It doesn't just help speakers of other languages – it helps uncover bugs early

L10n

- Give the translators time to translate and to report bugs
- Translators always find bugs, and you want to hear them

i18n

- Give yourself time to fix issues

i18n

- Dogfood!
- Switch your MediaWiki installation to your language

i18n

- Switch your browser and OS to a different language, too
- You will be surprised.
If they don't work well, report bugs :)

i18n

- Don't be too smart with fixing existing non-English messages
- Just fix English and qqq

i18n

- Never say “It's only for the English Wikipedia”

Bad

```
'preference-enable' =>  
'Enable only in the  
[[Project:Main namespace|main  
namespace]])',
```

Good

```
'preference-enable' =>  
'Enable(only in the  
[[{{MediaWiki:Mainnamespacepa  
gelinek}}|main namespace]]',  
  'mainnamespacepagelinek' =>  
'Project:Main namespace',
```

NO LEGO

i18n

- Do not concatenate messages to create sentences!

Bad

MyExtension.i18n.php:

```
'deleted' => 'The page was deleted by',  
'on' => 'on',
```

MyExtension.php:

```
$pageDeleted = wfMessage( 'deleted' );  
$on = wfMessage( 'on' );  
$logMsg = "$pageDeleted $user $on  
$date.";
```


Good

MyExtension.i18n.php:

```
'deleted' => 'The page was deleted by $1  
on $2.',
```

MyExtension.php:

```
$logMsg = wfMessage( 'deleted',  
$user, $date );
```

i18n

- Don't assume the size of anything, like table headers, input boxes, etc.

i18n

- Avoid "right"/"left". Write relatively to other elements.

L10n

- ✦ Avoid jargon, like “comps”, “nav”, “CTA”, etc.
- ✦ If you really need it, you must document it.

L10n

- Message documentation

Message documentation

- In MediaWiki, qqq is a pseudo-language code for storing documentation.

Message documentation

- Always write qqq documentation.

L10n

- ✦ Having a glossary is awesome.
 - ✦ Good examples: Wikibase (Wikidata), FlaggedRevisions

L10n

- ✦ It's safe to assume that MediaWiki documentation will mostly be read at translatewiki.net, so...

Message documentation

- Screenshots are great! Put them on Wikimedia Commons

Message documentation

- Use the template `{{msg-wikia|MESSAGE}}` to link to other messages

Message documentation

- What is this message?
- Table header? Tooltip? Form label? Button? Something else?

Message documentation

- ✦ Part of speech!
- ✦ “Open”?
 - ✦ The file is open
 - ✦ Open the file
 - ✦ You cannot open this file

Message documentation

- ✦ Adjectives!

- ✦ Say what they describe: "green" can be masculine or feminine

Message documentation

- ✦ Verbs!

- ✦ Say whether it's imperative (“do it!”), infinitive (“to do it”) or something else

User feedback

- ✦ `[[Translating:Wikia]]`
- ✦ `[[User:Timothy_Quievryn]]`
 - ✦ all on `translatewiki.net`

Code review

- ✦ When committing code that has any i18n/L10n changes, invite experts to review
- ✦ Who are they at Wikia?

Messaging framework

Internationalisation

- ✦ Make as flexible a string localisation framework without making it really hard on translators
- ✦ Works in PHP and JS
- ✦ Plural, gender, grammar

- ✦ Date/time, numbers, URLs, ...

String example:

```
{{GENDER:$1|He|She|They}} bought {{PLURAL:$2|0=no boat|one boat|$2 boats|12=a dozen boats}} and got {{PLURAL:$3|0=no|only one dollar|$3 USD}} discount.
```

Major changes

- ✦ Message class (around a while, but not popular at Wikia yet, I've heard)
 - ✦ wfMessage()
 - ✦ ->params(), numParams(), rawParams()
 - ✦ ->inLanguage(), inContentLanguage()
 - ✦ ->plain(), text(), escaped(), parse(), parseAsBlock()

Major changes

- ✦ JavaScript i18n framework
- ✦ i18n friendly logging (BC can be a \$%*@#!!!)
- ✦ Get rid of globals using [I]ContextSource object
 - ✦ \$this->getOutput() / getRequest(), getLanguage()
 - ✦ \$this->msg() instead of wfMessage()

Bugs, features, patches, talk

- ✦ <http://bugzilla.wikimedia.org>
- ✦ <https://gerrit.wikimedia.org>
- ✦ `irc: #mediawiki-i18n` at `freenode.net`

Q&A

- ✦ siebrand@wikimedia.org
- ✦ [irc: #mediawiki-i18n at freenode.net](irc://freenode.net/#mediawiki-i18n)