Hallo.

Я очень рад быть здесь.

کیا آپ نے ہر صفحے کے اوپر دیا گیا —

"ترمیم" — کا بٹن دیکھا؟

How to internationalize your code
for Wikimedia and beyond

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The MediaWiki internationalization guide:

https://www.mediawiki.org/wiki/L10n

(frequently updated!)

Terminology

i18n

internationalization

Not internationalized:

```
echo 'Please enter the sum:';
```

Internationalized:

MyExtension.i18n.php:

```
$messages['en'] = array(
    'sum' => 'Enter the sum:',
);
$messages['ru'] = array(
    'sum' => 'Введите сумму:',
);
```

MyExtension.php:

```
echo wfMessage( 'sum' );

// (the software knows the user's language)
```

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

L10n

localization

Translated, but not localized:

MyExtension.i18n.php:

```
$messages['en'] = array(
    'date' => 'Purchase date: $1',
);
$messages['ja'] = array(
    'date' => '日付を購入：$1',
);
```

MyExtension.php:

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

Localized:

MyExtension.i18n.php:
```
$messages['en'] = array(
    'date' => 'Purchase date: $1',
);
$messages['ja'] = array(
    'date' => '日付を購入：$1',
);
```

MyExtension.php:
```
$date = dateFormat( $day, $month, $year );
echo wfMessage( 'date', $date );
// en: Purchase date: 11/10/2012
// ja: 日付を購入：2012-11-10
```

m17n

multilingualization

Not multilingualized:

article.css

```
body {
    font-family: Arial, Helvetica;
}
```

article.html

```
<p>Bangalore (ಬೆಂಗಳೂರು) is a city in
Karnataka.</p>
```

Possible result:

Bangalore (□□□□□□□□□) is a city in Karnataka.

Multilingualized (partly):

article.css:

```
:lang(en) {
    font-family: Arial, Helvetica;
}
:lang(kn) {
    font-family: Lohit Kannada;
}
```

article.html:

```
<p lang="en" dir="ltr">Bangalore (<span
lang="kn" dir="ltr">ಬೆಂಗಳೂರು</span>) is a
city in Karnataka.</p>
```

Result:

Bangalore (ಬೆಂಗಳೂರು) is a city in Karnataka.

Motivation

Do i18n now.

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

It gives the translators time to translate and to report bugs

(translators always find bugs, and you want to hear them)

Give yourself time
to fix issues

Never say

“It's only for English”

Messages syntax

$1, $2, $3

parameters,
a.k.a. placeholders

{{PLURAL}}

English, 2 forms:

```
{{PLURAL:$1|hour|hours}}
```

Russian, 3 forms:

```
{{PLURAL:$1|час|часа|часов}}
```

{{GENDER}}

```
$1 edited {{GENDER:$1|his|her}}
profile page
```

{{GRAMMAR}}

```
English: About {{SITENAME}}.
Gives:   About Wikipedia.

Polish?: O {{SITENAME}}.
Gives:   O Wikipedia.        :(

Polish!: O {{GRAMMAR:MS|{{SITENAME}}}}.
Gives:   O Wikipedii.        :)
```

If it's hard to translate something to your language, it may be possible to solve it by programming
a GRAMMAR rule.

Cool!

Can I use it for my program?

PHP:
Only MediaWiki

JavaScript: Anywhere!

jquery.i18n

A generic library that adds i18n capabilities to any website with jQuery

`https://github.com/wikimedia/jquery.i18n`

jquery.i18n usage, part 1

myApp.en.json:
```
{
"filecount": "$1 {{PLURAL:$1|File|Files}}"
}
```

myApp.kn.json:
```
{
"filecount": "$1 {{PLURAL:$1|ಫೈಲಿನ|ಫೈಲುಗಳ}}"
}
```

jquery.i18n usage, part 2

myApp.html:

```
<script src="jquery.js"></script>
<script src="jquery.i18n.js"></script>
...
<span data-i18n="filecount" id="filecount"></span>
```

myApp.js:

```
$( document ).i18n();
...
$( '#filecount' )
    .text( $.i18n( 'filecount', files.length ) );
```

Writing messages

in your features and extensions

NO LEGO

Do not concatenate messages to create sentences!

Bad:

MyExtension.i18n.php:

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

MyExtension.php:

```
$pageDeleted = wfMessage( 'page-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( 'page-deleted', $user, $date );
```

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

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

Avoid jargon, like “comps”, “nav”, “CTA”, “conversion rate” etc.

If you really need it,
you must document it.

Message documentation

qqq

In MediaWiki, it's a pseudo-language code for storing documentation

Always write qqq documentation.

(or some other documentation, if it's a different project)

Having a glossary is awesome.

Good examples: Wikibase (Wikidata), FlaggedRevisions

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

Screenshots are great!
Put them on Commons

Use the template
{{msg-mw|*MESSAGE*}}
to link to other templates

What is this message?

Table header? Tooltip?
Form label? Button?
Something else?

Part of speech!

“Open”

The file is *open*.
Open the file.
You don't have a permission to *open* this page.

Adjectives!

Please say what they describe: "green" can be masculine or feminine

Verbs!

Please say whether it's imperative *(“do it!”)*, infinitive *(“to do it”)* or something else

The `Message` class

Special pages, API, pagers

`$this->msg()`

Elsewhere:

`wfMessage()`

(There are some other functions, like `wfMsg()`, but they are mostly deprecated.)

`plain()`

No parsing at all, only parameters expansion. Leaves [[links]], {{templates}}, {{GENDER}} etc. as is.

`text()`

Transforms magic words in {{}} – {{GENDER}}, {{PLURAL}}, {{GRAMMAR}}

`escaped()`

Same as `text()`, but with `htmlspecialchars`.

`parse()`

Parse all wikitext to HTML

`parseAsBlock()`

Same as `parse()` and wrapped in <p></p>

Every method returns a Message object, so you can chain them:

```
wfMessage( 'myext-deleted-file' )
    ->params( $filename )
    ->rawParams( $link )
    ->inContentLanguage()
    ->parse();
```

More Message objects, less strings

Logging

New logging system

Gender

Flexible word order

Flexible parameters

Many logs yet to be converted (the hardest part is to understand all the legacy parameter formats)

Help!

Bug 38638

Interface messages needing rewording or documentation and other issues with existing messages.

It has links to many easy bugs.

[[Support]] at translatewiki.net

Recent feature:

Support requests for YOU are tracked at YOUR USER PAGE at translatewiki.net

When committing code that has any i18n changes, invite i18n to review: Nikerabbit, Siebrand, Amir, Santhosh

ಪ್ರಶ್ನೆಗಳು?

(Questions?)

!תּוֹדָה

(Thank you!)