Drupal 8’s multilingual APIs

Gábor Hojtsy
Gábor is an open source enthusiast and contributor. He started contributing to Open Source in 2000 when he became the lead of the documentation team and began the lead to that team.
11:45AM - 1:00PM
LUNCH: Pick up your lunch

1:00PM - 2:00PM
MULTILINGUAL DRUPAL 8
GİÇBOR HOJTSY
Core Conversations
⭐ BEGINNER
Thank you!

Ten years ago today, it began with a single Tweet. Since then, every moment of every day, people connect live about the things they care about most — all over the world.

Throughout the years, you’ve made Twitter what it is today and you’re shaping what it will be in the future. And for that, we thank you!

#LOVETWITTER
Gāiyor Hojtsy, thank you.

Twitter <info@e.twitter.com>

to gabor
Drupal 7 Multilingual

Drupal Core
DRUPAL 7 MULTILINGUAL

DRUPAL CORE

LOCALE
DRUPAL 7 MULTILINGUAL

- Locale
- L10n UP
- Content Translation
- Drupal Core
DRUPAL 7 MULTILINGUAL

- LOCALE
- L10N UP
- CONTENT TRANSLATION
- I18N
- DRUPAL CORE
FOUR PILLARS IN DRUPAL 8
FOUR PILLARS IN DRUPAL 8

LANGUAGE
Base services for all modules dealing with data. Not just multilingual.
FOUR PILLARS IN DRUPAL 8

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**INTERFACE**
Interface translation has built-in update feature, improved usability.
FOUR PILLARS IN DRUPAL 8

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Field translation in built-in API for all entities. Content translation module provides user interface.
FOUR PILLARS IN **DRUPAL 8**

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**INTERFACE**
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**CONTENT**
Field translation in built-in API for all entities. Content translation module provides user interface.

**CONFIG**
Common configuration system handles blocks, views, field settings. Unified translation.
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LANGUAGE

INTERFACE

CONTENT

CONFIG
DEALING WITH LANGUAGE

LanguageManager

Drupal:languageManager()

ConfigurableLanguageManager
DEALING WITH LANGUAGE

->getLanguages()

UND: NOT SPECIFIED

EN: ENGLISH (DEFAULT)

ZXX: NOT APPLICABLE
DEALING WITH LANGUAGE

\[ ->\text{getLanguages}() \]

- **UND: NOT SPECIFIED**
- **ZXX: NOT APPLICABLE**
- **HU: HUNGARIAN**
- **IT: ITALIAN**
DEALING WITH LANGUAGE

->getLanguages()

UND: NOT SPECIFIED
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language.entity.$langcode.yml
DEALING WITH LANGUAGE

->getLanguages()

- UND: NOT SPECIFIED
- ZXX: NOT APPLICABLE
- HU: HUNGARIAN
- IT: ITALIAN

language.entity.$langcode.yml

Locked
DEALING WITH LANGUAGE

- \texttt{getLanguages()}\n
\begin{itemize}
  \item \textbf{UND: NOT SPECIFIED}
  \item \textbf{ZXX: NOT APPLICABLE}
  \item \textbf{HU: HUNGARIAN}
  \item \textbf{IT: ITALIAN}
\end{itemize}

\texttt{language.entity.$langcode.yml}

\begin{itemize}
  \item Locked
  \item Not locked
\end{itemize}
ConfigurableLanguage::createFromLangcode('fr')
->save()
DEALING WITH LANGUAGE

ConfigurableLanguage::
load('fr')-&gt;delete()
DEALING WITH LANGUAGE

$languageManager
->getCurrentLanguage()
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LANGUAGE

INTERFACE

CONTENT

CONFIG
INTERFACE LANGUAGE
INTERFACE LANGUAGE
DEPENDENCY INJECTION

USER

TRANSLATION

CONFIGURATION

LOGIC
Interface Language

t('English text')

$this->t('English text')
class Foo {
    use StringTranslationTrait;
    ...
}

INTERFACE LANGUAGE
Interface Language

```php
$this->t('English text')
->getOption('langcode');
```
INTERFACE LANGUAGE

format_plural(…)

$this->formatPlural(...)
**JAVASCRIPT API**

`Drupal.t(...)`  
`Drupal.formatPlural()`
locale.translate_page:
  title: 'User interface translation'
  description: 'Configure the import …'
  route_name: locale.translate_page
  parent: system.admin_configRegional
  weight: 15

locale.translate_status:
  title: 'Available translation updates'
  route_name: locale.translate_status
  description: 'Get a status report …'
  parent: system.admin_reports
locale.translate_page:
  title: 'User interface translation'
  description: 'Configure the import …'
  route_name: locale.translate_page
  parent: system.admin_config_regional
  weight: 15

locale.translate_status:
  title: 'Available translation updates'
  route_name: locale.translate_status
  description: 'Get a status report …'
  parent: system.admin_reports
FOUR PILLARS IN DRUPAL 8

LANGUAGE

INTERFACE

English to X

CONTENT

CONFIG
NODE.PHP (SNIPPET)

/**
 * Defines the node entity class.
 */

/**
 * @ContentEntityType(
 *   id = "node",
 *   label = @Translation(“Content”),
 *   translatable = TRUE,
 *   entity_keys = {
 *     "id" = "nid",
 *     "label" = "title",
 *     "langcode" = "langcode",
 *   }
 * )
 */
function baseFieldDefinitions($entity_type) {
    // …
    $fields['title'] = BaseFieldDefinition::create('string')
        ->setLabel(t('Title'))
        ->setRequired(TRUE)
        ->setTranslatable(TRUE);
}

FIELDS THEMSELVES
FIELDS THEMSELVES

AUTOMATED!
@FieldType(
  id = "image",
  column_groups = {
    "file" = {
      "label" = @Translation("File"),
      "columns" = {
        "target_id", "width", "height"
      }
    },
    "alt" = {
      "label" = @Translation("Alt"),
      "translatable" = TRUE
    }
  }
)
$node = Node::load(42);

$node = $node
   ->getTranslation('hu');

$node = $entityRepository
   ->getTranslationFromContext($node);
$node->getUntranslated()

$node->language()

$node->getTranslationLanguages()

$node->hasTranslation('hu')

$node->addTranslation('hu')

$node->removeTranslation('hu')
<table>
<thead>
<tr>
<th>FILTER CRITERIA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Content: Promoted to front page (Yes)</td>
</tr>
<tr>
<td>Content: Publishing status (Yes)</td>
</tr>
<tr>
<td>Content: Translation language (= Content language selected for page)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SORT CRITERIA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Content: Sticky at top of lists (desc)</td>
</tr>
<tr>
<td>Content: Authored on (desc)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PAGE SETTINGS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Path: /node</td>
</tr>
<tr>
<td>Menu: No menu</td>
</tr>
<tr>
<td>Access: Permission</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HEADER</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>FOOTER</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>NO RESULTS BEHAVIOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global: Unfiltered text (Global: Unfiltered text)</td>
</tr>
<tr>
<td>Content: Empty Node Frontpage behavior (Content: Empty Node Frontpage behavior)</td>
</tr>
<tr>
<td>Global: Title override (Global: Title override)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PAGER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use pager: Full</td>
</tr>
<tr>
<td>More link: No</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>LANGUAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rendering Language: Content language of view row</td>
</tr>
</tbody>
</table>
FOUR PILLARS IN DRUPAL 8

LANGUAGE

INTERFACE
English to X

CONTENT
X to Y
Intelligent objects

CONFIG
message: '@site is currently under maintenance. We should be back shortly. Thank you for your patience.'
langcode: en
config_object:
  type: mapping
mapping:
  langcode:
    type: string
    label: 'Language code'
...

text:
  type: string
  label: 'Text'
  translatable: true
system.maintenance:
  type: config_object
  label: 'Maintenance mode'
  mapping:
    message:
      type: text
      label: 'Message to display…'
message: '@site is currently under maintenance. We should be back shortly. Thank you for your patience.'
langcode: en
message: '@site is currently under maintenance. We should be back shortly. Thank you for your patience.'
langcode: en
message: '@site is currently under maintenance. We should be back shortly. Thank you for your patience.'
langcode: en

message: '@site karbantartás alatt áll…’
message: '@site is currently under maintenance. We should be back shortly. Thank you for your patience.'
langcode: en

message: '@site karbantartás alatt áll…'

message: '@site karbantartás alatt áll…'
message: '@site is currently under maintenance. We should be back shortly. Thank you for your patience.'
langcode: en

message: '@site karbantartás alatt áll…'

message: '@site …'
$config = \Drupal::config('system.maintenance');

$config->get('message');
$config = \Drupal::config('system.maintenance');
$config->get('message');
$manager = \Drupal::languageManager();
$hu = $manager->getLanguage('hu');

$original = $manager->getConfigOverrideLanguage();
$manage->setConfigOverrideLanguage($hu);

$config = \Drupal::config('system.maintenance');
// ...

$manager->setConfigOverrideLanguage($original);
\Drupal::config('system.maintenance');

\Drupal::configFactory()->getEditable('system.maintenance');

\Drupal::languageManager()->getLanguageConfigOverride('hu', 'system.maintenance')->set('message', 'Karbantartás...')->save();
FOUR PILLARS IN DRUPAL 8

LANGUAGE

INTERFACE
English to X

CONTENT
X to Y
Intelligent objects

CONFIG
X to Y
Dumb arrays
How was it?

Evaluate this session - https://events.drupal.org/node/9814

@gaborhojtsy