Best Practices for Building Multilingual Sites in Drupal 8

BADCamp 2020

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About Me

Mohit Aghera

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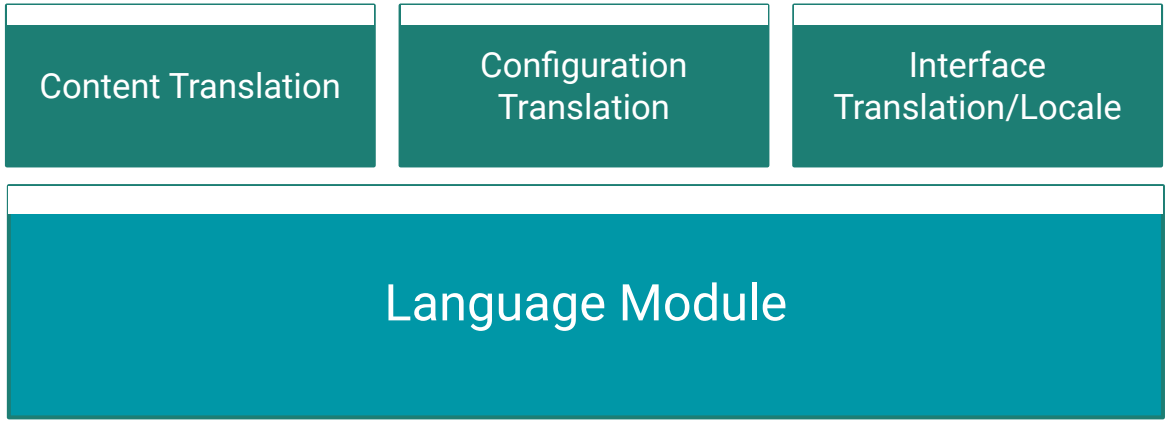
Modules Stack

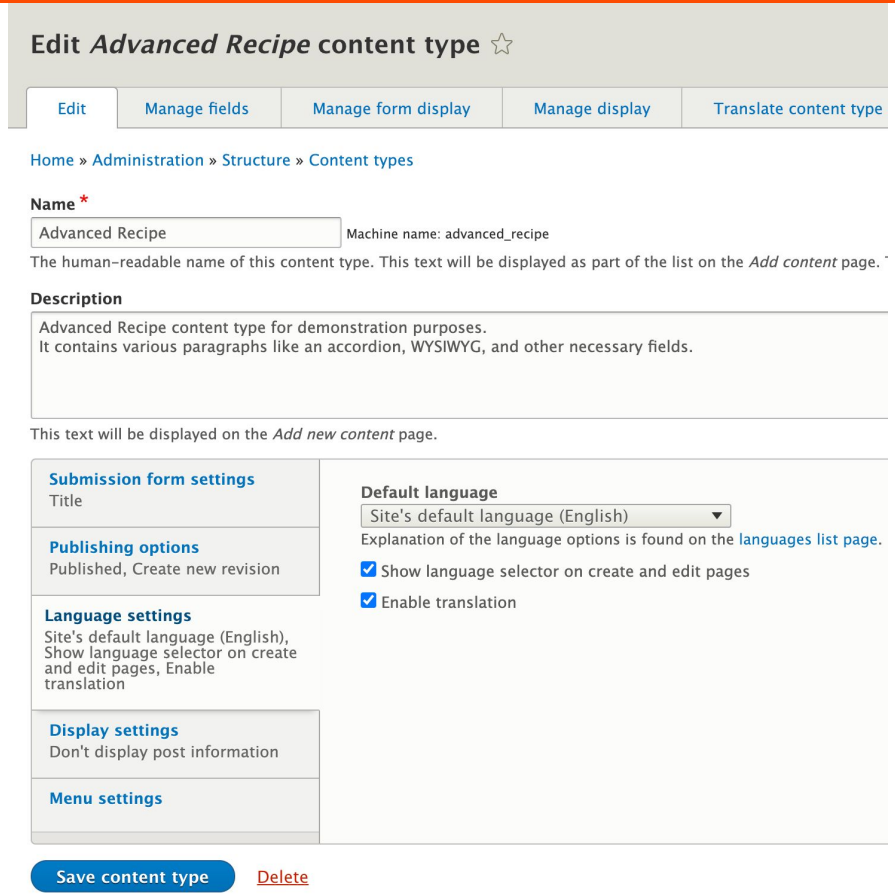


Two Personas

Site Builders

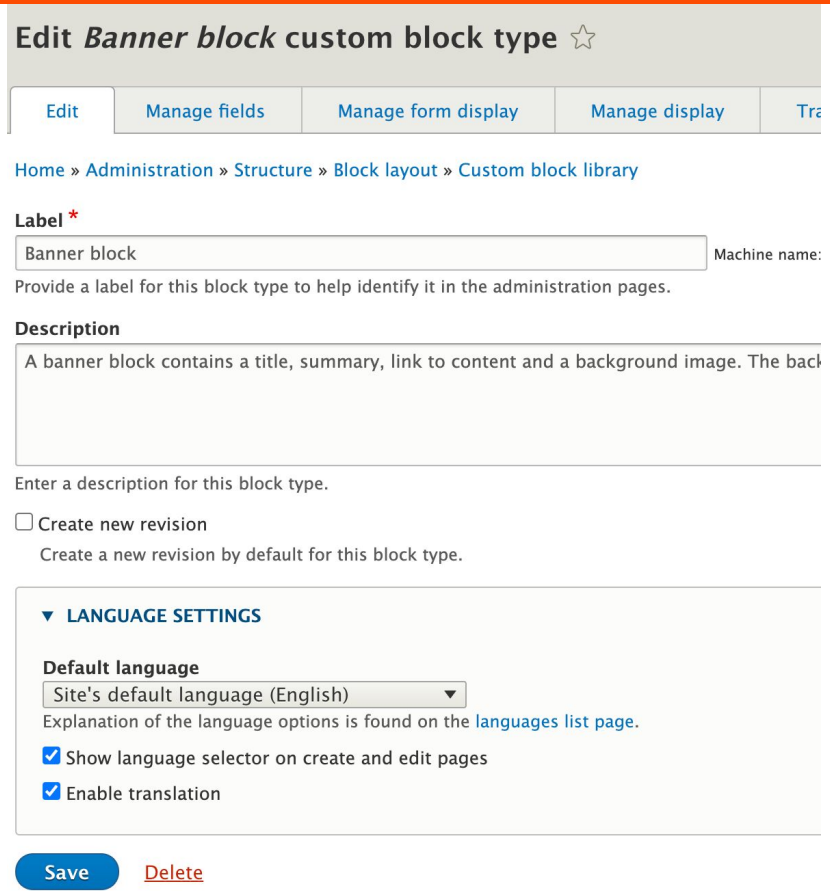
Translating Content Entities

- Content Types
- Detailed options are visible on Regional and language > Content Language page.



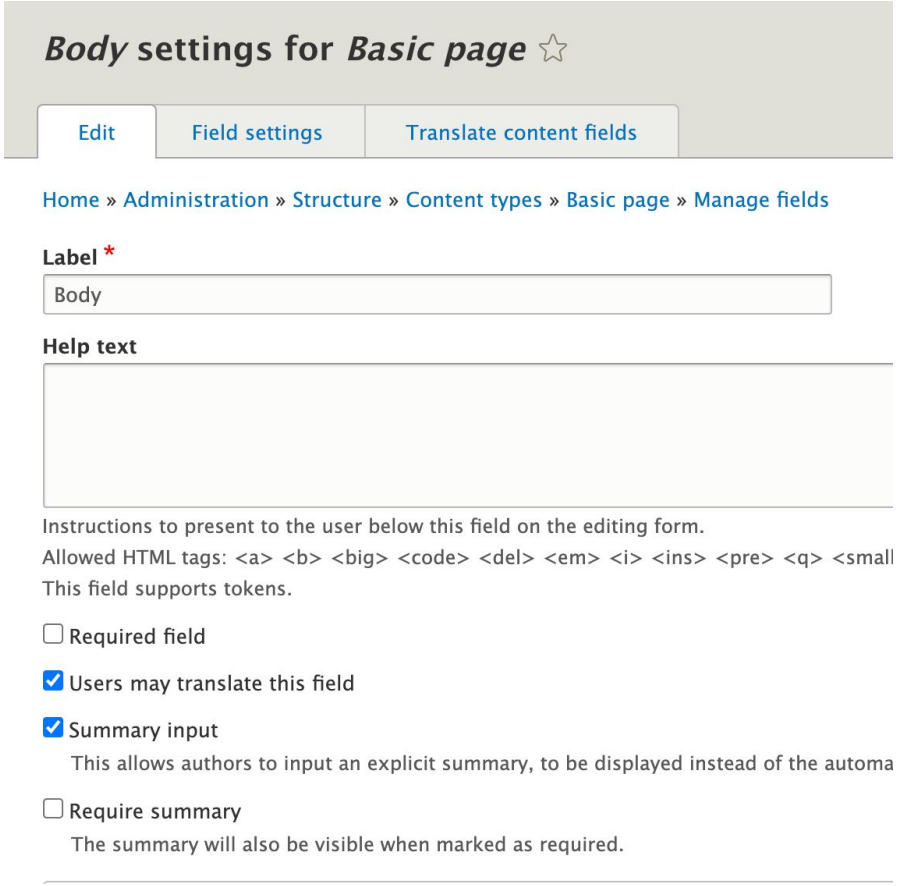
Translating Content Entities

- Blocks translation
- Blocks visibility per language
- Translation of various attributes for block instance like title etc.



Making Fields Translatable

- Enable from the field settings
- Detailed settings related to content types can be found on “admin/config/regional/content-language”
-



Paragraph Translation

Label *

Additional Information

Help text

Instructions to present to the user below this field on the editing form.

Allowed HTML tags: <a> <b> <big> <code> <del> <i> <ins> <pre> <q> <sn

This field supports tokens.

☐ Required field

☐ Users may translate this field

⚠ Paragraphs fields do not support translation. See the online documentation.

▼ REFERENCE TYPE

Reference method *

Default

Which Paragraph types should be allowed?

○ Exclude the selected below

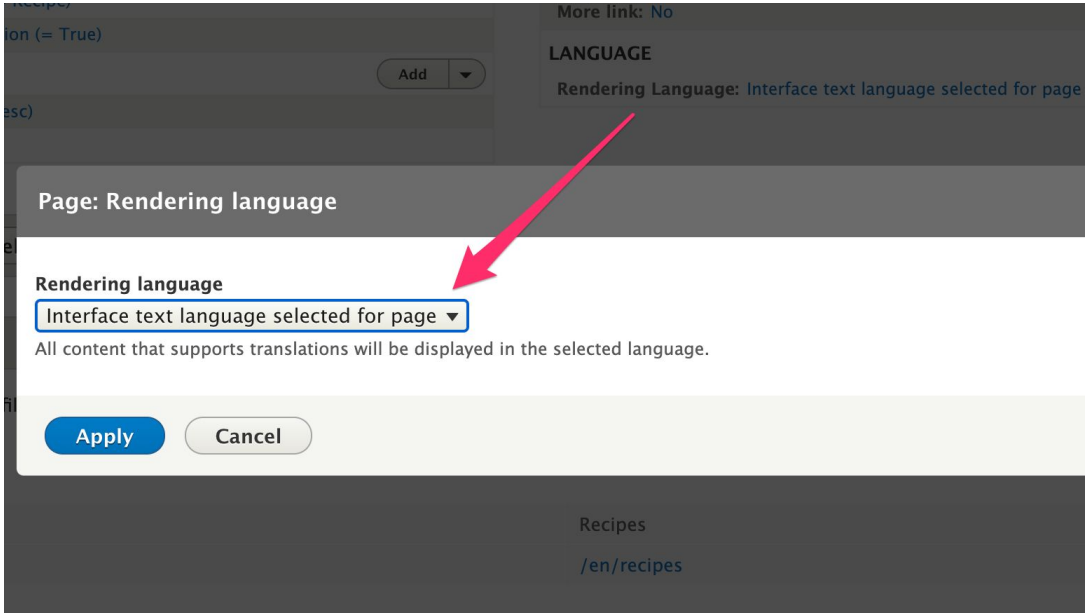
◉ Include the selected below

Paragraph types

Region & Language > Content Language

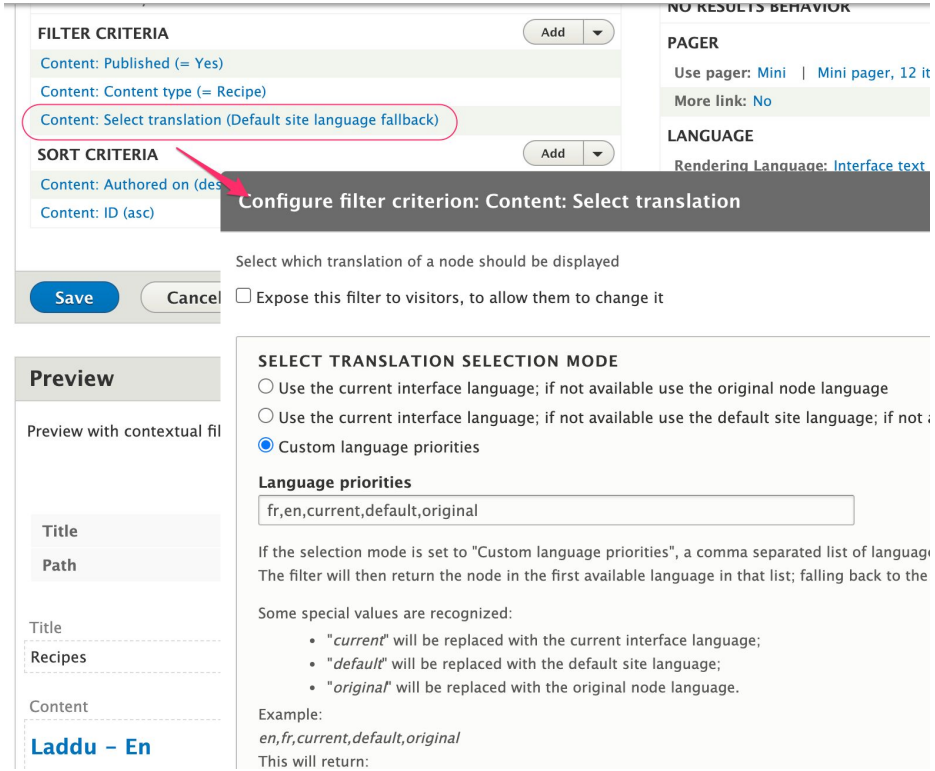
Views - Content Translation

- Display plugin provides various options to render the content.
- Also takes care of simple translation fallback



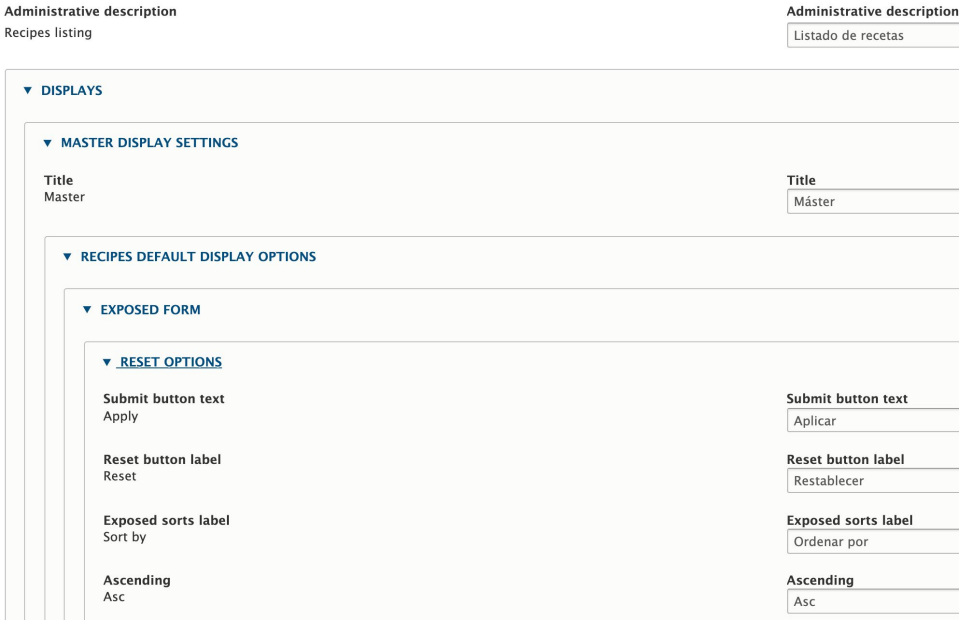
Views - Content Translation

- We can use “select_translation” for advance translation fallback.
- Similar modules
  - active_translation
  - language_fallback
  - entity_language_fallback



Views - Interface Translation

- Translate all the titles, help text, default text, no result behaviour text, button labels for the views.
- We can export it via config export
- Drupal adds it to seperate directory based on language code.



Translated Views

- Gets exported to “<your-config-directory>/language/<langcode>/
- In demo setup: config/sync/language/es/

```yaml
label: Recetas
description: 'Listado de recetas'
display:
  default:
    display_title: Máster
    display_options:
      exposed_form:
        options:
          submit_button: Aplicar
          reset_button_label: Restablecer
          exposed_sorts_label: 'Ordenar por'
          sort_asc_label: Asc
          sort_desc_label: Desc
      pager:
        options:
          tags:
            previous: ‹‹
            next: ››
          expose:
            items_per_page_label: 'Elementos por página'
            items_per_page_options_all_label: '- Todo -'
            offset_label: Desplazamiento
      fields:
        title:
          separator: ', '
      title: Recetas
  page_1:
    display_title: Página
    display_options:
      menu:
        title: Recetas
```

Multilingual Solr Search

- Multilingual solr search is part of “search_api” module now.
- URL on demo setup: “admin/config/search/search-api/index/umami_search/edit”

Translations Contribution Tools

- TMGMT module and ecosystem
- It supports automated or user contributed translations

Developers

Entity Translation API

- Fields inherit language from parent language aware entity
- $entity->getTranslation()
- $entityRepository->getTranslationFromContext()
- Several other methods to EntityInterface
- hook_entity_translation_create()
- hook_entity_translation_insert()
- hook_entity_translation_delete()

Entity Translation API

```
 * @ContentEntityType(
 *   id = "recipe_review",
 *   label = @Translation("Recipe review"),
 *   base_table = "recipe_review",
 *   data_table = "recipe_review_field_data",
 *   revision_table = "recipe_review_revision",
 *   revision_data_table = "recipe_review_field_revision",
 *   translatable = TRUE,
 *   entity_keys = {
 *     "id" = "id",
 *     "revision" = "vid",
 *     "label" = "name",
 *     "uuid" = "uuid",
 *     "uid" = "user_id",
 *     "langcode" = "langcode",
 *     "published" = "status",
 *   },
```

Making Entity Fields Translatable

```php
$fields['name'] = BaseFieldDefinition::create( type: 'string')
  ->setLabel(t( string: 'Name'))
  ->setDescription(t( string: 'The name of the Recipe review entity.'))
  ->setRevisionable( revisionable: TRUE)
  ->setTranslatable( translatable: TRUE)
  ->setSettings([
    'max_length' => 50,
    'text_processing' => 0,
  ])
  ->setDefaultValue( value: '')
  ->setDisplayOptions( display_context: 'view', [
    'label' => 'above',
    'type' => 'string',
    'weight' => -4,
  ])
  ->setDisplayOptions( display_context: 'form', [
    'type' => 'string_textfield',
    'weight' => -4,
  ])
  ->setDisplayConfigurable( display_context: 'form', configurable: TRUE)
  ->setDisplayConfigurable( display_context: 'view', configurable: TRUE)
  ->setRequired( required: TRUE);
```

Configuration Entity Translation

- Configuration translations are provided by “config_translation” module.
- It works out-of-box for all the Drupal Core’s config entities

Translating Custom Configuration

- Create “my_module.schema.yml”
- Add the fields that we want to make translatable.
- Create “my_module.config_translation.yml” to link it to schema.yml

Translating Custom Configuration

```yaml
umami_multilingual.adminconfig:
  type: config_object
  label: 'Umami Multilingual basic config'
  mapping:
    help_text:
      type: text
      label: 'Help Text'
    default_description:
      type: text
      label: 'Default Description'
```

umami_multilingual_schema.yml

```yaml
umami_multilingual.admin_config_form:
  title: 'Umami Configuration Form'
  # base_route_name is the route that provides configuration form.
  base_route_name: umami_multilingual.admin_config_form
  # names should contain all the configuration keys in "umami_multilingual.schema.yml"
  names:
    - umami_multilingual.adminconfig
```

umami_multilingual.config_translation.yml

Configuration Translation APIs

- Override the configuration
- Fetch translated configuration
- hook_config_translation_info_alter()

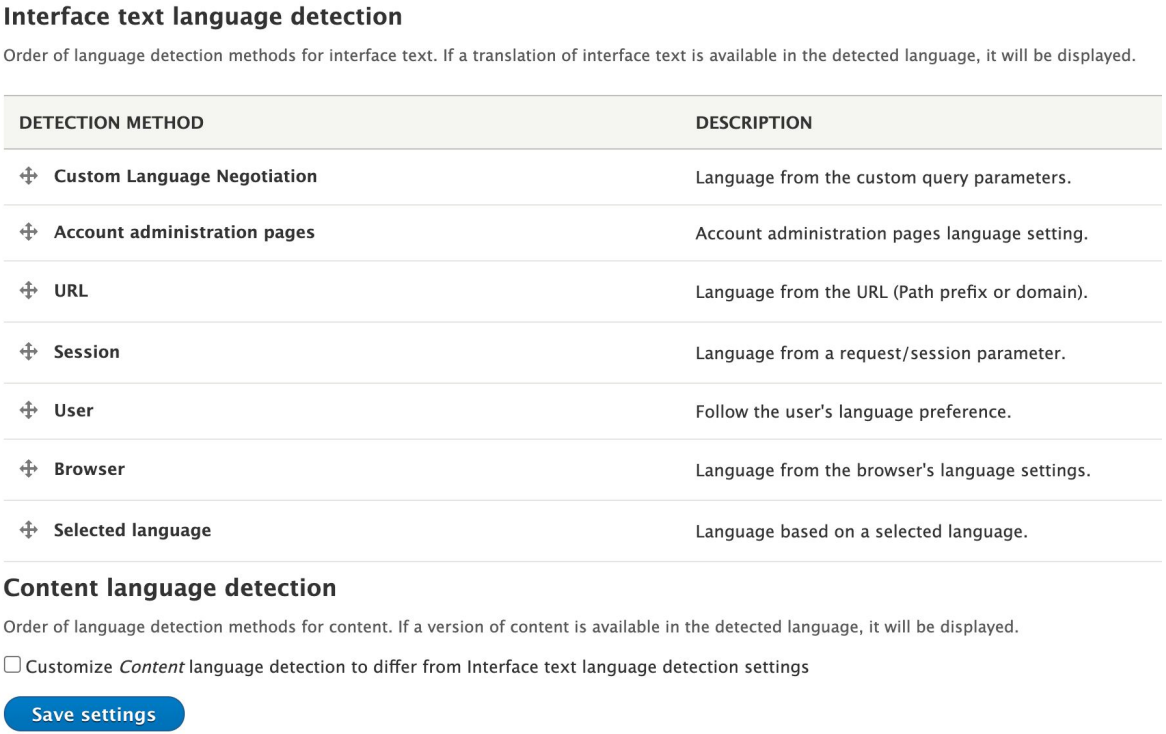
```php
$language = $language_manager->getLanguage($params['account']->getPreferredLangcode());
$original_language = $language_manager->getConfigOverrideLanguage();
$language_manager->setConfigOverrideLanguage($language);
$mail_config = \Drupal::config( name: 'user.mail');

$token_options = ['langcode' => $langcode, 'callback' => 'user_mail_tokens', 'clear' => TRUE];
$message['subject'] .= PlainTextOutput::renderFromHtml($token_service->replace($mail_config->get
($key . '.subject'), $variables, $token_options));
$message['body'][] = $token_service->replace($mail_config->get($key . '.body'), $variables,
$token_options);

$language_manager->setConfigOverrideLanguage($original_language);
```

Language Negotiation Plugins

- Determines which language to pick
- We can also write custom language negotiation plugins



Interface text language detection

Order of language detection methods for interface text. If a translation of interface text is available in the detected language, it will be displayed.

DETECTION METHOD	DESCRIPTION
Custom Language Negotiation	Language from the custom query parameters.
Account administration pages	Account administration pages language setting.
URL	Language from the URL (Path prefix or domain).
Session	Language from a request/session parameter.
User	Follow the user's language preference.
Browser	Language from the browser's language settings.
Selected language	Language based on a selected language.

Content language detection

Order of language detection methods for content. If a version of content is available in the detected language, it will be displayed.

☐ Customize *Content* language detection to differ from Interface text language detection settings

Save settings

Language Negotiation Plugins

```php
/**
 * Custom Language Negotiation Plugins.
 *
 * @LanguageNegotiation(
 *   id = \Drupal\umami_multilingual\Plugin\LanguageNegotiation\LanguageNegotiationCustom::METHOD_ID
 *   weight = -1,
 *   name = @Translation("Custom Language Negotiation"),
 *   description = @Translation("Language from the custom query parameters."),
 * )
 */
class LanguageNegotiationCustom extends LanguageNegotiationMethodBase {

  /**
   * The language negotiation method id.
   */
  const METHOD_ID = 'language-custom';

  /**
   * {@inheritdoc}
   */
  public function getLangcode(Request $request = NULL) {
    $langcode = NULL;

    if ($this->languageManager && $request && $request->query->get( key: 'test-language') !== NULL) {
      $query_langcode = $request->query->get( key: 'test-language');
      $langcodes = array_keys($this->languageManager->getLanguages());
      if (in_array($query_langcode, $langcodes)) {
        $langcode = $query_langcode;
      }
    }

    return $langcode;
  }

}
```

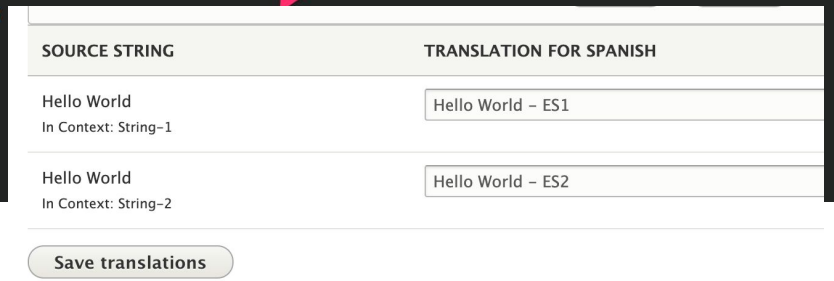
Interface Text Translation

- Use “StringTranslationTrait”
- Translate by $this->t(“Hello World”)
- Context parameters to t() helps to provide contextual and disambiguous translations

Interface Text Translation

```php
public function build() {
  $build = [];
  $text_1 = $this->t( string: 'Hello World', [], ['context' => 'String-1']);
  $text_2 = $this->t( string: 'Hello World', [], ['context' => 'String-2']);

  return [
    '#theme' => 'item_list',
    '#items' => [$text_1, $text_2],
  ];
}
```



Translation in Twig

- t() twig function for the translation
- trans filter

```
{% if site_logo %}
  <a href="{{ path('<front>') }}" rel="home">
    <img src="{{ site_logo }}" alt="{{ 'Home'|t }}" />
  </a>
{% endif %}
```

Translation in JS

- Drupal.t()
- Drupal.formatPlural()

```
if ($toolbarEscape.length && pathInfo.currentPathIsAdmin) {
  if (escapeAdminPath !== null) {
    $toolbarEscape.attr( name: 'href', escapeAdminPath);
  } else {
    $toolbarEscape.text(Drupal.t( str: 'Home'));
  }
}
```

Adding Translation in Custom Modules

- “interface translation project” and “interface translation server pattern” properties in the info.yml files helps to provide custom .po files.

umami_multilingual/umami_multilingual.info.yml

```
interface translation project: umami_multilingual
interface translation server pattern:
  modules/custom/umami_multilingual/translations/%language.po
```

```
# Umami Multilingual translations for Spanish language.

msgid "Hello World"
msgstr "Hola Mundo"
```

umami_multilingual/translations/es.po

Translations Deployment

- Drush Language Commands: https://www.drupal.org/project/drush_language
- We can leverage Drush commands with CI pipeline.

Sample Repository

- Github: https://github.com/mohit-rocks/drupal8-multilingual

Coming up next
Friday 11 am

- **Accessible SVGs: Inclusiveness Beyond Patterns** with Carie Fisher
- **Decoupling Drupal: Gatsby Live Preview from the same project** with Chad Carlson
- **Making a better community, better software, and a better world** with Tara King, Ruby Sinreich, and Elli Lugwigson

Coming up next
Friday 10:45 am

I/O

amazee.io

- **Coffee Break** with amazee.io in the Expo Hall

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Thank you!!