Decoupling Drupal and the integration with Gatsby

- Gautam Das



About Me

- Working at Genero as a Drupal Developer
- Drupaler for the last 6 years
- Backend tasks for multiple clients and projects.
- Acquia certified Drupal 7 and Drupal 8 developer



Agenda

- 1. What is decoupled Drupal.
- Gatsby (React based static site generator)
- 3. Integrating Drupal with Gatsby



Decoupling Drupal

Decoupling is often a means to enable creating content once and displaying on multiple platforms.

Drupal is used only as a content management system without the presentation layer.

There are no templates and themes, there is only content and admin UI.

Drupal exposes the API for other applications to consume.



Gatsby

What's Gatsby

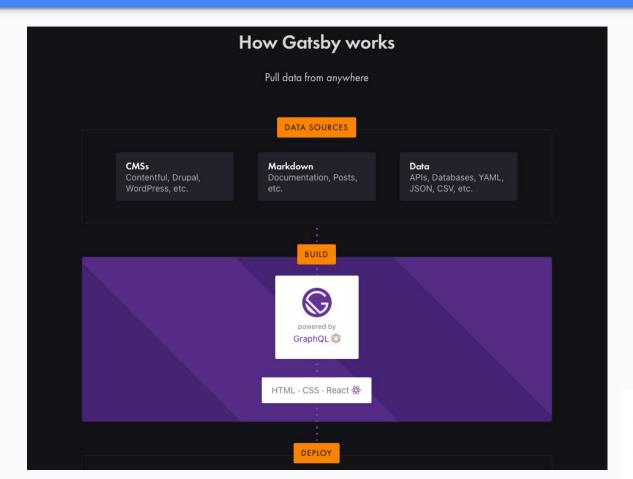
Gatsby is a React-based, GraphQL powered, static site generator.

You code and develop your site, Gatsby transforms it into a directory with a single HTML file and your static assets.

Gatsby collects data from wherever it may be: Markdown, JSON, CMS, third party APIs, anywhere!

The second reason it's special is the richness of the Gatsby ecosystem. Gatsby has not been around for too long, but already boasts great documentation, and a number of starters to help you get a site up quickly

From: https://www.gatsbyjs.org/





Drupal + Gatsby

Modules

Drupal core modules and couple of contributed modules JSON API Extras provides some extra features.

▼ ウェブサービス	
□ HAL	▶ Hypertext Application Language を使用しているエンティティをシリアライズしたもの。
□ HTTP Basic Authentication	▶ Basic認証プロバイダーを提供します。
JSON API Defaults	▶ Builds on top of JSON API to deliver extra functionality.
✓ JSON:API	► Exposes entities as a JSON:API-specification-compliant web API.
☑ JSON:API Extras	► Builds on top of JSON:API to deliver extra functionality.
✓ REST UI	▶ Provides a user interface to manage REST resources.
✓ RESTful Web Services	▶ RESTful ウェブ API としてエンティティやその他のリソースを公開します。
✓ Serialization	▶ データを JSON や XML のような形式にシリアライズしたり復元するサービスを提供します。



JSON Data

After enabling the modules the output which will be available.

```
Raw Data
                   Headers
Save Copy Collapse All Expand All Trilter JSON
▼ jsonapi:
    version:
                                                           "1.0"
  ▼ meta:
    ▼ links:
      w self:
           href:
                                                           "http://jsonapi.org/format/1.0/"
 data:
▼ meta:
  - links:
    ▼ me:
      ▼ meta:
                                                           "648455b0-c5fc-478b-9478-501876ac214a"
       w href:
                                                           "https://gatsby.genero-cloud.com/isonapi/user/user/648455b0-c5fc-478b-9478-501876ac214a"
w links:
  ▼ action--action:
    w href:
                                                           "https://gatsby.genero-cloud.com/jsonapi/action/action"
  base_field_override--base_field_override:
    w href:
                                                           "https://gatsby.genero-cloud.com/jsonapi/base_field_override/base_field_override"
  w block--block:
    w href:
                                                           "https://gatsby.genero-cloud.com/jsonapi/block/block"
  ▼ block content—banner:
    w href:
                                                           "https://gatsby.genero-cloud.com/jsonapi/block_content/banner"
  ▼ block_content--basic:
    w href:
                                                           "https://gatsby.genero-cloud.com/jsonapi/block_content/basic"
  ▼ block content--grid image:
    w href:
                                                           "https://gatsby.genero-cloud.com/jsonapi/block_content/grid_image"
  block_content--message:
    w href:
                                                           "https://gatsby.genero-cloud.com/jsonapi/block_content/message"
  block_content--text_image:
                                                           "https://gatsby.genero-cloud.com/jsonapi/block_content/text_image"
  block_content_type--block_content_type:
                                                           "https://gatsby.genero-cloud.com/jsonapi/block content type/block content type"
  ▼ comment—comment:
    w href:
                                                           "https://gatsby.genero-cloud.com/jsonapi/comment/comment"
  v comment_type--comment_type:
                                                           "https://gatsby.genero-cloud.com/jsonapi/comment_type/comment_type"
    - href:
  ▼ configurable_language--configurable_language:
    w href:
                                                           "https://gatsby.genero-cloud.com/isonapi/configurable language/configurable language"
  v contact_form--contact_form:
    w href:
                                                           "https://gatsby.genero-cloud.com/jsonapi/contact_form/contact_form"
  contact_message—feedback:
    w href:
                                                           "https://gatsby.genero-cloud.com/jsonapi/contact_message/feedback"
  ▼ contact_message—personal:
    w href:
                                                           "https://gatsby.genero-cloud.com/isonapi/contact message/personal"
   date_format--date_format:
```

Integrating

Requires a gatsby plugin to integrate with Drupal

```
gatsby-config.js
module.exports =
 siteMetadata: {
   title: 'DEN',
   description: `DEN 2019.`,
   author: `@den`,
 plugins: [
    'gatsby-plugin-react-helmet',
    'gatsby-plugin-sass',
    `gatsby-plugin-catch-links`,
      resolve: 'gatsby-source-filesystem',
     options: {
       name: `images`,
       path: `${__dirname}/src/images`,
    `gatsby-transformer-sharp`,
    'gatsby-plugin-sharp',
    'gatsby-image',
      resolve: `gatsby-plugin-manifest`,
     options: {
       name: `gatsby-starter-default`,
       short_name: `starter`,
       start_url: '/',
       background_color: `#663399`,
       theme_color: `#663399`,
       display: `minimal-ui`,
       icon: 'src/images/favicon.png', // This path is relative to the root of the site.
      resolve: `gatsby-source-drupal`,
     options: {
       baseUrl: https://den-2019-drupal.com/,
       apiBase: `jsonapi`
```



Gatsby CLI

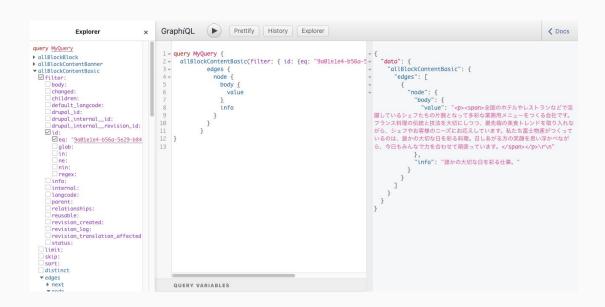
- gatsby develop
- gatsby build

```
fujibussan-gatsby git: (FBRS-10) gatsby develop
success <mark>open and validate gatsby-configs - 0.111 s</mark>
success load plugins - 6.040 s
success initialize cache - 0.044 s
success copy gatsby files - 0.460 s
success onPreBootstrap - 0.050 s
nfo Starting to fetch data from Drupal
success Fetch data from Drupal - 0.607 s
nfo Downloading remote files from Drupal
(node:1191) [DEP0066] DeprecationWarning: OutgoingMessage.prototype._headers is deprecated
success Remote file download - 0.301 s
success source and transform nodes - 1.249 s
success building schema - 2.089 s
success createPages - 0.041 s
success createPagesStatefully - 0.197 s
success onPreExtractQueries - 0.048 s
success update schema - 0.107 s
success extract queries from components - 1,460 s
success write out requires - 0.122 s
success write out redirect data - 0.042 s
success Build manifest and related icons - 0.405 s
success onPostBootstrap - 0.474 s
 nfo bootstrap finished - 52,475 s
success run static queries - 0.562 s - 10/10 19.10 queries/second
success run page queries - 0.079 s - 6/6 225.81 queries/second
WARNING Compiled with 14 warnings
```



GraphQL

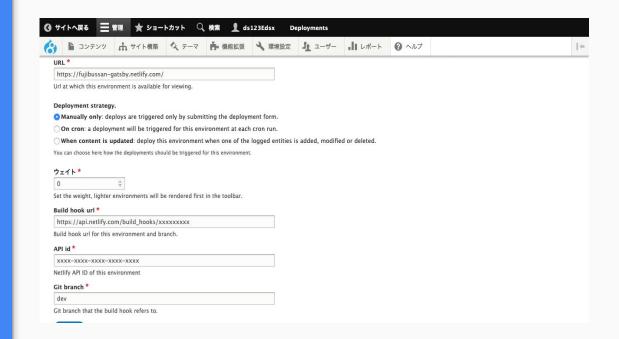
Use GraphQL to query drupal and data and use to build pages.





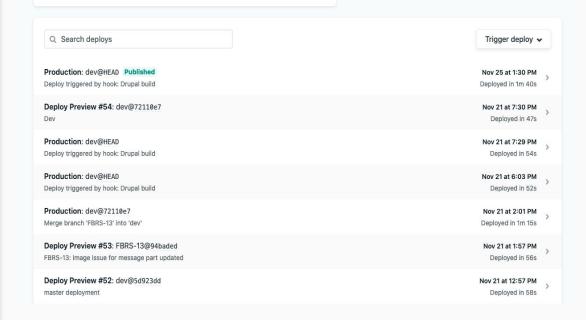
Automated Deployments

Using Build hook modules





Netlify





Together, Gatsby and Drupal form a powerful combination that makes an excellent case for decoupling your next project.

Conclusion



Questions?

D.O Profile: das.gautam27

Twitter: @das_gautam27