

How Plone Excels in GatsbyJS Content Mesh

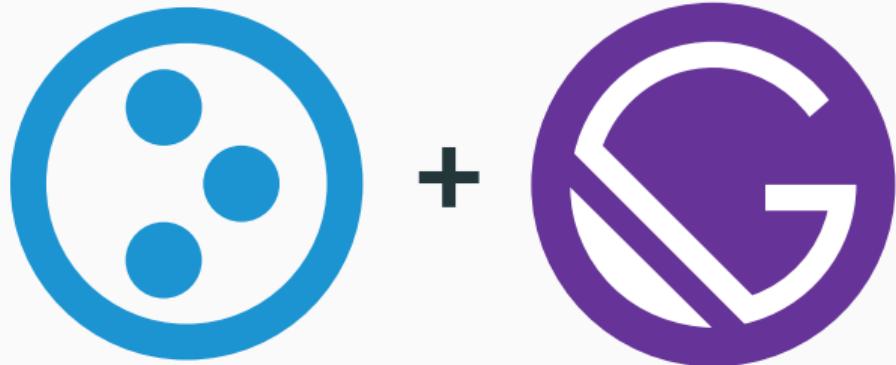
Plone Conference 2019

Asko Soukka

23.10.2019

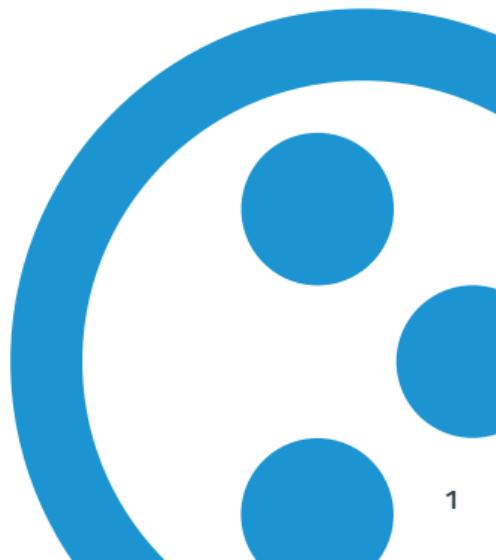


JYVÄSKYLÄN YLIOPISTO
UNIVERSITY OF JYVÄSKYLÄ



Background

- Python developer since 2002
- Plone developer since 2004
- Full-time professional since 2008
- GSOC mentor since 2013
- GatsbyJS user since 2018



University of Jyväskylä, Central Finland



Demo

GatsbyJS

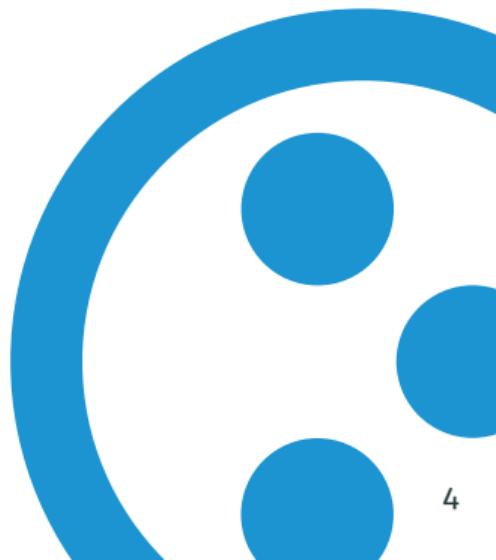
GatsbyJS – the framework

- React based website and app generator
- GraphQL based CMS agnostic mashup framework
- Server-side rendered static deployment
- MIT-licensed open source plugin ecosystem



GatsbyJS – the company

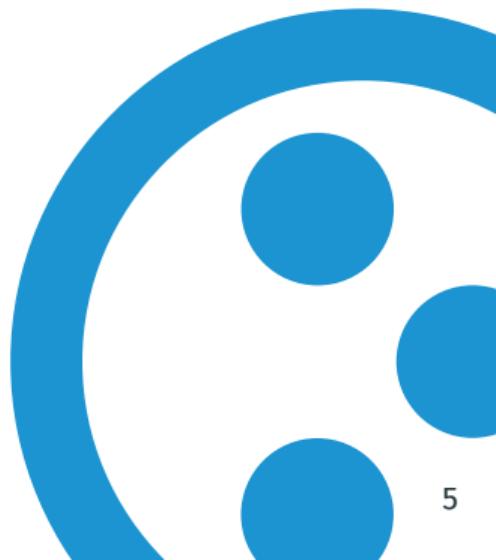
- Open source hobby turned into VC backed startup
- Copyrights owner, maintainer and evangelist
- Free tooling, documentation and webinars
- Paid cloud services with premium features



Advantages

Good

- "Blazingly-fast websites"
- Beginner friendly documentation
- Seamless developer experience
- Commitment on accessibility
- React ecosystem compatible



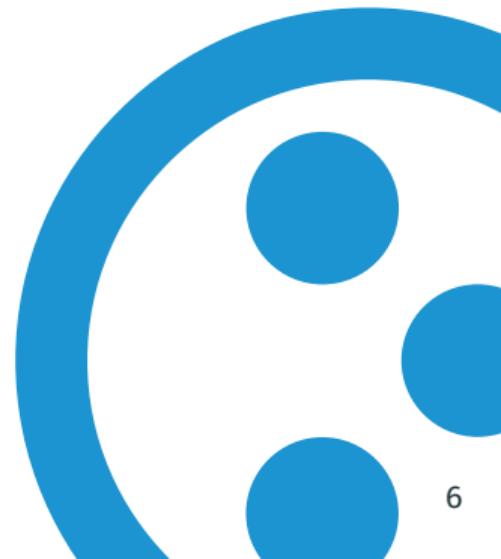
Shortcomings

Bad

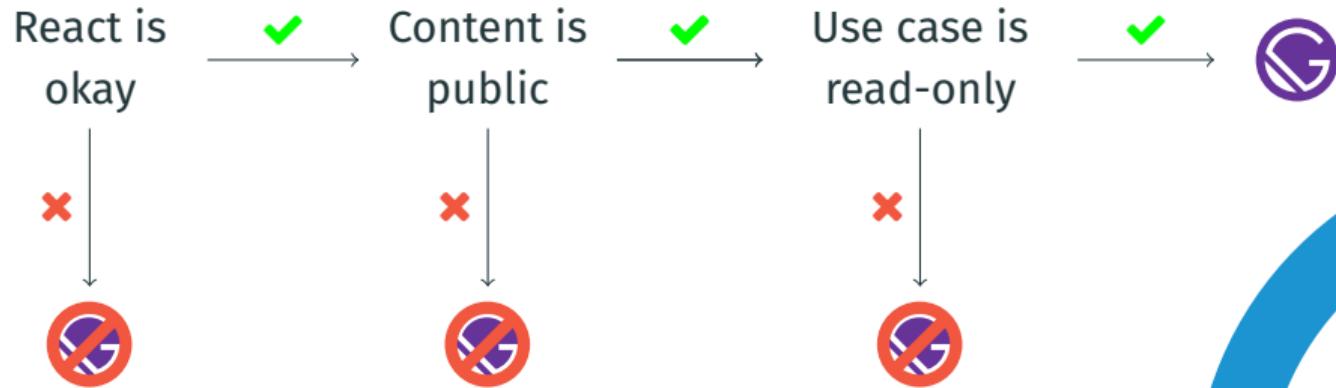
- No incremental builds
- Varying plugin quality
- GatbyJS GitHub monorepo

Ugly

- "Overly-complicated framework and pipeline"
- "Vendor lock-in for just updating static HTML"

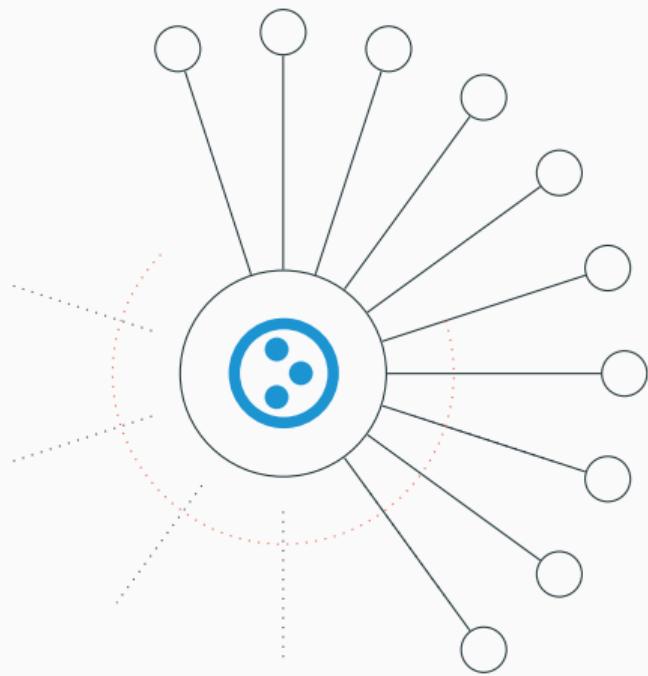


Not for Everyone

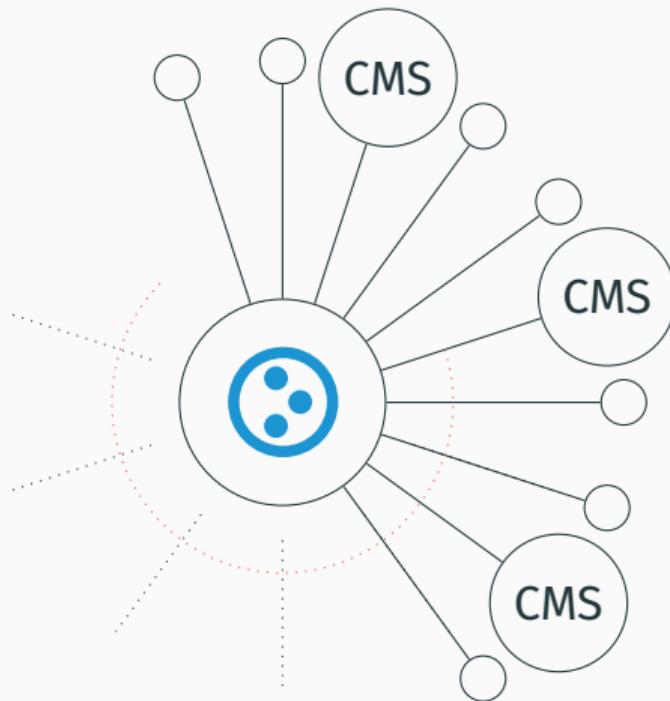


Content Mesh

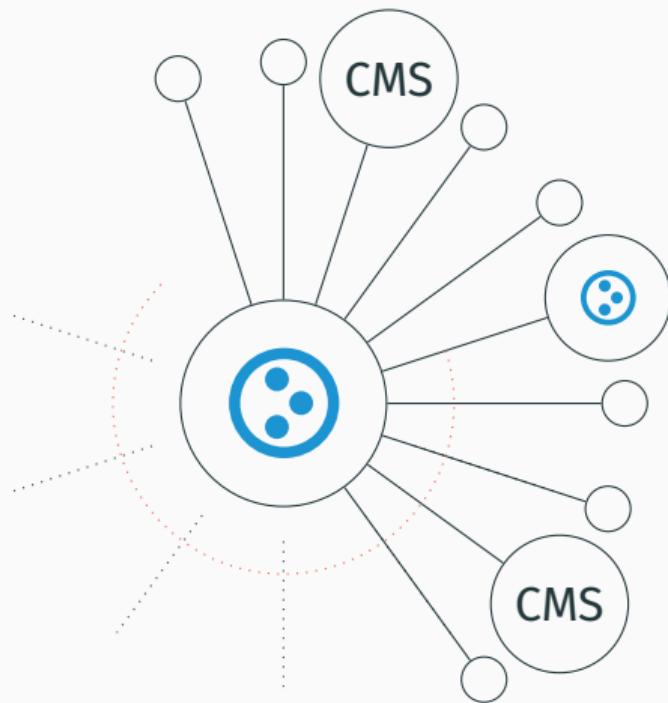
CMS in Disruption



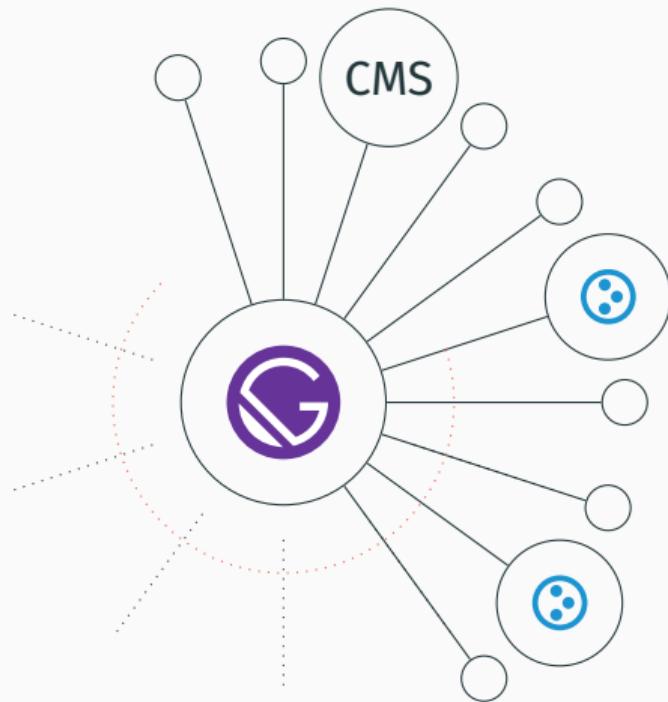
CMS in Disruption



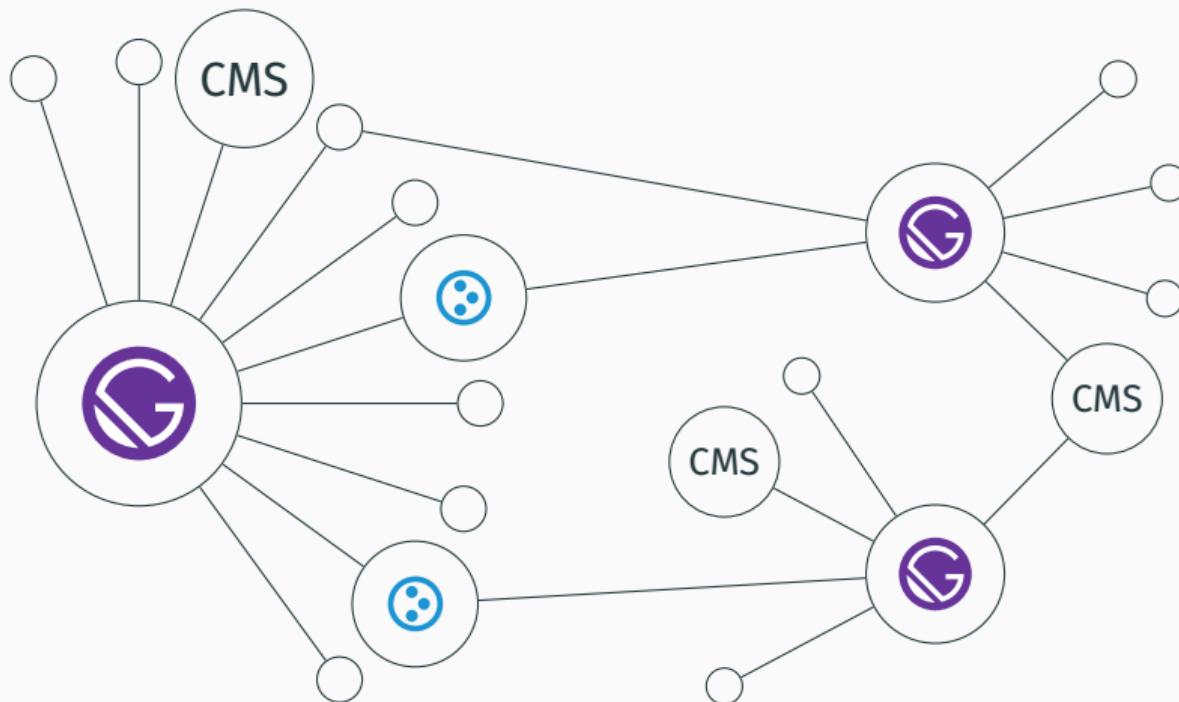
CMS in Disruption



CMS in Disruption



Content Mesh



Ecosystem

Plugin Categories

SOURCE

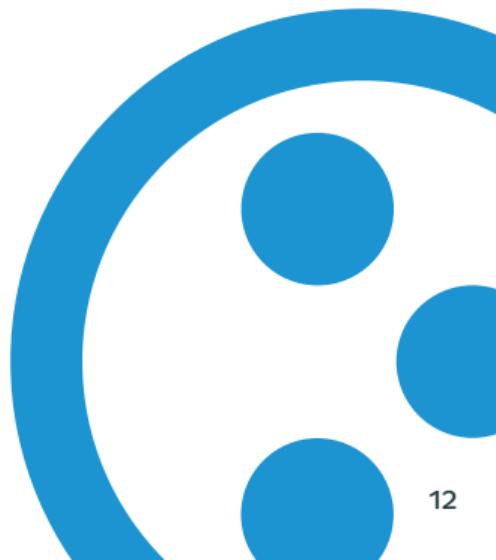


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Plugin Categories

SOURCE

images



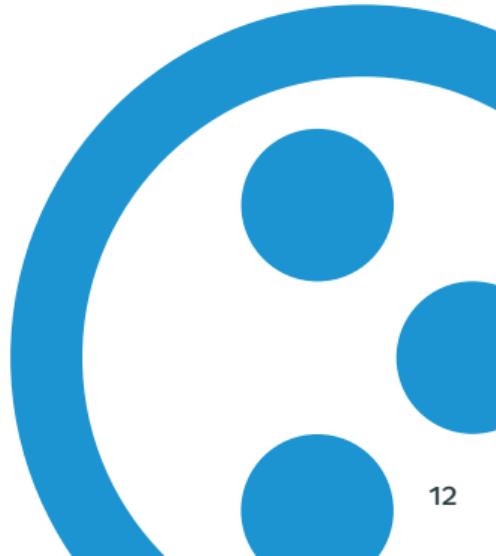
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Plugin Categories

SOURCE

TRANSFORMER

images



12

Plugin Categories

SOURCE

TRANSFORMER

images

scales



Plugin Categories

SOURCE

TRANSFORMER

THEME

images

scales



Plugin Categories

SOURCE

TRANSFORMER

THEME

images

scales

gallery



All **plugins** are equal
categories are not enforced

Themes

Experiment on maintainable boilerplate

- Packages with pre-configured components
- Configuration possible with plugin options
- Overridable or extendable by shadowing



Gatsby Themes

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JBOA



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???

Gatsby Themes

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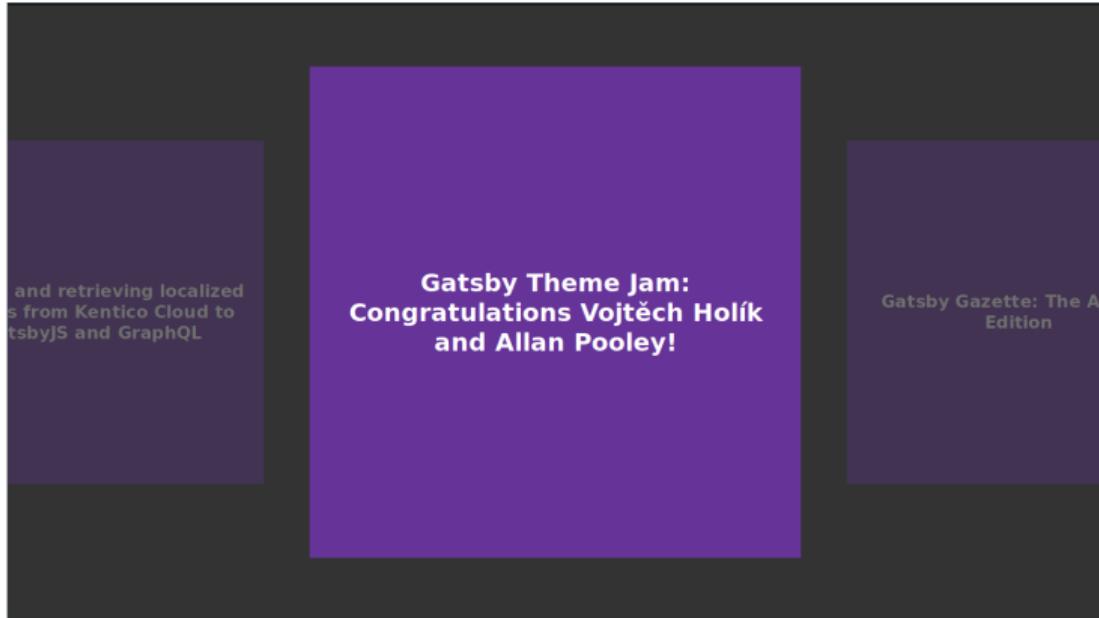
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PROFIT



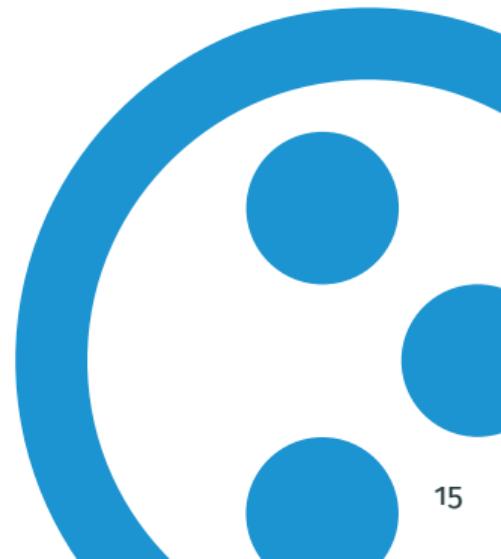
Example “theme” gatsby-theme-coverflow



datakurre.github.io/gatsby-theme-coverflow

Example "theme" configuration

```
{  
  resolve: "gatsby-theme-coverflow",  
  options: {  
    path: "gatsby-blog",  
    query: `{ allCoverPages: allFeedGatsbyBlog {  
      edges {  
        node {  
          title  
          link  
        }  
      }  
    }`  
  }  
}
```



Plone

Out of the Box

Enablers

- Hierarchical content management
- Customizable content types
- Flexible publication workflows
- Effective and expiration dates
- High quality extensible REST API



Excellences

Curated use-cases

- Standalone spin-off web sites
- CMS part of GatsbyJS web apps
- Content configuration management

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Seen challenges

- WYSIWYG → WYSIWYM
- Release management



Status of gatsby-source-plone

Done

- Incremental Plone content sourcing
- Selectable site root with baseURL option
- Support for rich text, images and files
- Rich text to React w/ Gatsby links and images
- GraphQL queries by _path or by hierarchy
- Websocket-ready for instant develop updates



Future of gatsby-source-plone

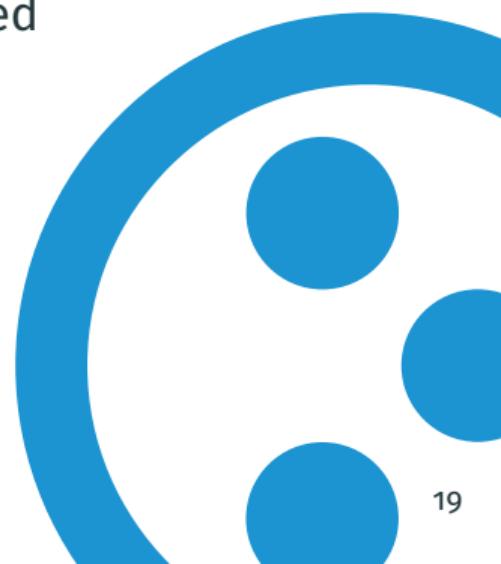
To do

- Support custom rich text, image and file fields

Issue: Only fields text, image and file are supported

- Path prefixing or namespacing support for multiple plugin instances

Issue: Instances may override each others' nodes



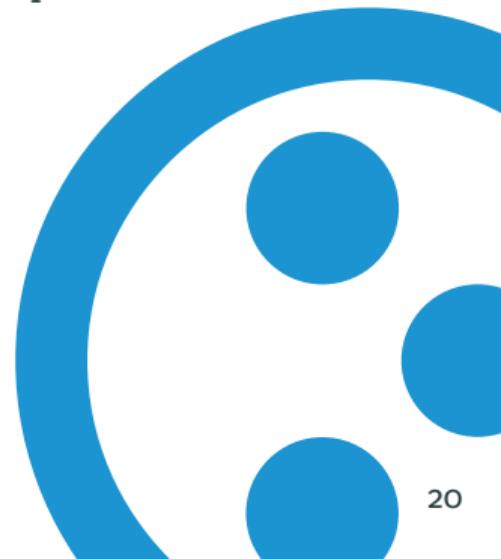
Get Started

Create a new project

```
$ npx gatsby new my-gatsby-project  
$ cd my-gatsby-project  
$ yarn add git+https://github.com/collective/gatsby-source-plone
```

Add a Plone source in ./gatsby-config.js with

```
plugins: [  
  { resolve: 'gatsby-source-plone',  
    options: {  
      baseUrl: 'https://plonedemo.kitconcept.com/en',  
    },  
  },  
,
```



Start GatsbyJS development server

```
$ yarn gatsby develop
```

Open browser at `http://localhost:8000/___graphql`

The screenshot shows the GraphQL playground interface. The top navigation bar includes tabs for 'Explorer', 'GraphQL' (which is active), 'Prettify', 'History', 'Explorer', and 'Code Exporter'. The left sidebar contains a tree view of available queries, including 'MyQuery', 'allDirectory', 'allFile', 'allImageSharp', 'allPloneBreadcrumbs', 'allPloneDocument' (selected), and its sub-fields 'filter', 'limit', 'skip', 'sort', 'distinct', and 'edges'. The main area displays a query result for 'MyQuery'. The query itself is:

```
query MyQuery {
  allPloneFolder {
    edges {
      node {
        _id
        _path
        title
      }
    }
  }
  allPloneDocument {
    edges {
      node {
        _id
        _path
        title
      }
    }
  }
}
```

The resulting JSON data is:

```
{
  "data": {
    "allPloneFolder": {
      "edges": [
        {
          "node": {
            "_id": "demo",
            "_path": "/demo/",
            "title": "Demo"
          }
        }
      ]
    },
    "allPloneDocument": [
      {
        "node": {
          "_id": "demo",
          "_path": "/demo/",
          "title": "Demo"
        }
      }
    ]
  }
}
```

Learn GatsbyJS

- gatsbyjs.org/tutorial
- collective.github.io/gatsby-source-plone

Ask for help

- github.com/collective/gatsby-source-plone/issues



More of gatsby-source-plone

Web site examples

- github.com/collective/gatsby-source-plone
- github.com/collective/gatsby-starter-plone

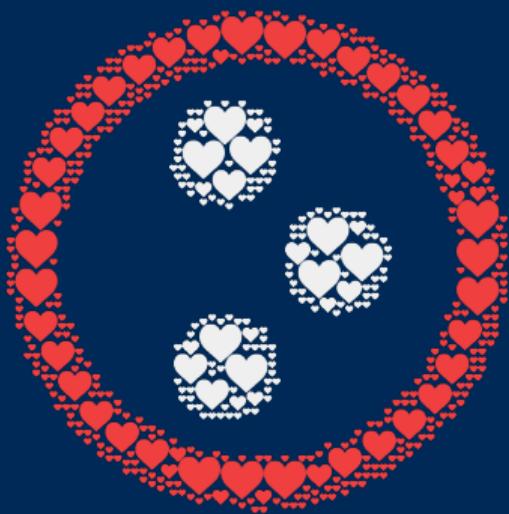
Landing page example

- github.com/datakurre/gatsby-starter-plone-brochure

Content configuration example

- github.com/datakurre/gatsby-theme-ds-player





datakurre.github.io/ploneconf2019