

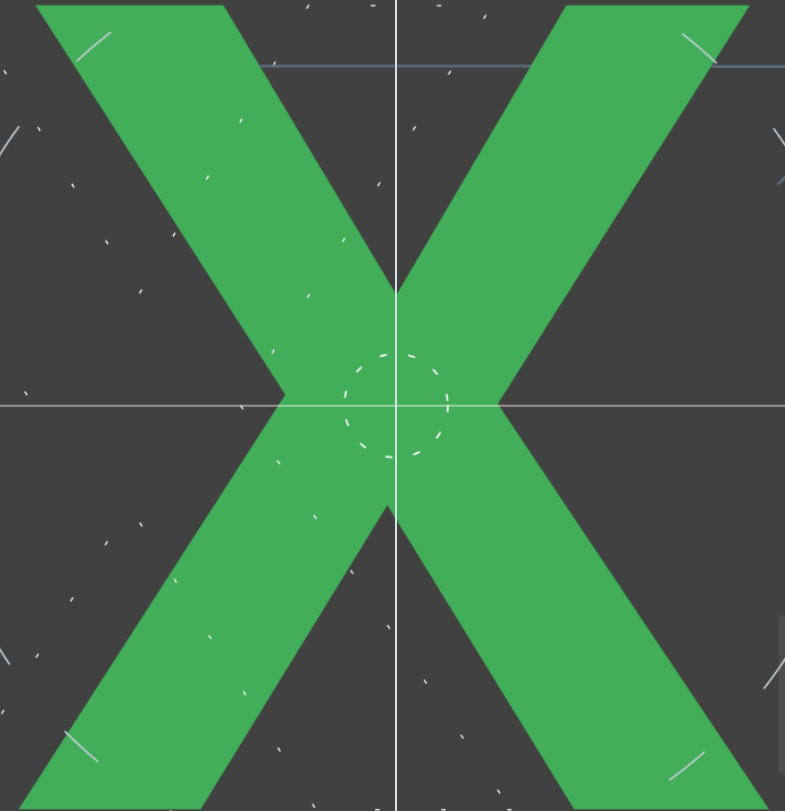
#TXS2020

SDL*

Building a website with semantic content models

Andriy Zhidko & Oleksii Shapovalov

10 December 2020



Agenda

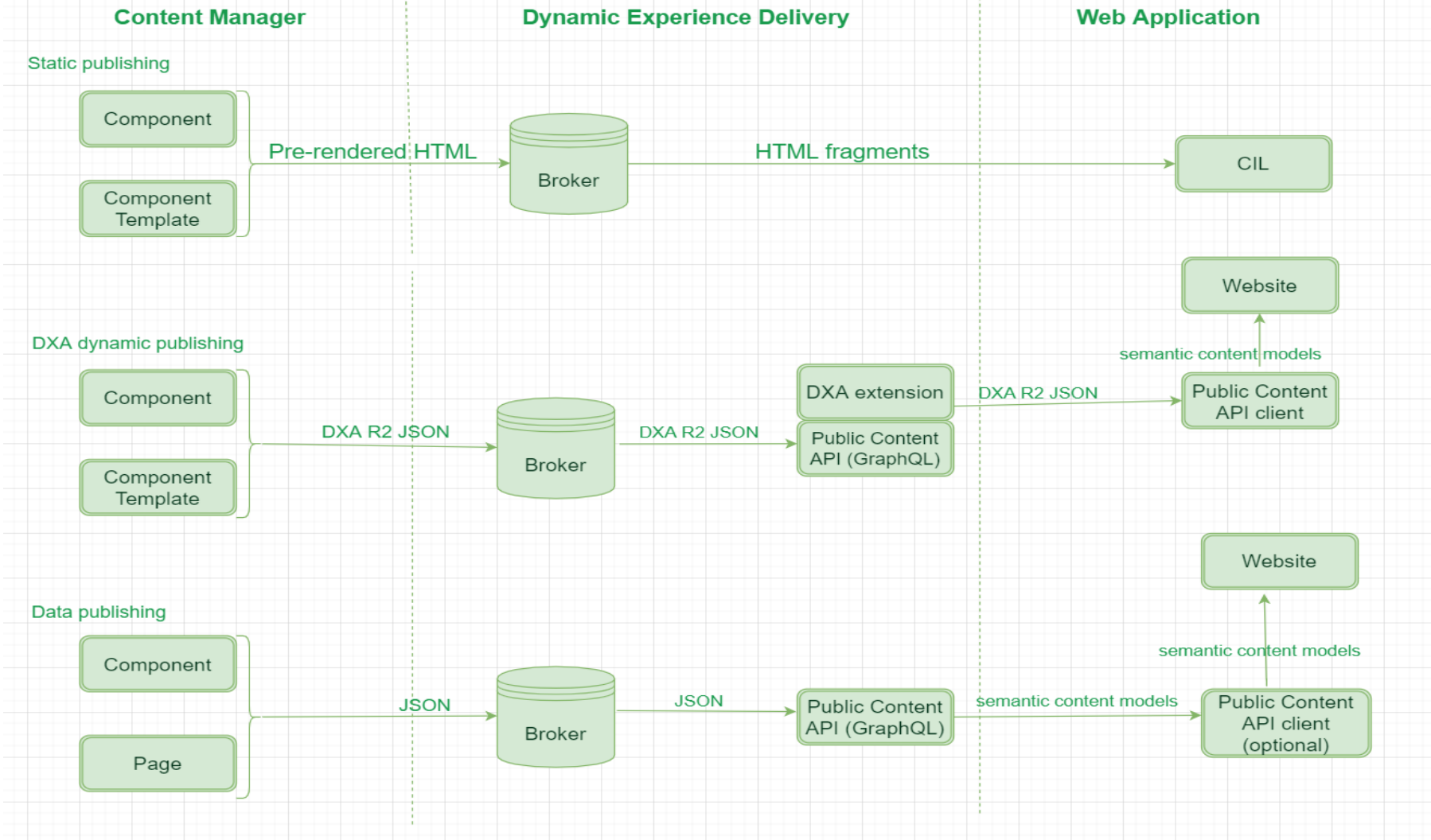


- Evolution of publishing models
- Benefits
- Content modeling on Content Manager side
- Introduction to semantic content models
- Hands-on



Evolution of publishing models

Publishing models



Benefits



- **Improve your headless capabilities for providing omnichannel experiences**
 - Because semantic content modelling on the delivery side allows you to classify content as a content type
- **Reduce total cost of ownership (TCO)**
 - Because we hide the complexity of the CMS, allowing any developer to consume the data for their application
- **Enjoy a shorter time to market**
 - No waiting or 'content freezes'
- **Publish faster**



Content modeling on Content Manager side



New field properties for the schema

- Applicable for semantic content models
- Each schema field will have checkbox to specify:
 - if it should be published
 - if it should be indexed on DXD
- By default both properties will be enabled

Field Details

* XML Name:

* Description:

Type:

Mandatory

Enable for inline editing

Translatable

Publish this field when you publish an item that uses this Schema

Make this field searchable for website visitors



General settings for schema

- Possibility to exclude item from publishing or indexing
- Applicable to:
 - Component schema
 - Metadata schema
 - Multimedia schema
 - Region schema

The screenshot shows the 'General' settings tab for a schema. The interface includes several tabs: 'General', 'Design', 'Metadata Design', 'Source', 'Workflow', and 'Info'. The 'General' tab is active and contains the following fields:

- * Name: Article
- * Description: Article
- * Schema Type: Schema (dropdown menu)
- * Root Element Name: Content

Below these fields, there are two checkboxes, both of which are checked:

- Enable each Schema field to be made publishable when authors publish an item based on this Schema
- Enable each Schema field to be made searchable for website visitors



Semantic content models



Semantic content models

- Customers can define their own semantic content models using GraphQL Schema Definition Language
- Allow customers to query/filter using familiar concepts (for example: article, news, post, blog etc.)

```
type Post {  
  id: String!  
  title: String!  
  publishedAt: DateTime!  
  likes: Int! @default(value: 0)  
  blog: Blog @relation(name: "Posts")  
}
```

```
type Blog {  
  id: String!  
  name: String!  
  description: String  
  posts: [Post!]! @relation(name:  
"Posts")  
}
```



Semantic content models in DXD

- Semantic content models exposed natively in the content API
- Refined GraphQL API to support custom schema types within existing root queries:
 - items
 - component
 - page
- Also custom root queries

```
page(namespaceId: 1, publicationId: 2,
      pageId: 76) {
  content {
    ... on UntypedContent {
      data {
      }
    }
  }
}
```

```
page(namespaceId: 1, publicationId: 2,
      pageId: 76) {
  content {
    ... on Post {
      id
      title
    }
  }
}
```



DXD configuration

- Semantic content models are searched from classpath:

`*.graphqls`

in the schemas directory, eg:

`content-
service/config/schemas`

- Can be managed using add-on service extension

Example configuration of the type 'Post' within `cd.graphqls`:

```
type Post implements Content {  
  id: ID  
  type: String  
  data: PostBody  
}  
type PostBody {  
  id: String  
  title: String  
  publishedAt: String  
  likes: Int  
}
```



How is it consumed?

- Customers can use the GraphQL client of their own choosing
- Custom semantic content models are automatically exposed in the GraphQL API documentation

<https://nexus.js.org/>

<https://www.graphql-java.com/>

<https://graphql-dotnet.github.io/>

#TXS2020



Hands on

New way of developing an SDL Tridion powered site



- Define your content structure
- Publish
- Set up your optional semantic content models
- Develop your website
 - Consume content using GraphQL endpoint

#TXS2020



SDL (LSE:SDL) is the intelligent language and content company. For over 25 years we've helped companies communicate with confidence and deliver transformative business results by enabling powerful experiences that engage customers across multiple touchpoints worldwide.

Are you in the know? Find out why the top global brands use SDL at sdl.com. Follow us on Twitter, LinkedIn and Facebook.

Copyright © 2020 SDL Ltd. All Rights Reserved. The SDL name and logo, and SDL product and service names are trademarks of SDL Ltd and/or its subsidiaries, some of which may be registered. Other company, product or service names are the property of their respective holders.