Adobe Experience Manager Sites – Core Components

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Agenda

1. What are the Core Components and what they do
2. Demo of the main components and features
3. Technical: How to use and extend them

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Core Components

AEM Sites components that cover the most common web content needs.

Core Components are

- **Pre-Configurable** Templates can define how the page authors can use them.
- **Versatile** Authors can create most kind of content with them.
- **Easy to Use** Authors can efficiently create and manage content with them.
- **Production Ready** Useable as-is, because they are robust, well tested and perform well.
- **Accessible** They comply WCAG 2.0 standard, provide ARIA labels and support keyboard navigation.
- **Easy to Style** The components implement the Style System and the markup follows BEM CSS naming.
- **SEO Friendly** The HTML output is semantic and provides schema.org microdata annotations.
- **PWA/SPA/App Ready** Their streamlined JSON output can also be used for client-side rendering.
- **Extensible** To cover custom needs but without starting from scratch, everything can be extended.
- **Open Sourced** If something is not as it should, contribute improvements on GitHub (Apache License).
- **Versioned** We won't break your site when improving things that might impact you.

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Launched on November 20, 2018

Core Components 2.2.2

- Includes 19 components
- Provides enhancements for the recently released Tabs and Carousel components
- Minimum requirements: 6.3.3.0 & 6.4.2.0

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The Components

Template components

1. **Page**: Responsive page that works well with the Template Editor.
2. **Navigation**: Site navigation that handles globalized structures.
3. **Language Navigation**: Displays the language structure of a site.
4. **Breadcrumb**: Lists the hierarchy of parent pages.
5. **Quick Search**: Incremental search field.

Atomic components

6. **Title**: Headings configurable to allow levels 1 to 6.
7. **Text**: Plain or rich text with configurable capabilities.
8. **Image**: Smart image display with configurable capabilities.

Social components

9. **Sharing**: Facebook and Pinterest widgets.

Reference components

10. **List**: Lists pages that match the configured criteria.
11. **Teaser**: Visual link to a page teasing its content with an image.
12. **Content Fragment**: Displays reusable content.

Container components

13. **Carousel**: Slideshow presentation of content.
14. **Tabs**: Organizes content into accessible tabs.

Form components

15. **Form Container**: Form paragraph system.
16. **Form Text**: Text input field (text, text area, email, phone, date, …).
17. **Form Options**: Multi-input filed (checkboxes, radios, drop-down, …).
18. **Form Button**: Submit or scriptable button.
19. **Form Hidden**: Invisible input field, for sending information along.

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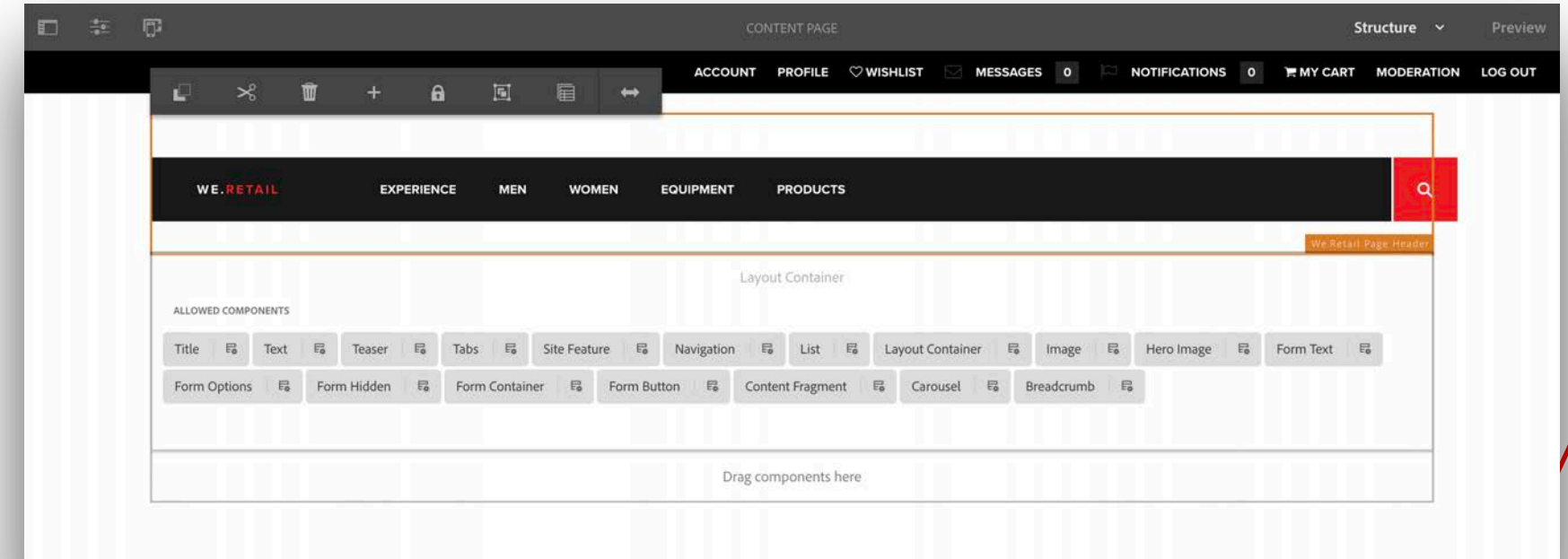
Template Editor

The Core Components require the Template Editor.

Purpose

- Replaces the classic UI Design mode.
- This is where the components can be pre-configured for the author.
- Offers a UI to compose page variations, instead of hard-coding them.
- Supports the responsive grid to accommodate for different layout.



- page
- page_about
- page_activity
- page_blueprint
- page_calendar
- page_campaign_newsletter
- page_campaign_profile
- page_communities
- page_community
- page_company
- page_company_sidebar_left
- page_geometrixx_newsletter
- page_home
- page_home_mobile
- page_journal
- page_mobile
- page_newevent
- page_no_sidebar
- page_product
- page_product_mobile
- page_profile
- page_sidebar
- page_sidebar_mobile
- page_sidebar_no_breadcrumb
- page_sidebar_render_together
- page_sidebar_right
- page_sidebar_right_mobile
- page_social_profile

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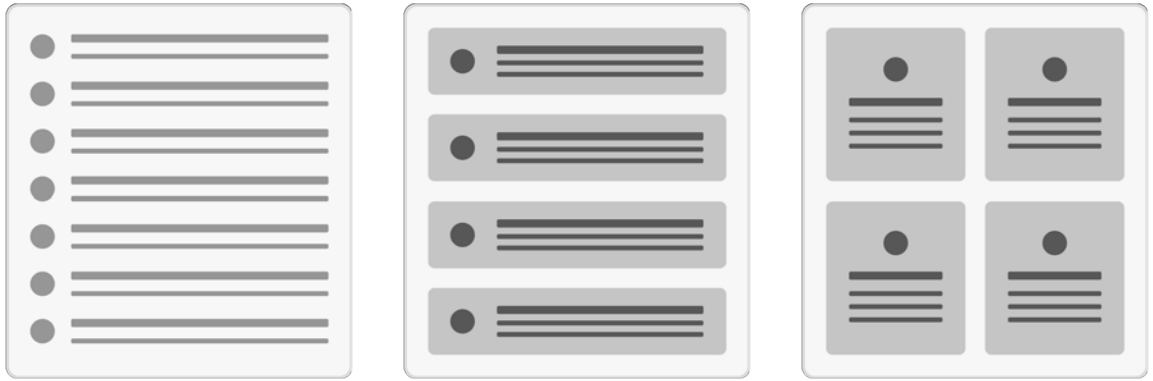
Style System

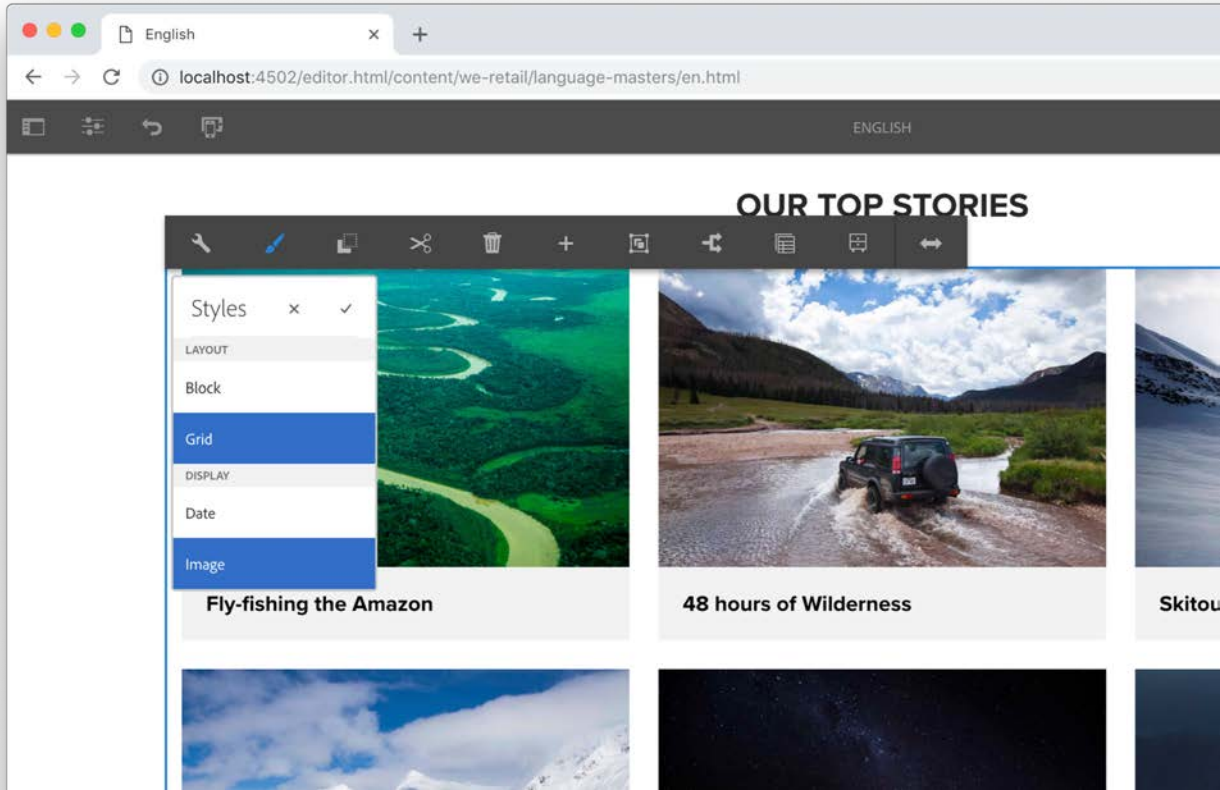
The Core Components implement the Style System.

Purpose

- Allow content authors to apply visual variants to components.
- Avoids duplicating the components for just applying a different CSS class to it.

Example of a List component that can have different visual representations, but a single implementation.





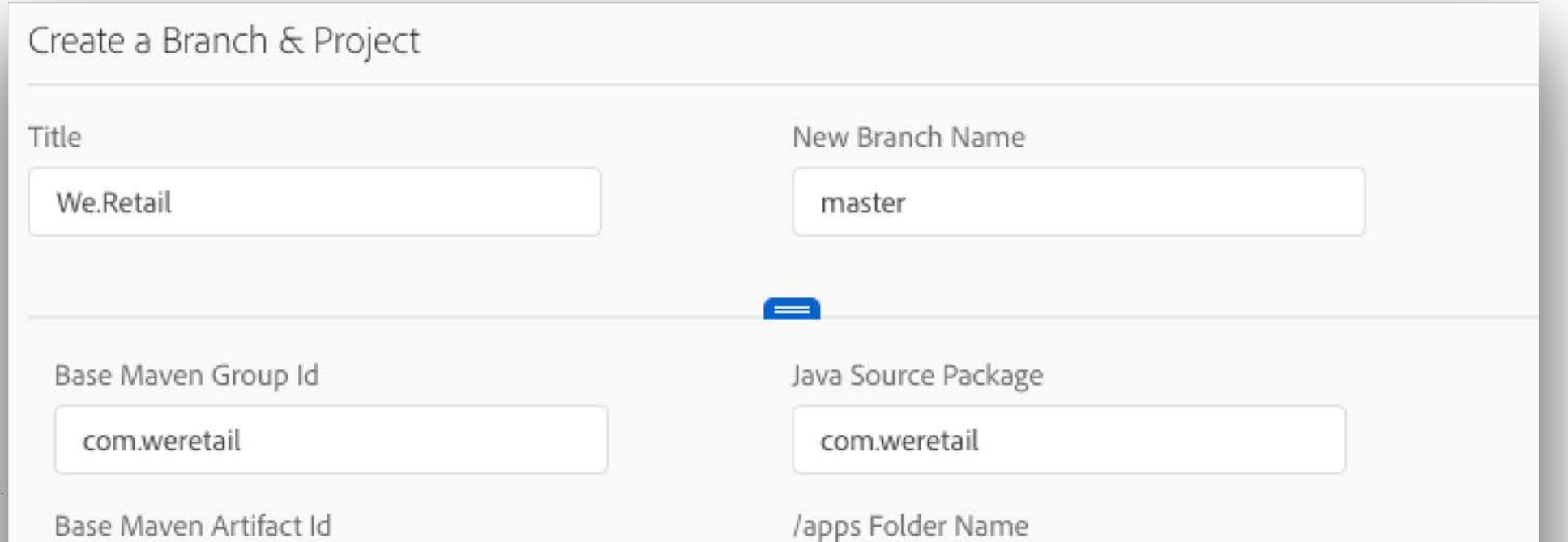
Archetype

The Core Components are featured in the AEM Project Archetype.

Purpose

- Template to easily create a new AEM Sites project.
- Enables all Core Components capabilities: Template Editor, Style System & Responsive Layout.

The new Cloud Manager provides a UI to create new AEM projects which uses the Archetype.



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Enough talking!

Show me the demo.

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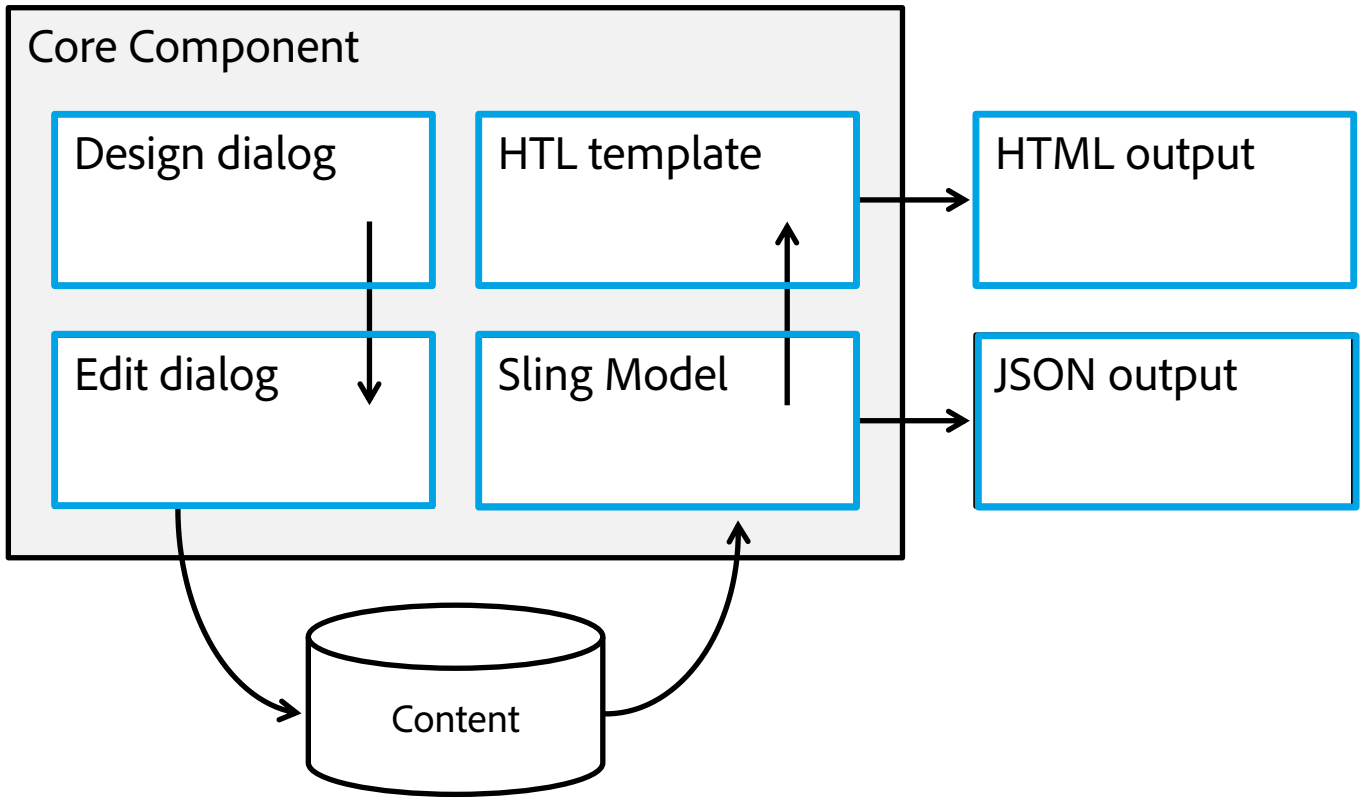
Anatomy

What makes the Core Components versatile and extensible.



- Design dialog defines what authors can or cannot do in the edit dialog.
- Edit dialog shows authors only the options they are allowed to use.
- Sling Model verifies and prepares the content for the view (template).
- Result of the Sling Model can be serialized to JSON for SPA use-cases.
- HTL renders the HTML server-side for traditional server-side rendering.
- HTML output is semantic, accessible, search-engine optimized, and easy to style.
- Implement the Style System.

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Content Repository

CONTENT

/content/my-site/my-page/jcr:content/root

Resource

/my-title

sling:resourceType = my-site/components/title

jcr:title = Hello World

COMPONENTS

/apps/my-site/components

Proxy Cmp

/title

sling:resourceSuperType = core/wcm/components/title/v1/title

jcr:title = Title

componentGroup = My Site

/apps/core/wcm/components/title/v1

Core Cmp

/title

/cq:dialog

/cq:design_dialog

/title.html

```
<h1 data-sly-use.model="com.adobe.cq.wcm.core.components.models.Title">
    ${model.text}
</h1>
```

OSGi Java Runtime

MODELS

com.adobe.cq.wcm.core.components.models

Interface

interface **Title**

getText()

com.adobe.cq.wcm.core.components.models.impl.v1

Implementation

```
@Model(adaptables = SlingHttpServletRequest.class,
       adapters = Title.class,
       resourceType = "core/wcm/components/title/v1/title")
```

class **TitleImpl** implements **Title**

getText()

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CORE COMPONENT

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OSGi Java Runtime

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STABLE API

COMPONENTS

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Delegation Pattern for Sling Models

The implementation of the Core Component's models is private, but can be extended with the delegation pattern.

```
@Model(adaptables = SlingHttpServletRequest.class,
       adapters = Title.class,
       resourceType = "myproject/components/pageHeadline")
public class PageHeadline implements Title {

    @ScriptVariable private Page currentPage;

    @Self @Via(type = ResourceSuperType.class)
    private Title title;

    @Override public String getText() {
        return currentPage.getTitle();
    }

    @Override public String getType() {
        return title.getType();
    }
}
```

→ https://github.com/adobe/aem-core-wcm-components/wiki/Delegation-Pattern-for-Sling-Models

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Versioning

Incompatible changes to following aspects of components will result in a new version of them:

1. Sling Models (following semantic versioning guidelines)
2. HTL Scripts and Templates
3. HTML Markup and CSS Selectors
4. JSON Representation
5. Dialogs

→ https://github.com/adobe/aem-core-wcm-components/wiki/Versioning-Policies

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Conclusion

The Core Components have a ton of features, don't waste your time by re-implementing them. They are versatile and extensible; leverage them and contribute in case anything is missing.

→ **github.com/adobe/aem-core-wcm-components**

Get started with the "WKND" Tutorial → **bit.ly/aem-wknd**

Do you want us to reach out to you for feedback? → **bit.ly/aem-core-cmp-reg**

March 26–28, 2019: Please join us at Summit, we'll present several sessions and labs about related topics like "Developing Sites" and "Modernizing an existing implementation".

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