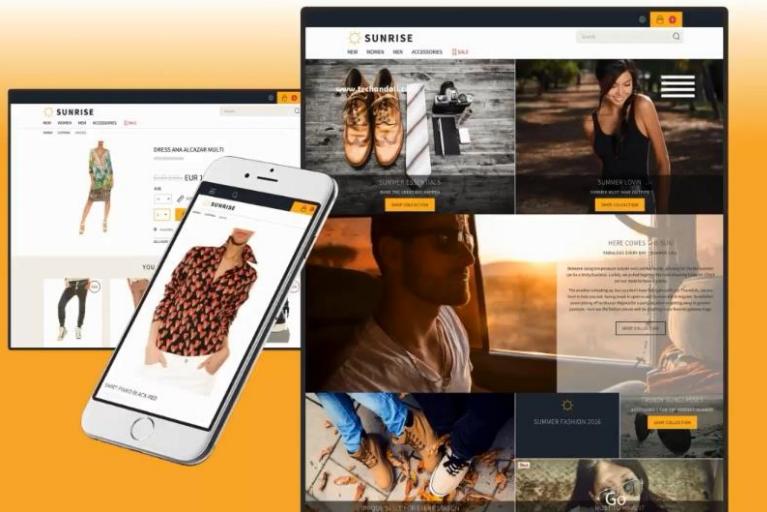
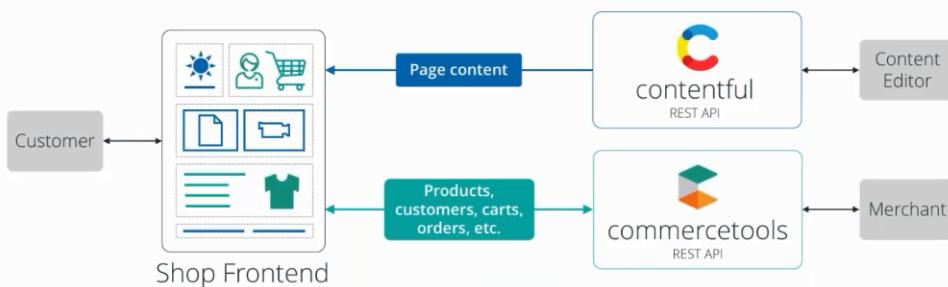


match made in Heaven!



commercetools + contentful



There are 2 sources of content that are integrated, Contentful for the page content and layout, Commercetools for the merchant and commerce data.

Agenda

- **contentful** – Content Management
- **commercetools** – Next Generation E-Commerce Platform
- **SUNRISE** in a few words.
- **Integration** of contentful with SUNRISE
- **Q&A** Session



An API-centric content management infrastructure
with flexible APIs and a global CDN.

Let's you create and manage your content in a single place and then distribute them to various channels for use.

**Make your content *flexible*
and *programmable*.**

OUR APIs

01 CONTENT DELIVERY API

Responsible for delivering published content to your end application. Also keeps content synced & up-to-date.

03 PREVIEW API

View draft and published content. Perfect for staging environments.

02 CONTENT MANAGEMENT API

Use directly or via our web app to create and manage your content.

04 IMAGES API

Dynamically manipulate images on the fly; cropping, resizing, compression, etc.

```
$ curl 'https://cdn.contentful.com/spaces/  
access_token=0b7f6x59a0&content_type=book'  
  
{  
  "total" : 2,  
  "items" : [  
    {  
      "fields" : {  
        "name" : "An introduction to regul  
        "author" : "Larry Wall",  
        "description" : "Now you have two  
      }  
    },  
    {  
      "fields" : {  
        "name" : "How to manage content in  
        "author" : "Contentful",  
        "description" : "Make an API reque  
      }  
    },  
  ]  
}
```



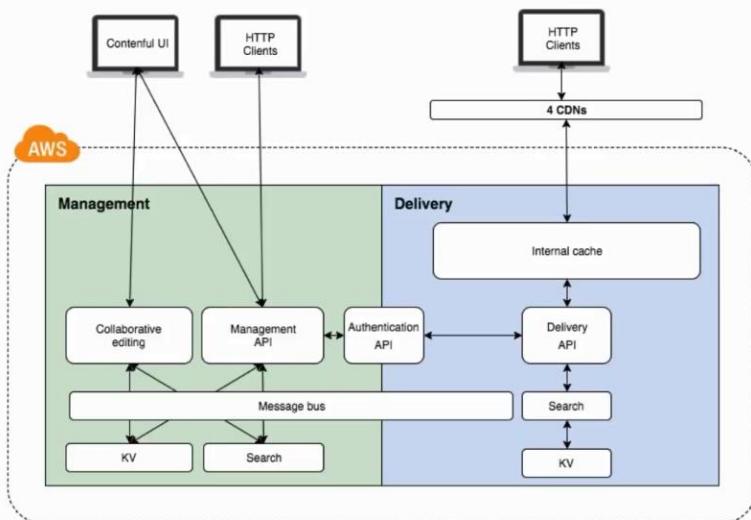
Powered by



6

The Contentful web app runs on the Management API

BEHIND THE CURTAIN



The screenshot shows the Contentful content editor interface for a product named "SoSo Wall Clock".

Product name (required): SoSo Wall Clock
15 characters

Slug: soso-wall-clock
The slug is auto-generated based on the title field

Description:

The newly released SoSo Clock from Lemnos marries simple, clean design and bold, striking features. Its saturated marigold face is a lively pop of color to white or grey walls, but would also pair nicely with navy and maroon. Where most clocks feature numbers at the border of the clock, the SoSo brings them in tight to the middle, leaving a wide space between the numbers and the slight frame. The hour hand provides a nice interruption to the black and yellow of the clock - it is featured in a brilliant white. Despite its bold color and contrast, the SoSo maintains a clean, pure aesthetic that is suitable to a variety of contemporary interiors.

Editor **Preview** **Insert media**

STATUS: Status: Published (pending changes)
Publish changes

Last saved Apr 24, 2017

PREVIEW: Open preview

By default, the Discovery App is used to preview content. Set up a custom content preview.

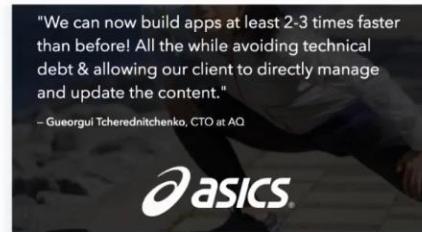
TRANSLATION: en-US Change

VERSIONS: Apr 24, 2017 PUBLISHED

Compare with current version

CONTENT VS. APPEARANCE

Contentful is a decoupled platform, meaning your content is separated from its appearance.



ASICS / AQ make marathon racing more engaging

IN OUR WEB APP

- The raw text, media files
- Content is stored and delivered in a generic, device-agnostic format.

ON YOUR WEBSITE

- Formatting applied in the end application (website, mobile app,...)
- Fonts, colors, alignment, etc.



Powered by



10

The New York Times

Copyright



Category



Title



Author



Lead



Body



NEW YORK, MONDAY, MARCH 29, 1999

DANCE REVIEW

When Wittiness Competes With Casual Disorientation

By JENNIFER DUNNING

There were ominous signs that one was in for an evening of art that must be suffered for. But "Middle of Nowhere," presented by the Unterwegstheater on Monday at the Kitchen, was a decidedly pleasant and provocative surprise.

The 10-year-old dance and theater company from Berlin, Germany, seen here in its American debut, came impressively close to creating a sense of time and place that provoked rather than irritated. The title of the evening-long piece, Projected video imagery on a free-standing door and the back wall, which included clips of moving cars, birds, cranes in a three-dimensional space that seemed without a center or perimeter for most of the evening. Even the dancing — a master mostly of slides, twists and soft, entrancing

partnering — seemed to occur in something other than space.

The five likable, physically daring and often witty (Yannis Adonis, Talal Al-Muhanna, Alexandra Damiani, Bernhard Fauser and Jennifer Howard) were casually indistinct, but the unassumingness and uniqueness of the performers made that disorientation enjoyable.

There were wittily witty moments, among them Ms. Howard's unsuccessful attempt to communicate her whereabouts in a continuing referendum of orientation. The dancier opening of the doors at times to scrutinize a seeming vacuum was eerilyarming. Some of that magic was lost, though, even when the lighting changed, fully illuminating the performing space.

Choreographed by Jai Gonzales, co-director of the company with Mr. Fauser, "Middle of Nowhere" was



Bernhard Fauser, front, and Yannis Adonis of Unterwegstheater.

Photo



Photographer

Photo Caption



Powered by



11

NEW YORK, MONDAY, MARCH 29, 1999

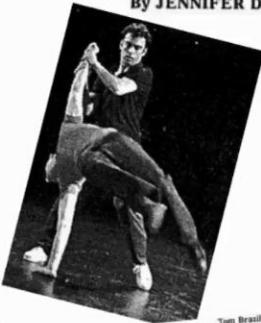
DANCE REVIEW

When Wittiness Competes With Casual Disorientation

By JENNIFER DUNNING

There were ominous signs that one was in for an evening of art that must be suffered for. But "Middle of Nowhere," presented by the Unterwegstheater on Wednesday at the Kitchen, was a decidedly pleasant and provocative surprise.

The 10-year-old dance and theater company from Heidelberg, Germany, seen here in its American debut, came impressively close to creating a sense of time and place that provocatively measured up to the title of the eveninglong piece. Projected video imagery on a free-standing door and the back wall, which included clips of moving cars, helped create a three-dimensional space that seemed without a center or perimeters for most of the evening. Even the dancing — a matter mostly of slides, twists and soft, entwining



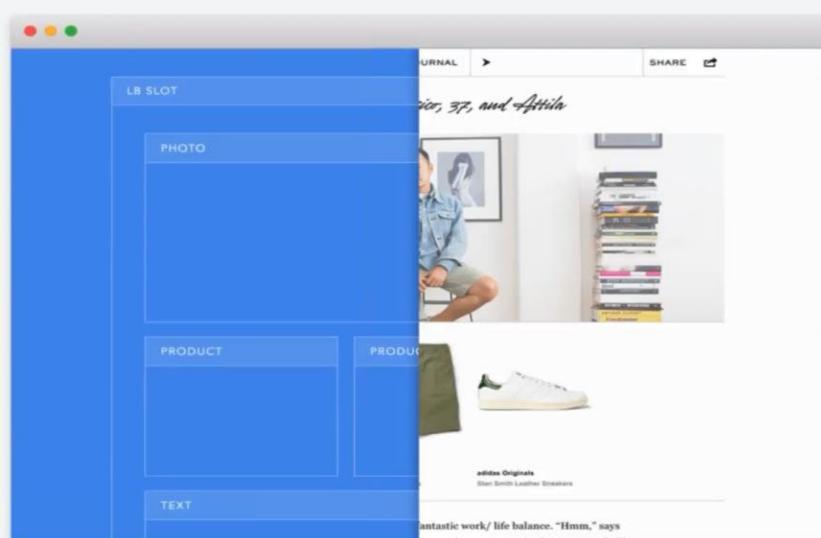
Tom Bräutigam, Bernhard Fauser, front, and Yannis Adoniou of Unterwegstheater.

SUNRISE

Powered by

commercetools

contentful 12



commercetools

C contentful

commercetools – the platform



100 % Cloud



API-first product from
Day 1 on



Auto scaling



Handles Global Loads



Highest availability



Unmatched
performance



Agnostic to programming
languages



100+ feature release
per year, zero downtime
deployed



Powered by



We provide an omni-channel commerce API that can be consumed by different programming languages.

What can we build?

Our Demo Shop [sunrise.commercetools.com](https://sunrise.commercetools.com/en/home)

The screenshot shows the Sunrise demo shop website. The header features the Sunrise logo, navigation links for STORES, HELP, and CALL US ON +44 123 456 000, and a sign-in button. The main content area displays two promotional banners: "SUMMER ESSENTIALS MAKE THE GREAT DAY HAPPEN" and "SUMMER LOVIN' SUMMER MUST HAVE OUTFITS". Below these are product cards for a "T-Shirt Nike white" (Size: XXS, Price: €29.61, Quantity: 1) and a "PICKUP SUNRISE Store Berlin" entry. A large image of a man with glasses and a beard is on the left, and a woman in a dark top is on the right. At the bottom, there's a quote about summer dressing and a note about the weather being hot.

The mobile device displays the Sunrise app interface, showing a product card for a "T-Shirt Nike white" and pickup information for the "SUNRISE Store Berlin". The smartwatch next to it shows a map with a location pin and the text "Open jacket Kathmandu Postre olive is ready for pickup".

commercetools

contentful 17

What's **behind** the shop?



Closed Cloud Core

The core platform, used via the HTTP API



Merchant & Admin Center: The Management UIs

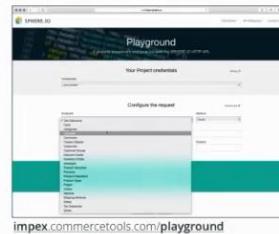


Open Source Ecosystem

„SUNRISE“: Reference implementations of web shops and native mobile apps



CLIs, Integrations & SDKs



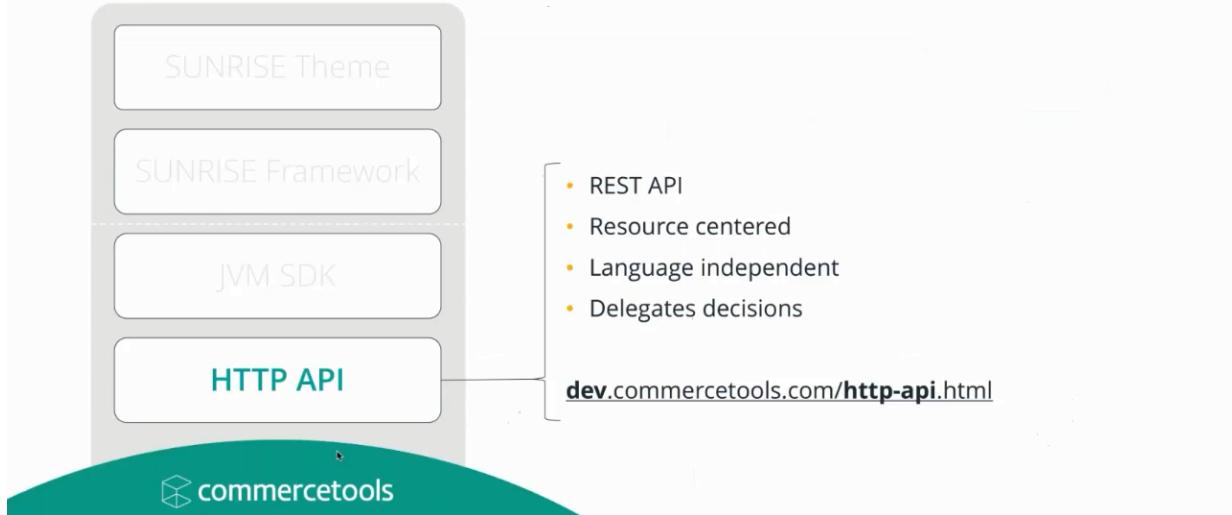
The Merchant & Admin Center is where you can manage your shop settings and content, we also provide SDKs and tools for the SUNRISE apps.

Merchant Center mc.commercetools.com

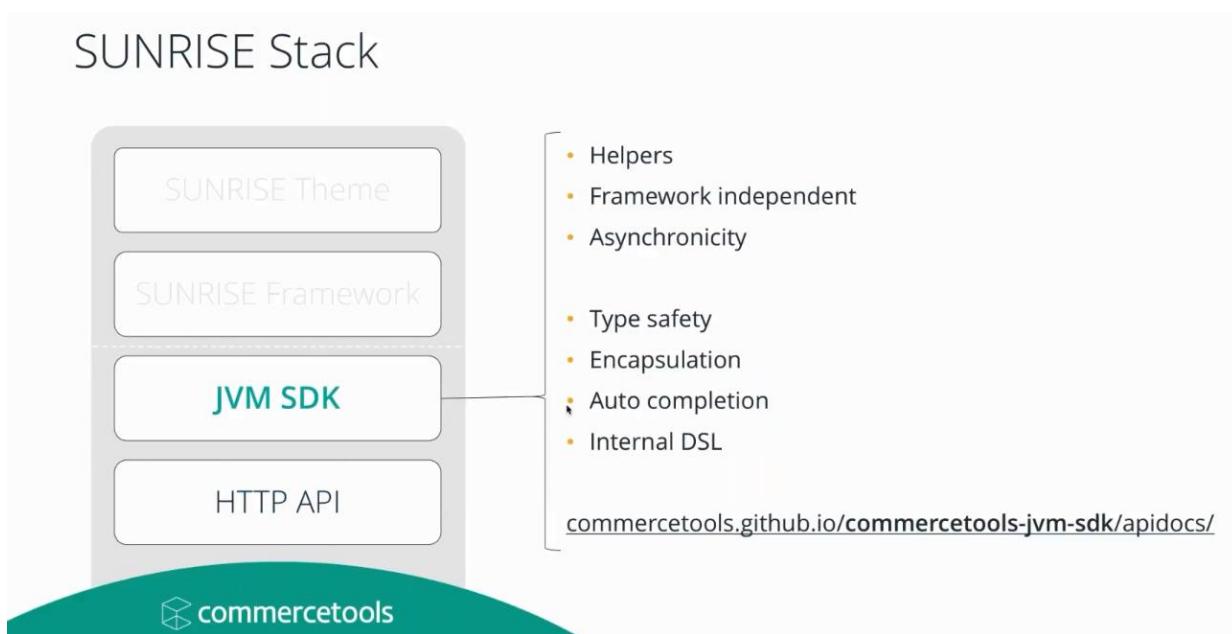
- The Merchant Center is the successor of the Admin Center.

Our e-commerce product offers many features like Product classification, localization of text fields, product modelling, configuration of variations, inventory and price management based on various facets like country, distribution channel, customer group, etc.

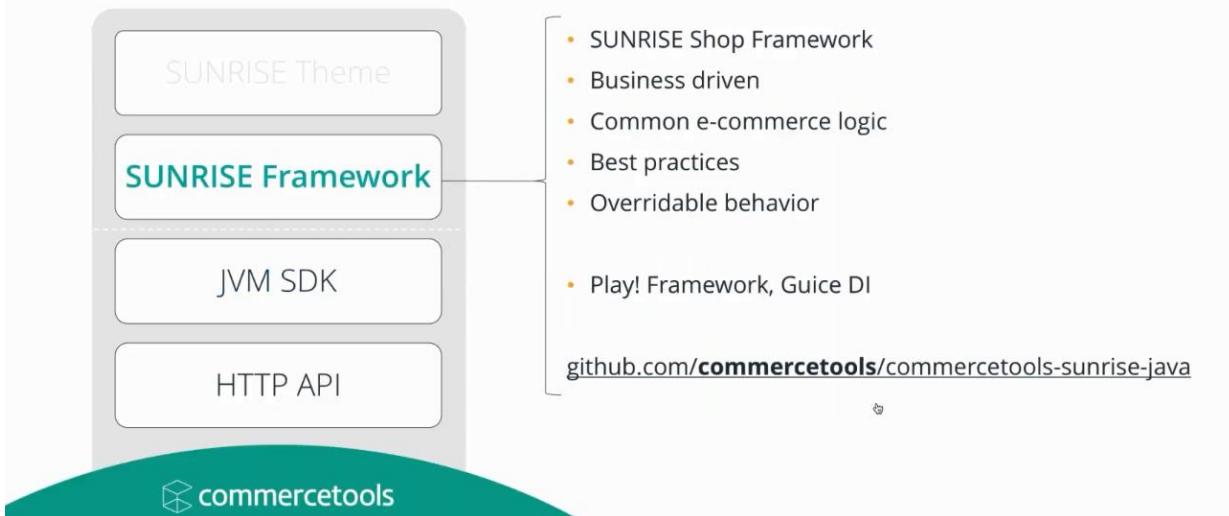
SUNRISE Stack



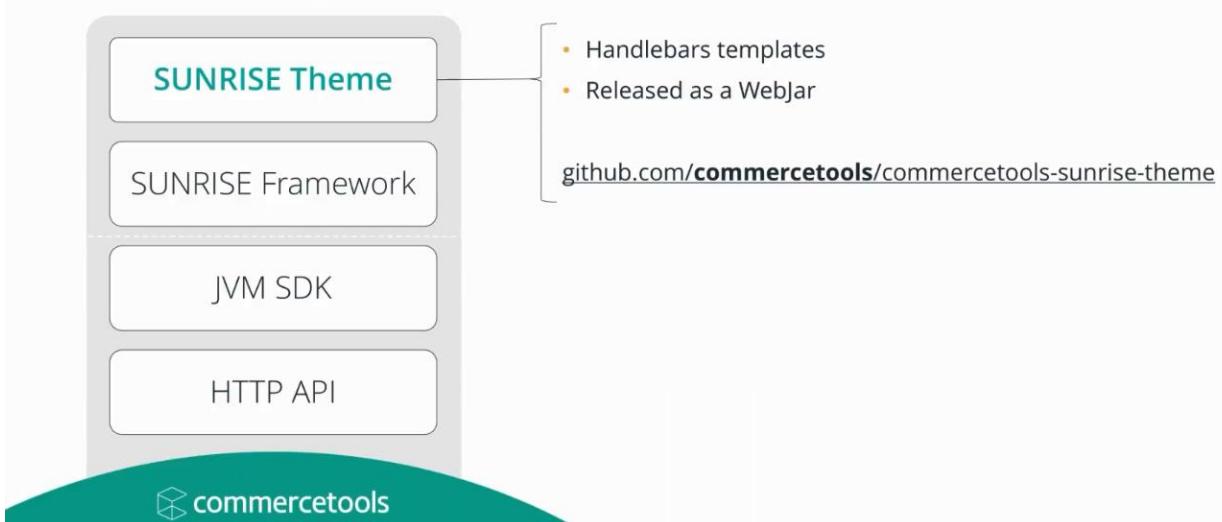
These are the technologies that power the shop.



SUNRISE Stack



SUNRISE Stack



And much more...

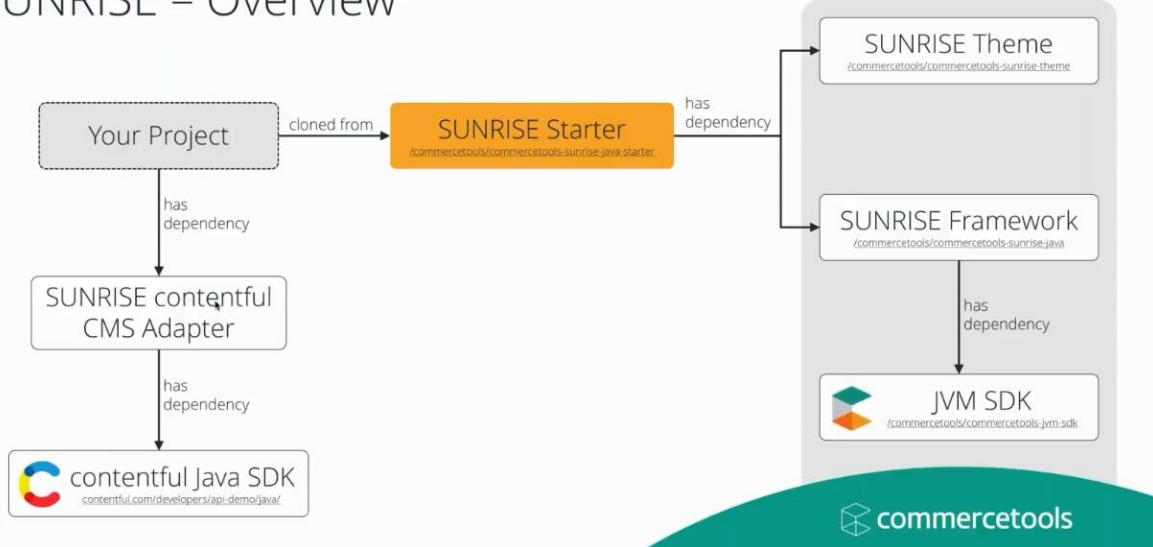
Developer Home
dev.commercetools.com

Feature Guide
go.commercetools.com/download-feature-guide-en





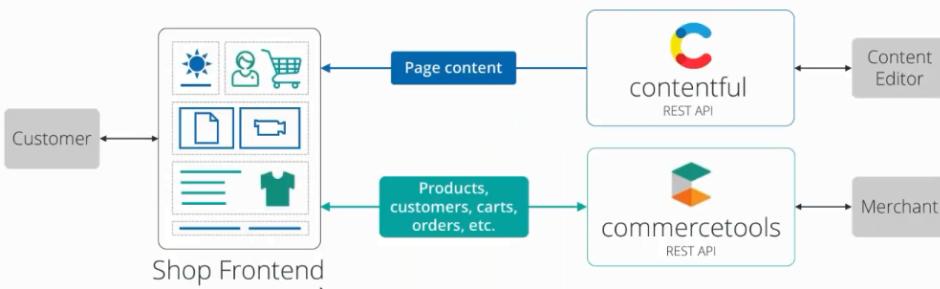
SUNRISE – Overview



This is the structure you need to know for working with Sunrise.

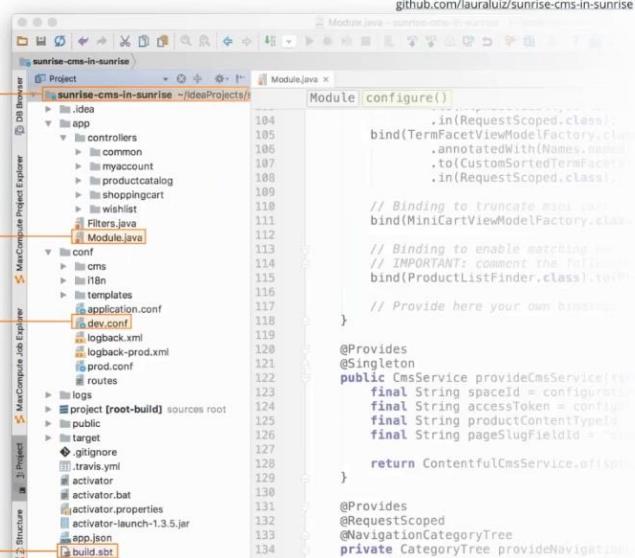
Demo

commercetools + contentful



contentful Integration – steps

1. Clone the SUNRISE starter project
 2. Add contentful dependency
 3. Provide the CMS service
 4. Enter your commercetools project and contentful space API credentials



Powered by



Thank You

www.commercetools.com

Houssein Ben Amor
Technical Trainer
Houssein.benamor@commercetools.com
[houvada](https://houvada.com)

Laura Luiz
Software Engineer
laura.luiz@commercetools.com

www.contentful.com

William Courtney
Onboarding Manager
wiliam@contentful.com



Powered by



Sunrise for training 39 ↗

Houssein Ben Amor

Product name	SKU	Availability	Status
Suit Tagliatore dark grey	M0E200000...		
Blazer Cantarelli blue	M0E200000...		
Espadrille Moschino Love multi	M0E200000...		
Bag "Dylan" Guess	A0E200000...		
Pumps "Flex" Michael Kors beige	M0E200000...		
Dress Ana Alcazar multi	M0E200000...		
Overall Pinko black	M0E200000...		
Sneakers Philippe Model blue	M0E200000...		
Scarf Altea dark blue	A0E200000...		
Bag Moschino Love black	A0E200000...		
Shirt Himons beige-white	M0E200000...		
Chino "Asly" Dondup cream	M0E200000...		
Shirt Jucca blue	M0E200000...		
Bag "Sabrina" medium Gabs	A0E200000...		
Polo Michael Kors blue	M0E200000...		

Screenshot of the Admin Center interface for a product named "Suit Tagliatore dark grey".

The top navigation bar includes links for p-portal, Webinar, LEO.org, Inbox, Cal, Drive, CT-Dataset, Trello, JavaDoc, Merchant Center, Admin Center, Admin Center, IMPEX, JIRA, and Platform Status Page.

The left sidebar lists navigation items: Dashboard, Products, Categories, Orders, Customers, Discounts, Settings, and Developers.

The main content area shows the product details:

- OVERVIEW**: Includes links for GENERAL INFO, PRICES, IMAGES, VARIANTS, CATEGORIES, STOCK, and SEO.
- Product Title:** Suit Tagliatore dark grey
- Image:** A circular thumbnail showing a dark grey suit jacket.
- SKU:** tagliatore-suit-07UEAO70-darkgrey
- Buttons:** Edit, Delete, and other actions.

The product has the following details:

- General Info:** n/a
- Prices:** Master Variant: Min € 614.75, Max € 937.50
- Images:** An image of a man wearing a dark grey suit.
- Variants:** 13 variants
- Categories:** Suits

The URL in the browser is: <https://admin.commerce-tools.com/sunrise-for-training-69/products/dtb07949-d588-43e8-90d3-1fab4031120f>

The Admin Center interface displays two main sections:

- Left Screenshot (Variants):** Shows a list of 13 variants for a product. Fields include Master Variant, SKU (M0E2000000DVFF), and Key. Detailed product information includes DATE OF CREATION, MANUFACTURER AID (AID MAXIMILIAN), MATRIX ID (M0E2000000DVFF), BASEID (78978), DESIGNER (Tagliatore), MADE IN ITALY (yes), CROSSELLING (XS), SIZE (34), FILTERCOLOR (en/grey), COLOR DESCRIPTION (en/dark grey), DETAILS (business), and GENDER (Herren).
- Right Screenshot (Product Record):** Shows a detailed view of a product record. Fields include ISONSTOCK, ISLOOK, and SAP EXTERNAL ID. Detailed product information includes DATE OF CREATION (07UEA070 B1161), MANUFACTURER AID (78978), MATRIX ID (M0E2000000DVFF), BASEID (78978), CROSSELLING (XS), SIZE (38), FILTERCOLOR (en/grey), COLOR DESCRIPTION (en/dark grey), DETAILS (business), and GENDER (Herren).

IntelliJ IDEA Project Structure:

- Project Explorer:** Shows the project structure for 'sunrise-cms-in-sunrise' with modules like app, conf, and routes.
- Code Editor:** Displays build.sbt file content:


```
name := "commercetools-sunrise-java-starter"
version := "0.1.0-SNAPSHOT"
scalaVersion := "2.11.8"
val sunriseFrameworkVersion = "1.0.0-M5"

lazy val root = (project in file("."))
  .enablePlugins(PlayJava, SunriseThemeImporterPlugin)
  .configs(IntegrationTest, TestCommon.PlayTest)
  .settings(testCommon.defaultSettings)
  .settings(sunriseThemeJarName in Compile := "commercetools-sunrise-theme")
  .resolvers ++ Seq(
    Resolver.sonatypeRepo("releases"),
    Resolver.bintrayRepo("commercetools", "maven")
  )
  .libraryDependencies ++ Seq(
    cache,
    // SUNRISE Framework dependencies
    "com.commercetools.sunrise" % "product-catalog" % sunriseFrameworkVersion,
    "com.commercetools.sunrise" % "shopping-cart" % sunriseFrameworkVersion,
    "com.commercetools.sunrise" % "my-account" % sunriseFrameworkVersion,
    "com.commercetools.sunrise" % "wishlist" % sunriseFrameworkVersion,
    "com.commercetools.sunrise" % "test-lib" % sunriseFrameworkVersion % "test,it",
    // SUNRISE Theme dependency
    "com.commercetools.sunrise" % "commercetools-sunrise-theme" % "0.66.0",
    "org.webjars" % "webjars-play" % "2.5.0-2"
  )
```
- Terminal:** Shows application startup logs:


```
[info] play.api.Play - Application started (Dev)
[info] Compiling 1 Java source to /Users/housseinbenamor/IdeaProjects/sunrise-cms-in-sunrise/target/scal...
```

The screenshot shows the IntelliJ IDEA interface with the project 'sunrise-cms-in-sunrise' open. The code editor displays the `Module.java` file, which contains Java code for a Guice module. The terminal window below shows the application starting up, indicating a successful build and deployment.

```

import io.sphere.sdk.client.SphereClientUtils.blockingWait;
import static io.sphere.sdk.queries.QueryExecutionUtils.queryAll;
import static java.util.Collections.emptyList;

public class Module extends AbstractModule {

    @Override
    protected void configure() {
        // Binding for the client to connect commercetools
        bind(SphereClient.class)
            .toProvider(SimpleMetricsSphereClientProvider.class)
            .in(Singleton.class);

        // Binding for the HTTP Authentication
        bind(HttpAuthentication.class)
            .toProvider(BasicAuthenticationProvider.class)
            .in(Singleton.class);
    }

    // Binding for category tree
}

```

We have disable getting content from file and enable providing CMS service using Contentful using the id, accessToken.

The screenshot shows the IntelliJ IDEA interface with the project 'sunrise-cms-in-sunrise' open. The code editor displays the `Module.java` file, specifically the `provideCmsService()` method. The code has been modified to use Contentful's CMS service instead of reading from files. The terminal window below shows the application starting up, indicating a successful build and deployment.

```

@Provides
@Singleton
public CmsService provideCmsService(final Configuration configuration) {
    final String spaceId = configuration.getString("contentful.spaceId");
    final String accessToken = configuration.getString("contentful.accessToken");
    final String productContentTypeId = "page";
    final String pageSlugFieldId = "slug";

    return ContentfulCmsService.of(spaceId, accessToken, productContentTypeId);
}

@Provides
@RequestScoped
@NavigationCategoryTree
private CategoryTree provideNavigationCategoryTree(final CategoryTreeConfigu
    return configuration.navigationCategoryTree()
        .flatMap(categoryTree::findByExternalId)
        .map(categoryTree::findChildren)
        .map(categoryTree::getSubtree)
}

```

The configuration values we need are the `projectKey`, the `clientId` and `clientSecret` are generated from Commercetools, the `authUrl` and `apiUrl` are known. The Contentful values are generated from the Contentful app.

You have 10 days left until your trial period expires. Contact our [support](#) for any question or help.

Dashboard

Revenue statistics

€ 0.00 Today € 0.00 Yesterday € 0.00 Last 7 days

Revenue from 0 orders Revenue from 0 orders Revenue from 0 orders

No orders were made from 2017-07-11 to 2017-07-25

Tue 11 Thu 13 Sat 15 Mon 17 Wed 19

Available Projects

- AUDI Training
- Bundle Tutorial
- deloitte-sunrise
- deloitte-team-3
- deloitte-team-5
- deloitte-team-6
- e-com-hack-preparation

€ 0.00 Yesterday € 0.00 Last 7 days

Revenue from 0 orders Revenue from 0 orders

No orders were made from 2017-07-11 to 2017-07-25

Tue 11 Thu 13 Sat 15 Mon 17 Wed 19

You have 10 days left until your trial period expires. Contact our [support](#) for any question or help.

Dashboard

Revenue statistics

€ 0.00 Today € 0.00 Yesterday € 1.53K Last 7 days

Revenue from 0 orders Revenue from 0 orders Revenue from 3 orders

You made € 1.531.66 out of 3 orders from 2017-07-11 to 2017-07-25

1.5k
1k
500
0

Tue 11 Thu 13 Sat 15 Mon 17 Wed 19

Product types

Select a Product Type to change its options or add a brand new Product Type.

PRODUCT TYPES

- main
- New product type

The left screenshot shows the Commercetools Admin Center API Clients page. It lists a single client entry:

name	permissions
sunrise-for-training-69 client	manage_project

The right screenshot shows the Contentful APIs page. It includes sections for 'Content delivery / preview tokens' and 'Content management tokens'. There is also a 'Example Key' section with an 'Add API key' button.

This is where you can find your credentials for Commercetools. This is where you can find your credentials for Contentful

The left screenshot shows a terminal window with the command `sbt run` being run. The output shows:

```
[info] play.api.Play - Application started (Dev)
ousseinbenamor@MacBook-Pro-2:~/IdeaProjects/sunrise-cms-in-sunrise$ sbt run
[info] Loading project definition from /Users/ousseinbenamor/IdeaProjects/sunrise-cms-in-sunrise/project
[info] Set current project to commercetools-sunrise-java-starter (in build file:/Users/ousseinbenamor/IdeaProjects/sunrise-cms-in-sunrise/)
```

The right screenshot shows the Contentful Content model Page page. It lists fields for the Page content type:

Name	Description	Fields	Updated	By	Status
Banner		7	Jul 10, 2017	Laura Luiz	ACTIVE
Header		2	Jun 28, 2017	Laura Luiz	ACTIVE
Page		6	Jul 17, 2017	Laura Luiz	ACTIVE
Suggestions		4	Jul 10, 2017	Laura Luiz	ACTIVE

On the Content Model page, we can create our content types. These are the various content of the Page type we have

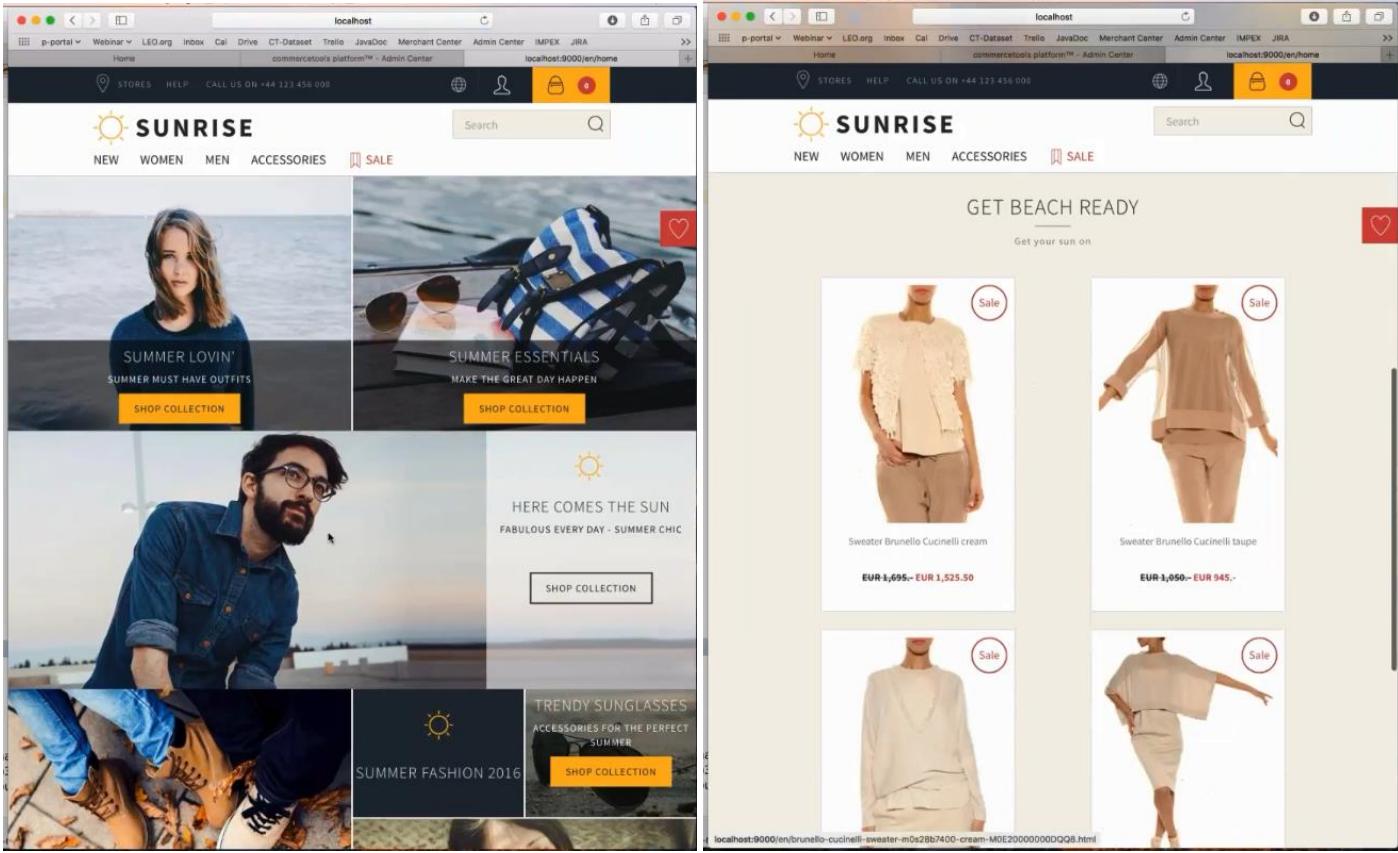
The left screenshot shows the 'Content' view with a table of 5 entries found, including 'Test Page', 'My Page', 'My Other Page', 'Default Page', and 'Home'. The right screenshot shows the detailed view for the 'Home' page, which has a title of 'Home', a slug of 'home', and a status of 'Published'. It also shows versions, a header with 'Sunrise', and banners.

The Content are instances of the types we have like Pages. This is the content of the Home page.

This screenshot shows the detailed view for the 'Home' page again. It includes fields for 'Slug (required)', 'Text - English', 'Text - German', 'Header' (with 'Sunrise'), 'Banners' (listing several banners like 'Summer Lovin', 'Summer Essentials', etc.), and a 'Suggestions' section. The 'VERSIONS' panel shows multiple previous versions of the page.

A screenshot of a browser window with the address bar showing 'localhost:9000'. The page content is identical to the one shown in the previous screenshots, displaying the 'Home' page details.

We can check to see the Sunrise app running locally



Next, we will change an existing page

```

    </-- start home.hbs -->
    <!DOCTYPE html>
    <html lang="en">
    <head>
        {{> common/htmlhead}}
    </head>

    <body>
        <div class="darkbg hidden"></div>
        {{> common/header}}
        <div class="home-page">
            {{> catalog/home/home-banners}}
            <div class="container">
                {{> catalog/home/home-suggestions}}
                <div class="home-viewwall">
                    {{> catalog/home/view-products-link}}
                </div>
            </div>
            {{> common/wishlist wishlist=wishlist}}
            {{> common/footer}}
            {{> common/htmlscripts}}
        </body>
    </html>
    <!-- end home.hbs -->
  
```

Safari File Edit View History Bookmarks Window Help

localhost

stores help call us or +44 123 456 000

SUNRISE

NEW WOMEN MEN ACCESSORIES SALE

Sweater Brunello Cucinelli cream EUR 998,- EUR 898.20

Dress Brunello Cucinelli chalk EUR 970,- EUR 873,-

VIEW ALL NEW PRODUCTS

CUSTOMER CARE ABOUT US SHORTCUTS

CONTACT US OUR STORY MY ACCOUNT JOIN OUR NEWSLETTER Your email...

HELP CAREERS STORE LOCATOR

SHIPPING GIFT CARDS PAY SECURELY WITH THESE PAYMENT METHODS FOLLOW US

RETURNS SIZE GUIDE

© 2015 SUNRISE IMPRINT PRIVACY POLICY TERMS OF USE

Version Control Terminal Find TODO

```
+ g {\\n categories{limit: $limit, offset: $offset, sort: $sort, where: $where} {\\n
  offset\\n  count\\n  results {\\n    id\\n    productCount\\n  }\\n}, "variables": {"limit":500, "offset":0, "sort": "id asc[]"}}
[71ms] GET /product-types?sort=id asc&limit=500&offset=0
[debug] c.c.s.f.c.MetricsLogger - (1718ms) GET /en/home used 1 CTP request(s):
(197ms) POST /product-projections/search with body:
"filter.query=categories.id%3A2206b5c94d-0be6-4df4-88ef-c04da3a73c0%22%2C%223d5fbadb-3a
f389650b2de%22%2C%2223f965a6-c47f-469c-b48b-bb66524f8754%22%2C%2255ad4dc8-5a9f-410c-b762-b3
&sort=price+desc&limit=4&staged=false&markMatchingVariants=false&priceCurrency=EUR&priceCo
```

app.contentful.com

Home

Title - German Home

Requires less than 256 characters

Slug (required) home

Text - English

Text - German

Header Sunrise

Banners

- Summer Lovin'
- Summer Essentials
- Here comes the sun
- Unique style for every season
- SUMMER FASHION 2016
- Trendy Sunglasses
- Must have it

Create new entry and link Link existing entries

Status Published

Last saved Jul 16, 2017

TRANSLATION

en de Change

VERSIONS

	Jul 16, 2017	CURRENT
...	Jul 14, 2017	PUBLISHED
...	Jul 13, 2017	PUBLISHED
...	Jul 11, 2017	PUBLISHED
...	Jul 11, 2017	PUBLISHED
...	Jul 11, 2017	PUBLISHED

Compare with current version

Shop Name Sunrise

Requires less than 256 characters

Shop Logo

SUNRISE

STATUS Published

Last saved Jul 18, 2017

TRANSLATION

en de Change

VERSIONS

	Jul 18, 2017	CURRENT
...	Jul 18, 2017	PUBLISHED
...	Jul 14, 2017	PUBLISHED
...	Jul 13, 2017	PUBLISHED
...	Jul 11, 2017	PUBLISHED
...	Jun 28, 2017	PUBLISHED
...	Jun 28, 2017	PUBLISHED

Select a previous version to compare it with the current version of this entry.

USERS

No other users online

USERS

No other users online

Two screenshots of the Contentful interface showing the 'Sunrise' content item.

Screenshot 1 (Left):

- Shop Name:** Sunrise (7 characters)
- Status:** Published
- Last saved:** Jul 18, 2017
- TRANSLATION:** en, de, Change
- VERSIONS:**
 - CURRENT: Jul 18, 2017 (PUBLISHED)
 - Jul 18, 2017 (PUBLISHED)
 - Jul 14, 2017 (PUBLISHED)
 - Jul 13, 2017 (PUBLISHED)
 - Jul 11, 2017 (PUBLISHED)
 - Jun 28, 2017 (PUBLISHED)
 - Jun 28, 2017 (PUBLISHED)
- Compare with current version:** Select a previous version to compare it with the current version of this entry.
- USERS:** No other users online.

Screenshot 2 (Right):

- Shop Name:** Sunrise (7 characters)
- Status:** Published (pending changes)
- Last saved:** A few seconds ago
- TRANSLATION:** en, de, Change
- VERSIONS:**
 - Jul 18, 2017 (PUBLISHED)
 - Jul 18, 2017 (PUBLISHED)
 - Jul 14, 2017 (PUBLISHED)
 - Jul 13, 2017 (PUBLISHED)
 - Jul 11, 2017 (PUBLISHED)
 - Jun 28, 2017 (PUBLISHED)
 - Jun 28, 2017 (PUBLISHED)
- Compare with current version:** Select a previous version to compare it with the current version of this entry.
- USERS:** No other users online.

Two screenshots of the Contentful interface showing the 'Sunrise' content item.

Screenshot 1 (Left):

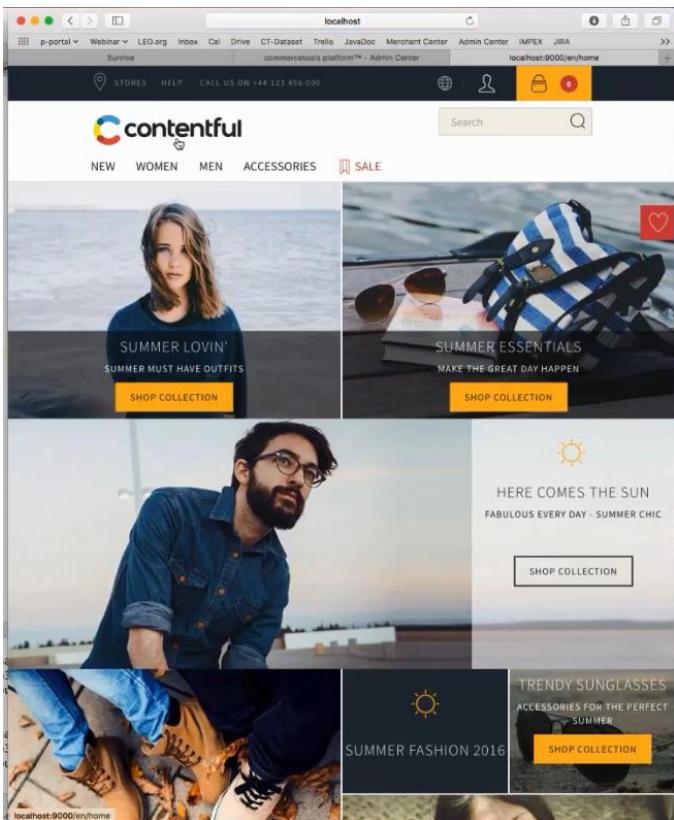
- Shop Name:** Sunrise (7 characters)
- Status:** Published (pending changes)
- Last saved:** Jul 18, 2017 (pending changes)
- TRANSLATION:** en, de, Change
- VERSIONS:**
 - a few seconds ago (CURRENT)
 - Jul 18, 2017 (PUBLISHED)
 - Jul 18, 2017 (PUBLISHED)
 - Jul 14, 2017 (PUBLISHED)
 - Jul 13, 2017 (PUBLISHED)
 - Jul 11, 2017 (PUBLISHED)
 - Jun 28, 2017 (PUBLISHED)
- Compare with current version:** Select a previous version to compare it with the current version of this entry.
- USERS:** No other users online.

Screenshot 2 (Right):

- Shop Name:** Sunrise (7 characters)
- Status:** Published
- Last saved:** A few seconds ago
- TRANSLATION:** en, de, Change
- VERSIONS:**
 - a few seconds ago (CURRENT)
 - Jul 18, 2017 (PUBLISHED)
 - Jul 18, 2017 (PUBLISHED)
 - Jul 14, 2017 (PUBLISHED)
 - Jul 13, 2017 (PUBLISHED)
 - Jul 11, 2017 (PUBLISHED)
 - Jun 28, 2017 (PUBLISHED)
- Compare with current version:** Select a previous version to compare it with the current version of this entry.
- USERS:** No other users online.

Screenshot of the MacConsole Project Explorer showing the file structure of the commerce tools sunrise theme. The terminal window shows two POST requests to /product-projections/search with different filters.

```
+ [144ms] POST /product-projections/search with body:
  "filter.query.categories.id": "3a42206b5c94d-0be6-4df4-88ef-c04d5a3a73c0%22%2C%223d5fba...",
  &sort=price+desc&limit=4&staged=false&markMatchingVariants=false&priceCurrency=EUR&priceCo...
[debug] c.c.s.f.c.m.MetricsLogger - (299ms) GET /en/home used 1 CTP request(s);
(158ms) POST /product-projections/search with body:
  "filter.query.categories.id": "3a42206b5c94d-0be6-4df4-88ef-c04d5a3a73c0%22%2C%223d5fba...",
  &sort=price+desc&limit=4&staged=false&markMatchingVariants=false&priceCurrency=EUR&priceCo...
```



Screenshot of the Contentful editor showing the 'Home' content entry. The 'Banners' section lists several banners: 'Summer Lovin'', 'Summer Essentials', 'Here comes the sun', 'Unique style for every season', 'SUMMER FASHION 2016', 'Trendy Sunglasses', and 'Must have it'. The status is set to 'Published'.

The changed logo now appears. Next, let us switch the banners. The easiest way is to go to the switch the banners array in the Contentful editor and publish the changes

Screenshot of the Contentful CMS interface showing the creation of a new page entry for 'Home'.

Page Details:

- Title:** Home
- Status:** Published
- Text - English:** Requires less than 256 characters
- Text - German:** Text input field
- Header:** Sunrise
- Banners:**
 - Unique style for every season
 - Summer Essentials
 - Here comes the sun
 - Summer Lovin'
 - SUMMER FASHION 2016
 - Trendy Sunglasses
 - Must to have it
- Users:** No other users online

Suggestions:

- Get beach ready

Preview:

Screenshot of the Contentful preview interface showing the published version of the 'Home' page.

Page Preview:

- Header:** Sunrise
- Banners:**
 - Unique style for every season
 - Summer Essentials
 - Here comes the sun
 - Summer Lovin'
 - SUMMER FASHION 2016
 - Trendy Sunglasses
 - Must to have it
- Content:**
 - Summer Lovin' SUMMER MUST HAVE OUTFITS SHOP COLLECTION
 - HERE COMES THE SUN FABULOUS EVERY DAY - SUMMER CHIC SHOP COLLECTION
 - UNIQUE STYLE FOR EVERY SEASON FASHION STYLES 2016 SHOP COLLECTION
 - SUMMER ESSENTIALS MAKE THE GREAT DAY HAPPEN SHOP COLLECTION
 - SUMMER FASHION 2016 TRENDY SUNGLASSES ACCESSORIES FOR THE PERFECT SUMMER SHOP COLLECTION
 - MUST TO HAVE IT HOT PIECES FOR THE SUMMER SHOP COLLECTION

IDE View:

IntelliJ IDEA interface showing the code editor for the 'home.hbs' template file.

```

<!DOCTYPE html>
<html lang="en">
  <head>
    <common/htmlhead>
  </head>
  <body>
    <div class="darkbg hidden"></div>
    <common/header>
    <div class="home-page">
      <catalog/home/home-banners>
      <catalog/home/home-suggestions>
      <div class="home-viewall">
        <catalog/home/view-products-link>
      </div>
    </div>
    <common/wishlist wishlist="content.wishlist">
      <common/footer>
      <common/htmlscripts>
    </body>
  </html>
<!-- end home.hbs -->

```

Terminal:

```
+ (151ms) POST /product-projections/search with body:
+ "filter.query.categories.id!=3%2206b5c94d-0be6-4df4-88ef-c04d5a3a73c0%22%2C%223d5fbadb-3a
f389650b2de%22%2C%223f965a6-c47f-469c-b48b-bb66524f8754%22%2C%22554d4dc8-5a9f-410c-b762-b
&sort=price+desc&limit=4&staged=false&markMatchingVariants=false&priceCurrency=EUR&priceCo
[debug] c.c.s.f.c.m.MetricsLogger - (331ms) GET /en/home used 1 CTP request(s):
(65ms) POST /product-projections/search with body:
+ "filter.query.categories.id!=3%2206b5c94d-0be6-4df4-88ef-c04d5a3a73c0%22%2C%223d5fbadb-3a
f389650b2de%22%2C%223f965a6-c47f-469c-b48b-bb66524f8754%22%2C%22554d4dc8-5a9f-410c-b762-b
&sort=price+desc&limit=4&staged=false&markMatchingVariants=false&priceCurrency=EUR&priceCo
[ ]"

```

The screenshot shows an IDE (IntelliJ IDEA) interface with the following details:

- Project Structure:** The project is named "sunrise-cms-in-sunrise". It contains modules like "app", "controllers", "conf", "templates", and "pages".
- Code Editor:** The code for `PagesController.java` is displayed. A specific line of code is highlighted: `@EnableHooks`. The code implements a `CompletionStage<Result>` for the `show` method.
- Terminal:** The terminal shows several log entries related to a POST request to `/product-projections/search`.
- Browser:** A browser window shows the Contentful platform interface. A message says "Home* published successfully". The page status is listed as "Published". A "TRANSLATION" section shows "en" and "de" status. A "VERSIONS" section lists several versions of the page, all marked as "PUBLISHED".

Next, let us see how to start building a page from scratch

The screenshot shows an IDE (IntelliJ IDEA) interface with the following details:

- Project Structure:** The project is named "sunrise-cms-in-sunrise". It contains modules like "app", "controllers", "conf", "templates", and "pages".
- Code Editor:** The code for `PagesController.java` is displayed. A specific line of code is highlighted: `</body>`.
- Terminal:** The terminal shows several log entries related to a POST request to `/product-projections/search`.
- Browser:** A browser window shows a Contentful storefront. The URL is `localhost:9000/en/pages/my-page.html`. The page displays a dark-themed header and footer with placeholder content.

Screenshot of a Java IDE (IntelliJ IDEA) showing the code editor for a Haml template file (`pages.hbs`) and a browser window displaying a Contentful page.

Code Editor (IntelliJ IDEA):

```

html body div.container
1  <!DOCTYPE html>
2  <html lang="en">
3
4      <head>
5          {{> common/htmlhead}}
6      </head>
7
8      <body>
9          <div class="darkbg hidden"></div>
10         {{> common/header}}
11
12         <div class="container">
13             <h1>{{cms "title"}}</h1>
14
15         </div>
16
17         {{> common/footer}}
18         {{> common/htmlscripts}}
19     </body>
20
21 </html>
22
23

```

Browser:

localhost:9000/en/pages/my-page.html

The page displays the Contentful logo and navigation links: NEW, WOMEN, MEN, ACCESSORIES, SALE. It also shows customer care links: CONTACT US, CAREERS, STORE LOCATOR, SHIPPING, RETURNS, and PAYMENT. A newsletter sign-up form is present.

Screenshot of a Java IDE (IntelliJ IDEA) showing the code editor for a Haml template file (`pages.hbs`) and a browser window displaying a Contentful page.

Code Editor (IntelliJ IDEA):

```

html body div.container div picture img.img-responsive
1  <!DOCTYPE html>
2  <html lang="en">
3
4      <head>
5          {{> common/htmlhead}}
6      </head>
7
8      <body>
9          <div class="darkbg hidden"></div>
10         {{> common/header}}
11
12         <div class="container">
13             <h2>{{cms "title"}}</h2>
14
15             <div>
16                 <h4>{{cms "banners[1].title"}}</h4>
17
18                 <picture>
19                     
20                 </picture>
21             </div>
22
23         {{> common/footer}}
24         {{> common/htmlscripts}}
25     </body>
26
27 </html>
28
29

```

Browser:

localhost:9000/en/pages/my-page.html

The page displays the Contentful logo and navigation links: NEW, WOMEN, MEN, ACCESSORIES, SALE. It also shows customer care links: CONTACT US, CAREERS, STORE LOCATOR, SHIPPING, RETURNS, and PAYMENT. A newsletter sign-up form is present. The page content includes the title "Summer Lovin'" and a background image of a woman standing by the sea.

app.contentful.com

commercetools platform™ - Admin Center

localhost:8000/en/pages/my-page.html

Content

Page

Type to search: Press the down arrow key for help.

Add entry

Views

All

Status

Published

Changed

Draft

Archived

CONTENT TYPE

Banner

Header

Page

Suggestions

5 entries found

Name	Updated	Author	Status
Home	3 minutes ago	Me	PUBLISHED
Test Page	Jul 16, 2017	Me	UPDATED
My Page	Jul 18, 2017	Me	UPDATED
My Other Page	Jul 17, 2017	Laura Luiz	PUBLISHED
Default Page	Jul 16, 2017	Laura Luiz	PUBLISHED

My Page

Title - English

My Page

7 characters

Requires less than 256 characters

Title - German

Meine Seite

11 characters

Requires less than 256 characters

Slug (required)

my-page

Text - English

<?>Lorem ipsum dolor sit amet, consectetur adipiscing elit. Nulla fermentum dapibus justo at lacinia. Morbi sed mauris ac nisl rutrum commodo a et erat. Aenean

Text - German

<?>Lorem ipsum dolor sit amet, consectetur adipiscing elit. Nulla fermentum dapibus justo at lacinia. Morbi sed mauris ac nisl rutrum commodo a et erat. Aenean

Header

Sunrise

Header

Banners

- Must to have it
- Summer Lovin'
- Here comes the sun

Create new entry and link

Link existing entries

VERSIONS

- Jul 18, 2017 PUBLISHED
- Jul 17, 2017 PUBLISHED

Compare with current version

STATUS

Status: Published (pending changes)

Publish changes

Last saved Jul 18, 2017

TRANSLATION

en de Change

VERSIONS

Jul 18, 2017 PUBLISHED

Jul 17, 2017 PUBLISHED

Compare with current version

Select a previous version to compare it with the current version of this entry.

USERS

No other users online

https://app.contentful.com/spaces/fxw6cpv92yp/entries/BwNMFT7c6QuySUEAloCkE

app.contentful.com

commercetools platform™ - Admin Center

localhost:8000/en/pages/my-page.html

Content

Actions

Info

Title - English

Summer Lovin'

13 characters

Requires less than 256 characters

Title - German

Sommer Fashion

14 characters

Requires less than 256 characters

Subtitle - English

Summer must have outfits

24 characters

Requires less than 256 characters

Subtitle - German

Beste Outfits für die Saison

28 characters

Requires less than 256 characters

Header Image

Create new asset and link

Link an existing asset

Background Image - English

Women at the beach

Background Image - German

USERS

No other users online

STATUS

Status: Published

Change status

Last saved Jul 10, 2017

TRANSLATION

en de Change

VERSIONS

- Jul 10, 2017 CURRENT
- Jul 10, 2017 PUBLISHED
- Jun 27, 2017 PUBLISHED

Compare with current version

Select a previous version to compare it with the current version of this entry.

USERS

No other users online

Screenshot of a Mac OS X desktop showing a Java application (Safari) and a terminal window.

Java Application (Safari):

- Project: sunrise-cms-in-sunrise
- File: pages.hbs

```

<html>
  <head>
    {{> common/htmlhead}}
  </head>

  <body>
    <div class="darkbg hidden"></div>
    {{> common/header}}
```

Terminal:

```

+ [info] play.api.Play - Application started (Dev)
X --- (RELOAD) ---
[info] play.api.Play - Application started (Dev)
--- (RELOAD) ---
[info] play.api.Play - Application started (Dev)
```

Screenshot of a Contentful website preview titled "My Page".

The page displays a woman standing by the sea. The content includes:

- A banner section with a background image and text: "Summer Lovin'"
- An article section with text: "Lorem ipsum dolor sit amet, consectetur adipiscing elit. Nulla fermentum dapibus justo at lacinia. Morbi sed mauris ac nisl rutrum commodo a et erat. Aenean consectetur eros quis cursus tristique. Cras sodales enim eget lorem lacinia convallis. Nullam nec libero eu nunc dictum tempus. Cras blandit varius commodo. Duis vel ipsum eu libero commodo pharetra pulvinar sit amet metus. Integer feugiat dui ac consequat venenatis. Suspndisse metus enim, mollis sit amet pharetra quis, dictum quis augue. Sed neque quam, ultrices quis mi a, porttitor pharetra elit. Pellentesque porta nisl sit amet urna varius ultricies. Duis vel sapien quis dui faucibus eutmod. Aliquam interdum interdum ultrices."
- A paragraph of placeholder text: "Morbi vel sem et urna faucibus tempus. Nunc sed urna ullamcorper, dictum risus eget, accumsan velit. Ut nibh dul, gravida in egestas in, volutpat vel arcu. Suspndisse dapibus, nibh et efficitur sodales, risus urna eleifend elit, sed laoreet nunc neque eget dui. Phasellus facilisis orci sagittis consequat suscipit. Suspndisse ac mollis nisl. Cras gravida viverra metus nec rutrum. Donec ac magna in arcu tempus aliquet eu vitae nisl."

Screenshots of the Contentful UI showing the creation and editing of a content entry.

Left Screenshot (English Version):

- Title:** Summer Lovin'
- Content:**
 - Text: "Summer must have outfit"
 - Text: "Beste Outfits für die Saison"
- Media:**
 - Background Image: "Woman at the beach"
 - Background Image: "Woman at the beach" (German version)

Right Screenshot (German Version):

- Description:**
 - Text: "Sommer must have outfits"
 - Text: "Beste Outfits für die Saison"
- Media:**
 - Background Image: "Woman at the beach"

```

package com.commercetools.sunrise.cms;

import ...;

/**
 * A service providing access to CMS pages.
 */
@FunctionalInterface
public interface CmsService {

    /**
     * Retrieves the page identified by the given key for any of the provided locales trying to match the first
     * on the list that the content is defined for.
     *
     * Depending on implementation and CMS provider if requested page is not defined for any of requested locales
     * an empty result might be returned or configured default locale might be used.
     *
     * @param pageKey identifier of the page
     * @param locales list of locales for which the content is expected to be defined
     * @return requested page or empty result
     */
    CompletionStage<Optional<CmsPage>> page(String pageKey, List<Locale> locales);
}

```

```

@Module
@Provides
@Singleton
public CmsService provideCmsService(final Configuration configuration) {
    final String spaceId = configuration.getString( key: "contentful.spaceId");
    final String accessToken = configuration.getString( key: "contentful.accessToken");
    final String productContentTypeId = "page";
    final String pageSlugFieldId = "slug";

    return ContentfulCmsService.of(spaceId, accessToken, productContentTypeId, pageSlugFieldId, ForkJoinPool.commonPool());
}

private CategoryTree provideNavigationCategoryTree(final CategoryTreeConfiguration configuration, final CategoryTree categoryTree) {
    return configuration.navigationExternalId()
        .flatMap(categoryTree::findById)
        .map(categoryTree::findChildren)
        .flatMap(categoryTree::findSubCategories);
}

```

For every page, a call is made to the Contentful CMS service using the pageKey to get the page details for rendering.