

WHAT'S NEW

CoreMedia Content Cloud v11
CMCC Distribution 11.2110.1



CoreMedia Content Cloud Distribution 11.2110.1

The new product features and enhancements highlighted in this document are available as part of CoreMedia Content Cloud v11, distribution 11.2110.1. For more details about the included products and components, please refer to our distribution download site at <https://go.coremedia.com/cmcc-11>

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1. Personalization Hub

Increasingly, both B2B and B2C customers expect online experiences to be relevant, contextual, and personal – at all times and at every stage in the customer journey. As personalized experiences have become the expected norm, companies in all industries are under pressure to adopt personalization tools to keep their buyers satisfied, engaged, and loyal. This is especially true in industries that depend on establishing a strong emotional connection with shoppers – such as fashion, sporting goods, and consumer goods.

Our long-standing Adaptive Personalization offering has provided a strong foundation for these efforts. But our customers now require an even more robust and extensible tool that enables them to expand their capabilities beyond the reach of a single dedicated personalization engine. They need to support a wide range of best-of-breed tools and data sources – including advanced AI-driven personalization.

This is the challenge that we have set out to address with our new Personalization Hub. This new Hub expands our existing portfolio of Content, Commerce, Marketing, and Experience Feedback Hubs. It enables customers to leverage the capabilities of leading personalization engines – including DynamicYield and Kibo – and provides an intuitive user interface tailored to a wide range of personalization use cases.

In addition to incorporating all the familiar capabilities of the existing Adaptive Personalization module, the new Personalization Hub provides a comprehensive framework around personalization services, along with the ability to connect to some of the best tools on the market. With CoreMedia Personalization Hub, developers can integrate their online personalization services with just a few lines of configuration.

Key components of the Personalization Hub include:

- CoreMedia Adaptive Personalization - for server-side personalization
- Comprehensive API for client-side integration to personalization engines
- Generic connector for personalization engines

In the future, this Hub will provide a flexible platform allowing customers to quickly enable additional CoreMedia-based services such as personalizing experiences based on weather and geolocation.

The benefits of this new offering include:

- Ability to deliver hyper-personalized experiences leading to higher consumer engagement and higher conversion rates
- Contains all existing capabilities of CoreMedia Advanced Personalization
- API first, configuration-only for certain services, requiring less development resources and faster time to market
- Prefabricated CoreMedia Labs connectors available for services that cannot be integrated via the API, which help keep implementation costs low

2. Commerce Hub v2 API

Over time, numerous additional features and improvements were added to the CoreMedia Commerce Hub. Despite - significantly improving the performance and functionality of the platform. However, they have occasionally led to deprecations and backwards compatible code that was occasionally complex and difficult to manage.



In CoreMedia Content Cloud 11.2110.1, we have simplified this situation by removing deprecated code and reducing the overall complexity, making the API easier to understand and use. It also enabled the implementation of changes that were not previously practical due to backwards compatibility issues.

The changes in this release include:

- Removal of legacy support for HCL Commerce
- Streamlined configuration
- New Commerce Hub API and default Commerce Adapter implementation for HCL Commerce, SAP Commerce, Salesforce Commerce Cloud, and commercetools.

For out-of-the-box commerce adapters, changes will be automatically applied, and customers only need to ensure that they are using the appropriate v2 adapters when running CoreMedia Content Cloud v11.2110.1. For custom commerce adapters or customized standard adapters, migration of custom code is required. Details can be found in the Upgrade Guide.

This new, easier to understand API, ensures smoother commerce adapter implementations and easier commerce configuration for every commerce project. Reduced complexity makes the implementation of new product features super easy.

3. Commerce Systems Supported Environments

In addition to the Commerce Hub enhancements described above, we have updated all pre-built commerce connectors to the currently supported versions of all of our integrated commerce platforms.

This enables us to support currently up-to-date versions but also prepares us for future versions. Dropping support for older versions frees up development capacity for new commerce APIs and to faster respond to new market demands.

Specific changes include:

- SFCC Connector: Support newer OCAPI version and more usage of Shop API instead of Data API
- SAP Commerce Cloud Connector: SAP CC 2105 support
- HCL Commerce Connector: focusing on v9 and v9.1
- Support for older versions on request

4. Content Hub and Feedback Hub Adapters as Bundled Plugins

One of our primary objectives for CoreMedia Content Cloud v11 is to simplify the development of new features and integrations by converting our adapters into easy to deploy plug-ins.

To facilitate new feature releases for Blueprint, we split the source code distribution for the Content Hub adapters for RSS and YouTube, as well as the Feedback Hub adapter for Imagga, into separate repositories on GitHub. This allows us to bundle them into the application as plugins, reducing the amount of source code, and facilitating independent and faster releases of these, and future, adapters.

CoreMedia Content Cloud v11.2110.1 contains CMD Line tools to simplify the bundling of public plugin releases.



In addition, we are providing three open-source GitHub repositories that host the plugin releases and their source code:

- <https://github.com/CoreMedia/content-hub-adapter-youtube>
- <https://github.com/CoreMedia/content-hub-adapter-rss>
- <https://github.com/CoreMedia/feedback-hub-adapter-imagga>

These changes help to provide a clean separation between product workspace and adaptor extensions reduces maintenance costs and streamlines future upgrade processes.

5. New UX Concept and Workflow App for CoreMedia Studio

Workflows are a well-established concept within CoreMedia Studio and are easily accessible via the Control Room module. While this approach is sufficient for smaller teams running just a few workflows with a limited amount of content, it quickly gets confusing for teams that need to manage multiple content-rich workflows.

To address the needs of larger teams and overcome the limitations of the Control Room interface, we introduced a new stand-alone Workflow App. It provides an optimized user interface to help editors deal with any workflow-related tasks. It also features a guided, wizard-like interaction pattern that will give users more direct assistance and make it easier for them to identify and select the desired action.

The Workflow App is based on a new design and UX framework called Studio Applications, which will be the foundation for all upcoming CoreMedia Studio extensions.

Finally, CoreMedia Content Cloud v11.2110.1 introduces a well-defined and streamlined declarative extension API for publication and localization workflows, which is ExtJS independent. This API allows for extensions and customizations in the newly introduced Workflow App as well as in the existing Control Room. For compatibility reasons, CoreMedia Content Cloud v10 Control Room extension points will still work with the new release. Customers have the option of upgrading their customizations to this new API. However, they are not required to.

New UX and design concepts in this release include:

- Introduction of an expanded UX concept into CoreMedia Studio called Studio Applications that provides dedicated spaces for goal-oriented and human-centered solutions. This new, “appified” version of CoreMedia Studio will become the foundation for all future development of the CoreMedia user interface.
- A new Studio Design System, which introduces a more colorful and easier-to-read appearance with bigger fonts and icons, while still offering a clear and effective user interface
- A more intuitive UX environment based on familiar design patterns that enables even casual users to be productive without extensive editorial training

New functionality in the release includes:

- A new Workflow Application based on these new design principles that operates independently from the Control Room and provides the necessary screen estate to optimize the user experience
- A range of UX improvements including improved handling of large numbers of workflows, making the transition and states of workflows more transparent across teams, and an enhanced environment for editing and previewing workflow content



With the introduction of the new CoreMedia Studio applications framework, the UI component that was previously called CoreMedia Studio has now been renamed the Content Application and will operate as one of multiple applications under the expanded CoreMedia Studio applications framework. It will still contain all the features that CoreMedia customers are familiar with. While our chief priority will be the introduction of new App functionality based on these new design and UX principles, we will also focus on gradually transforming our existing functionality into the new application concept.

All running and finished workflows now reside within the new Workflow App, which opens automatically whenever a workflow is opened or initiated. Workflows must still be initiated from within the existing CoreMedia Studio interface because it provides the strongest capabilities for working with and structuring content. Navigation between CoreMedia Studio and the new Workflow app happens via specific elements from within the app, such as the newly introduced general navigation burger menu, or by simply switching browser tabs.

The following screenshots provide a preview of the look and functionality of the new Workflow App – which will provide the template for all future CoreMedia Studio applications:

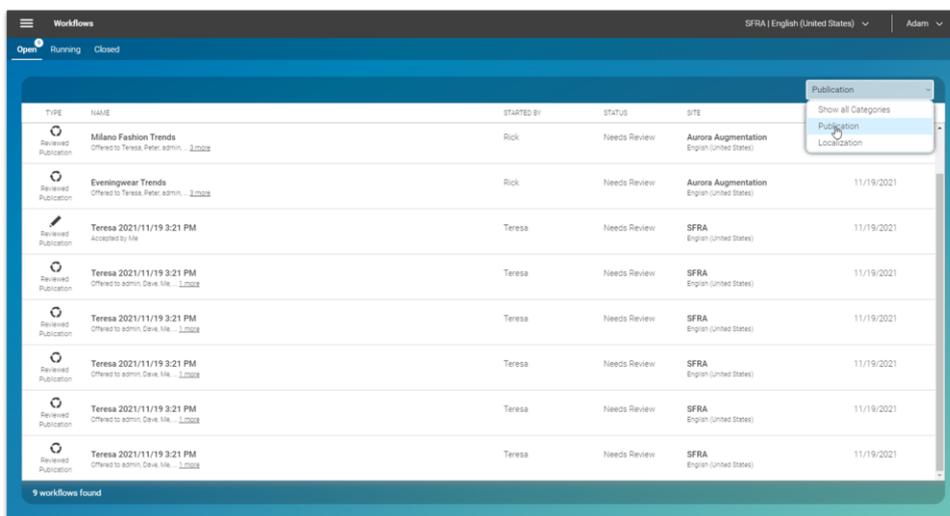


Figure 1: Workflow overview list

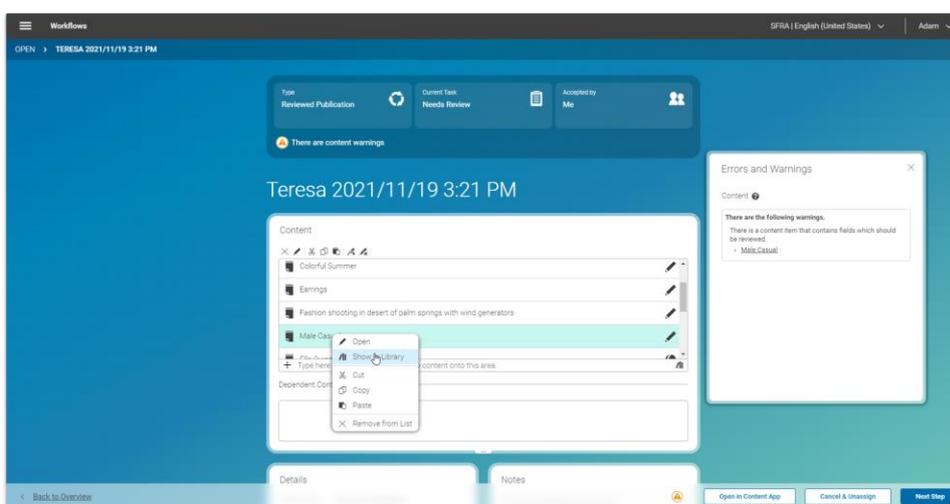


Figure 2: Workflow detail view

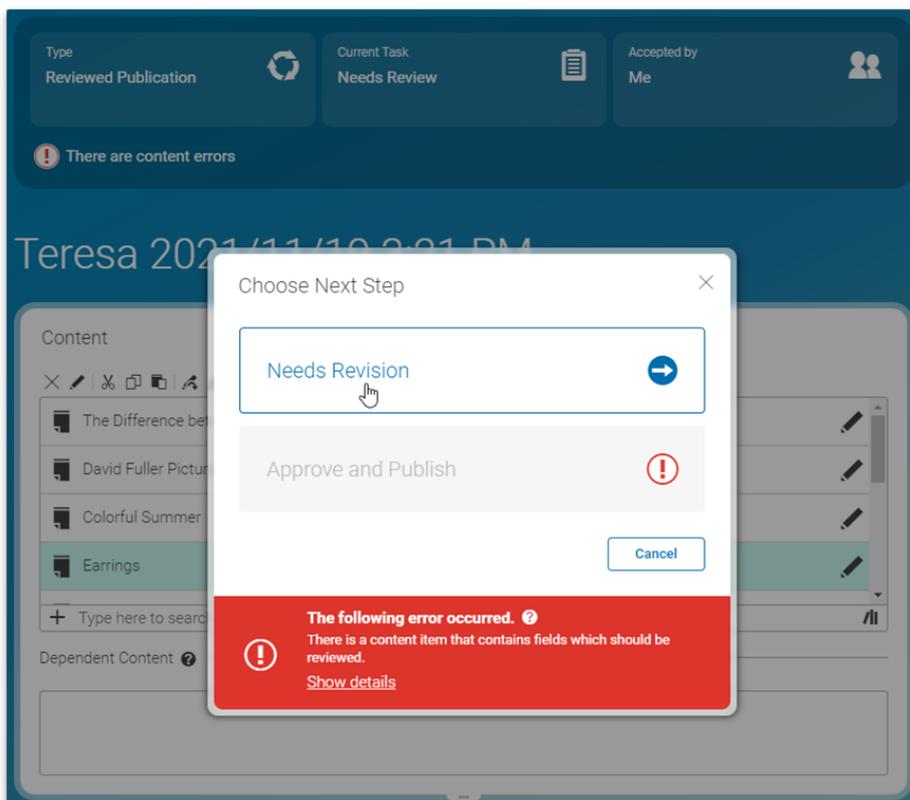
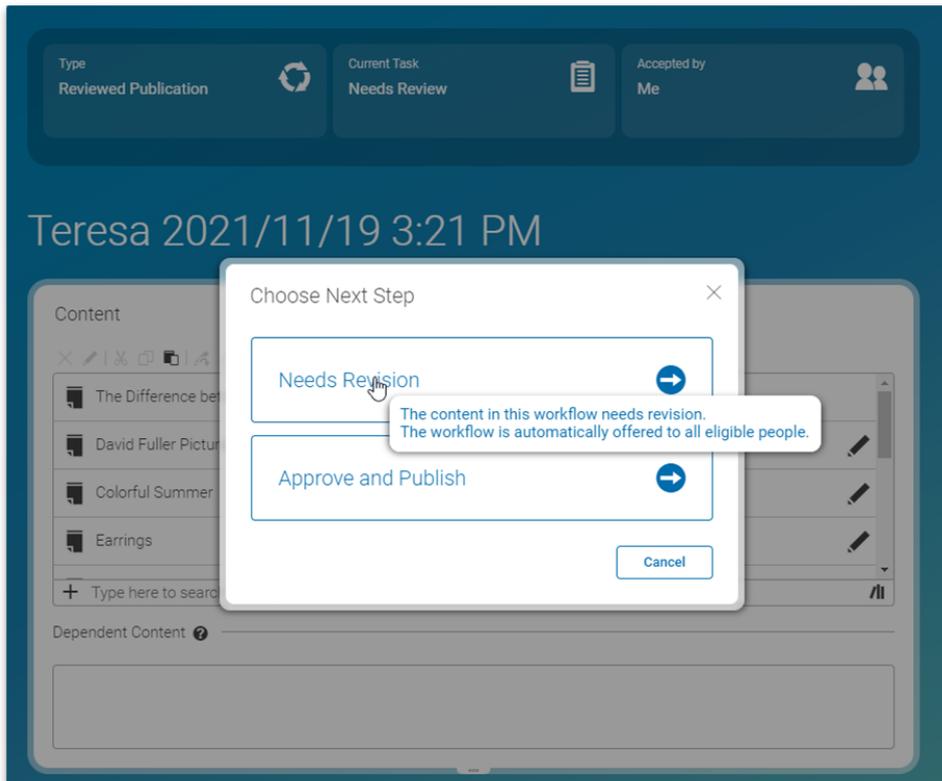


Figure 3: Next step dialog

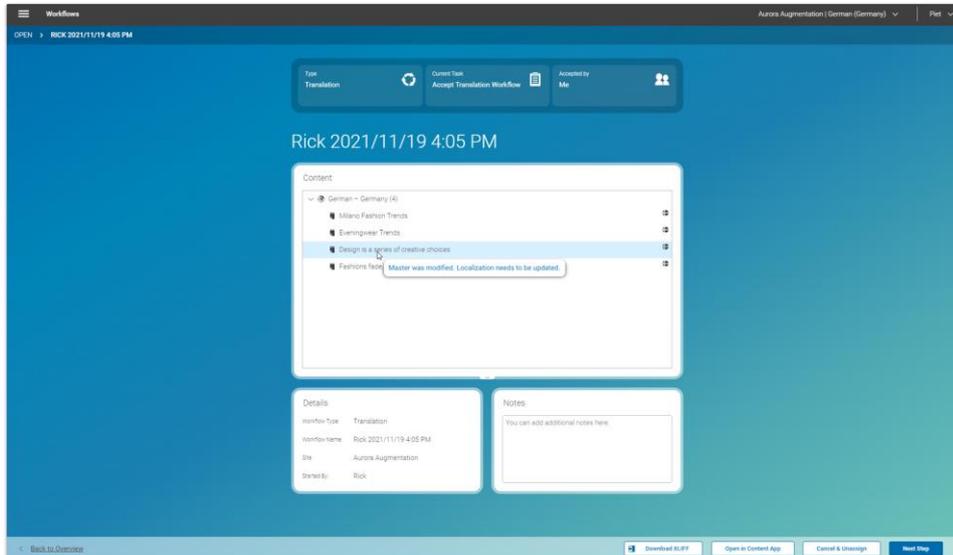


Figure 4: Localization

6. View Aborted Workflows in Workflow Archive

It is critical for editors and developers to have access to a complete overview of completed workflows to track past changes and clean up the repository when a workflow has been aborted for any reason.

To support this requirement, CoreMedia Content Cloud now allows editors to see aborted and escalated workflow as finished workflows in the new Workflow App. In addition, developers can now use the underlying Workflow Server hook to implement new kinds of workflow actions, such as like automatic rollback.

This feature includes updated workflow definitions and new APIs in the Workflow server. To enable this feature, custom workflow definitions must be updated and uploaded.

The following screenshot illustrates how this looks to an editorial user.

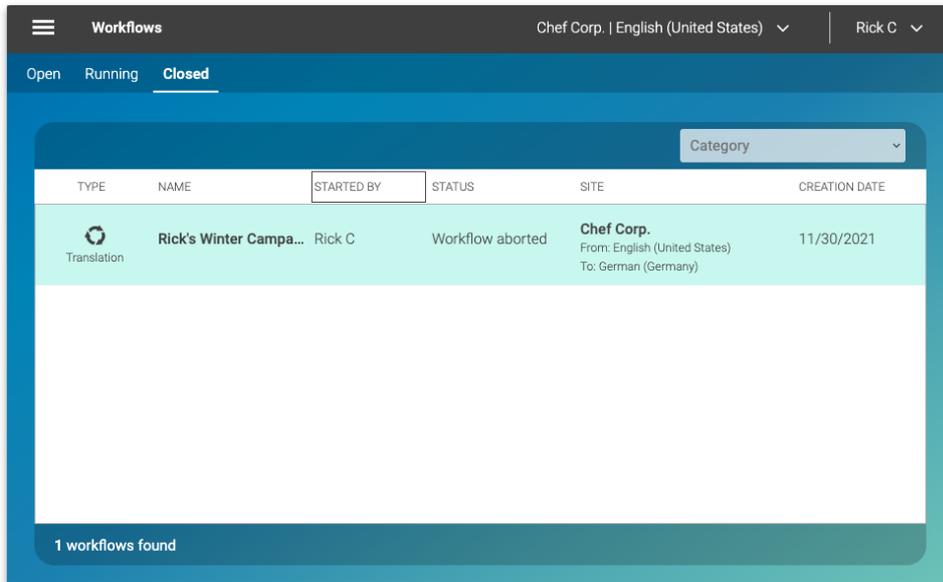


Figure 5: Aborted workflow list

The benefits of this enhancement include:

- Helps editors correct accidental changes and prevent content errors
- The underlying workflow action enables new use cases like automatic rollback, even in the case of unexpected workflow escalations.

7. Consolidated Toast Notifications and Running Job Notifications

A toast notification is a small message that shows up in a box on the screen in response to a direct use action and disappears on its own after few seconds.

In previous versions of CoreMedia Content Cloud, toast notifications were designed to pop up differently within various Studio environments. Starting with v11.2110.1, however, toast notifications are now displayed under a standardized design in the lower-left corner of the Studio.

The color and the icon of the toast vary depending on the category of the notification: success, warning, failure, or info. Toasts disappear after a few seconds or can be clicked away by the user.

Additionally, users are notified about longer running jobs that have been triggered by users or the system. Those notifications are displayed in the upper right corner of the Studio and help users to keep track of the background processes. All these notifications are black, and their icons vary depending on the nature of the job that has been finished. Like the toasts that appear in the lower left of the Studio, these notifications disappear after several seconds or can be clicked away by the user. Additionally, it is possible to hide notifications of a certain type permanently.

We also provide a new API to enable customers to define their toast notifications.

The following screenshots provide a preview of both new notification types:

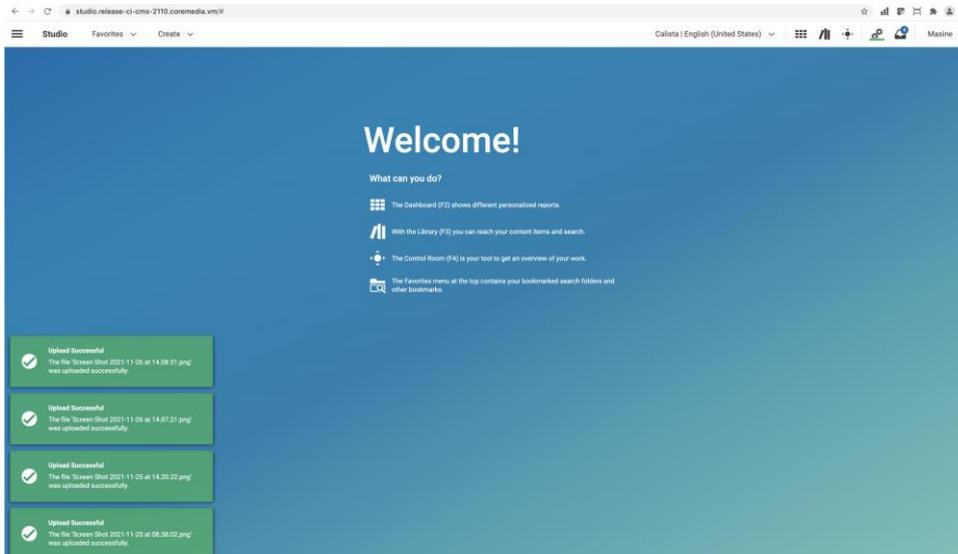


Figure 6: Lower left toast notifications

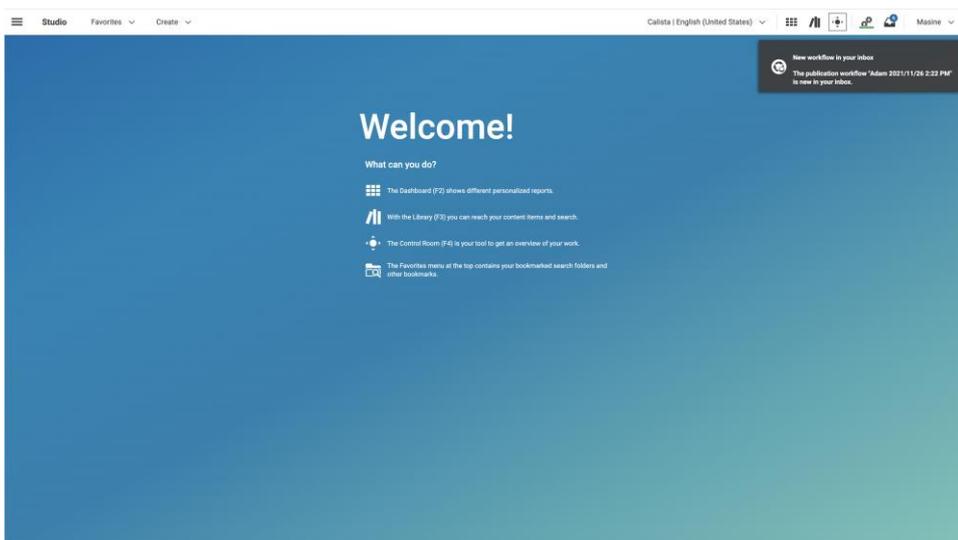


Figure 7: Upper right running jobs notifications

This enhancement is designed to provide a standardized approach for all toast notifications and facilitates the Integration of additional toasts.

8. Redesigned Site Selector

With CoreMedia Content Cloud v11.2110.1, the site selector menu has been restructured to allow editors to switch the view mode of the sites tree, making browsing for the preferred site easier and more efficient.

This new site selector has been divided into three tabs:

- Recent: a list of the last seven sites that have been selected
- Current: displays the name of the currently selected site, but also provides access to the full site tree
- Other Sites: This tab provides access to the site trees of all other sites



Studio users can change the view mode of the site tree for the currently selected site, as well as all other sites. By default, the tree is grouped by language, but can be switched into relationship mode.

The following screenshots show how the new site selector will appear to Studio users:

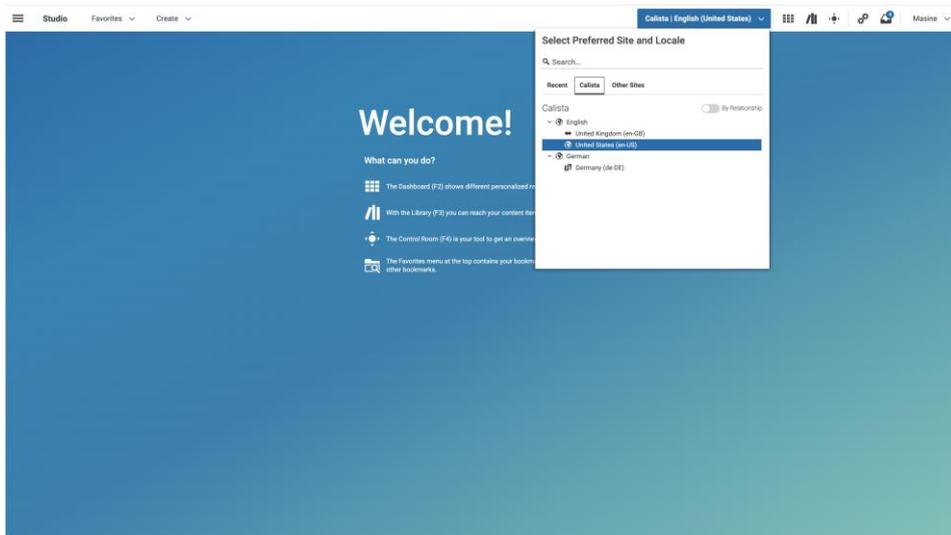


Figure 8: Current site view

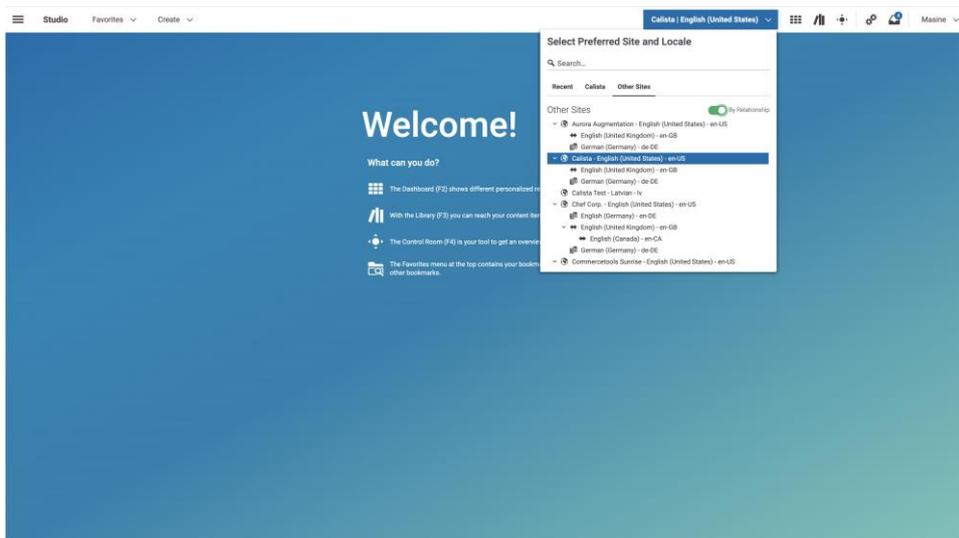


Figure 9: Other Sites view in relationship mode

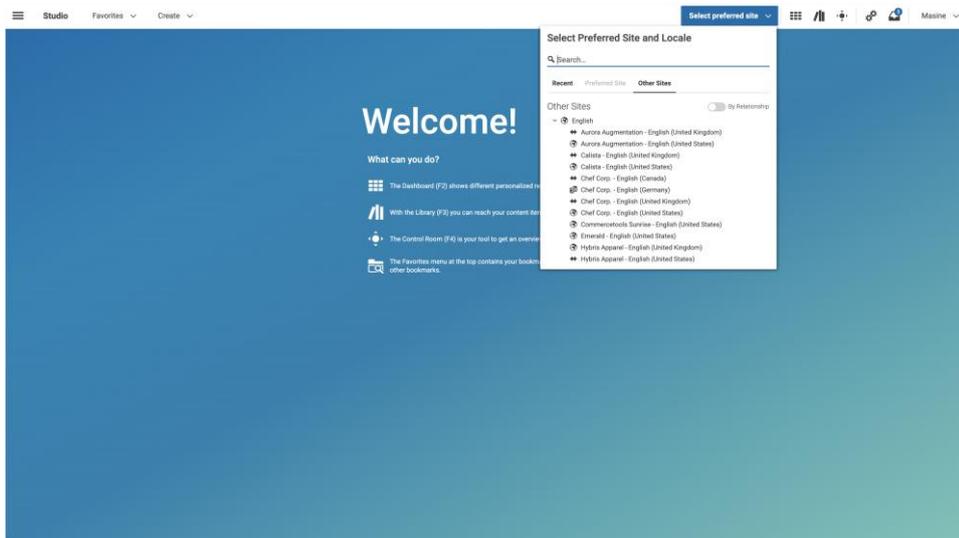


Figure 10: Other Sites view in language mode

9. Improved Studio User Experience and User Interface

CoreMedia Content Cloud v11.2110.1 provides a wide range of user experience and user interface enhancements to CoreMedia Studio including:

- Redesigned login screen
- Updated Studio header bar
- New burger menu for general navigation
- More colorful and modern design
- Motivational illustrations and animations

The following subsections provide more information on each of these enhancements.

9.1. Login Screen

The login screen of CoreMedia Studio has been redesigned to improve the emotional first impression and optimize the login interaction flow.

The new login screen will greet Studio users with a completely new design featuring an attractive animated illustration on the left-hand side.

The login screen is the very first touchpoint the user is presented with when they launch CoreMedia Studio. As confirmed by many studies, the first and the last impression leave the strongest impact on a user's experience. We hope that the appealing animation and an interaction design that lets users login as easily as possible will trigger a positive emotional response and improve their overall editorial experience.

In addition, the improved user interaction of the login dialog allows each company to define its most used authorization mechanism. This allows us to move the domain selector to a less prominent position within the interface, turning it into a feature that only administrators and technical users need to worry about.

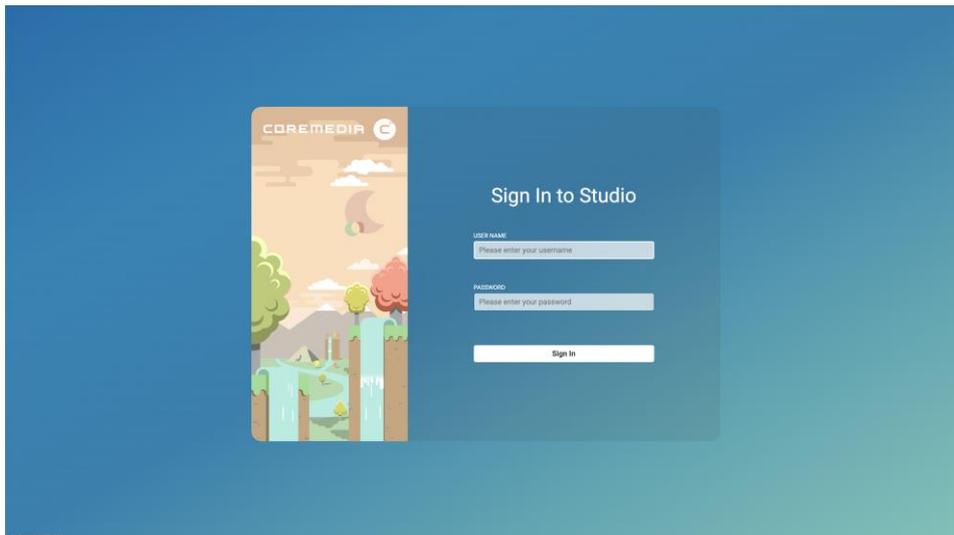


Figure 11: New CoreMedia Studio Login Screen

9.2. Studio Header

The new CoreMedia Studio header bar has an updated and modern look and feel. We have also optimized the structure of items, dropdowns and buttons based on user feedback and current design trends.

On the left-hand side, the header provides access to the new Burger Menu and other application specific menus including the “Favorite” and the “Create” menu. On the right-hand side, the user can access the library, control room or dashboard. It also features the notification and running jobs areas. The new and improved site chooser can also be found here.

9.3. New General Navigation Menu

The new general navigation menu (*see Figure 5*) enables Studio users to reach all areas across all applications in CoreMedia Studio, providing a safe and consistent means for navigation.

This “burger menu” style navigational element displays both individual Studio apps and relevant sub-areas of the apps to enable swift and efficient navigation. This structure provides users with a good overview of features in the studio and makes it easy for them to find their way around at any time.

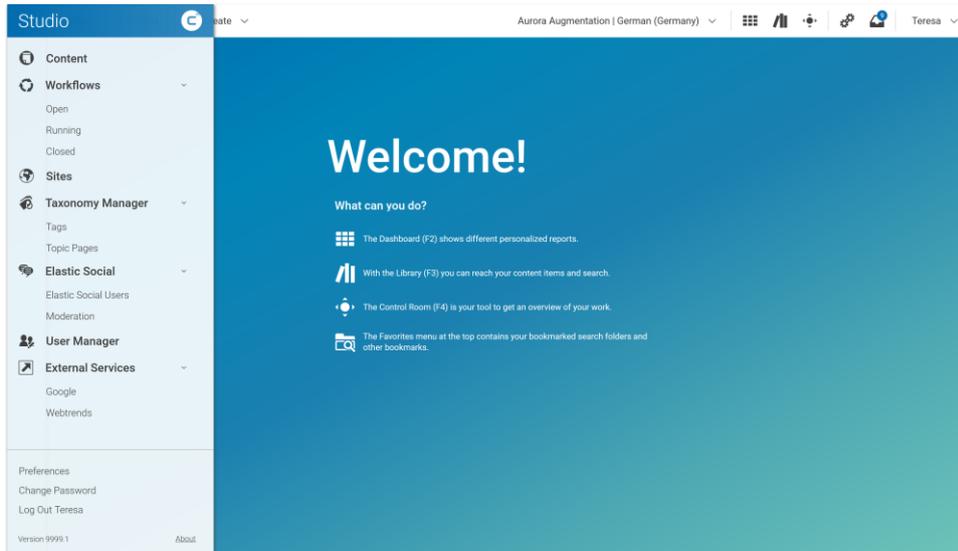


Figure 12: New general navigation menu (burger menu)

9.4. Color Refresh

Our qualitative research indicates that user interfaces in predominately grey tones feel out-of-date. Some users even report that it can be depressing to look at a grey visual environment for an entire workday. Most would prefer a more colorful and modern design. The color grey had a particularly strong negative impact on test users.

Based on this feedback and to support our goal of providing a smoother transition between the Content Application and the new Workflow Application, we decided to give the Content Application a refresh with new colors.

A main objective was to minimize the use of grey tones throughout. We replaced the light grey in the doc form backgrounds with a fresh light turquoise blue, which makes CoreMedia Studio look fresher. The dark grey toolbars will be replaced by a dark laguna blue, which can also be found in the gradient of the Workflow Application background. This creates a harmonious color combination and a smoother transition between apps.

Both colors have a pleasant color temperature which contributes to a stress-reducing and stimulating effect. The selected colors provide a good contrast what is very important for accessibility.

With these new colors, we can also influence the visual flow of users. The colors provide a clear indication of relevant areas without causing the user to feel tired or bored.

9.5. Illustrations & Animations

Starting with CoreMedia Content Cloud v11.2110.1 we are introducing animated illustrations into CoreMedia Studio with the intention of turning waiting times into small positive breaks for users. We are also introducing colorful illustrations to trigger positive emotional responses that we hope will lead to an enhanced user experience.

Illustrations and animations are very important motivational tools for user interfaces. If users get frustrated or bored, they won't like using the software. By including a range of motivational illustrations and animations in CoreMedia Studio we can reach out to users in a more positive way.



An animation can be more than just a simple spinner or a loading bar. It can be something the users enjoy watching. Illustrations and animations can also influence how the software is perceived. Getting emotional feedback on completed tasks, or as a visual comment on what has just happened, gives the impression of a personalized tool with a character of its own. It helps to make the user feel satisfied and understood, which leads to greater productivity and efficiency.

10. TypeScript Conversion

In previous releases of CoreMedia Content Cloud, CoreMedia Studio was programmed with ActionScript and MXML. Starting with CoreMedia Content Cloud v11.2110.1, Studio has been migrated to TypeScript.

ActionScript is based on ECMAScript 3, which has made very little progress since 2011, when it was donated to Apache. FlashPlayer is at end-of-life, so most browsers no longer support it. In addition, Apache's effort to create their own compiler to JavaScript (Apache Royale) has not been entirely successful. Based on these factors, it made sense to make the transition to TypeScript.

As part of this migration, we have made the following changes to CoreMedia Studio:

- Studio client is now implemented in TypeScript instead of ActionScript/MXML
- Studio client is now built with (p)npm instead of Maven
- Resulting compiled JavaScript and Docker image are very similar to the former artifacts

The transition to this new technology has been designed to be as painless as possible. CoreMedia has provided a tool to automatically convert custom Blueprint workspaces from ActionScript/MXML/properties/Maven to TypeScript/pnpm, so that it can be successfully built and run immediately after conversion. In addition, CoreMedia has provided npm-based tooling to build the new workspace and start the Studio client.

Studio client developers can convert their CoreMedia Content Cloud v10.2107 Studio client to TypeScript completely automatically, and, as a checkpoint, run it with their existing 2107 system. They can then move on to v11 as usual, by merging-in CoreMedia's v11 Blueprint workspace. This process is described in detail in the v11 Upgrade Guide.

Though based on different technologies, the new CoreMedia Studio client workspace supports the full set of developer use cases as before: building, running unit tests, starting the Studio client, “watching” for code changes, packaging plugins, enabling/disabling extensions, and much more.

We believe that this migration will provide customers with significant benefits including:

- Provides a modern, superior developer experience. TypeScript is a very popular programming language with an active developer community. TypeScript is in the 2021 top ten of the worldwide [PYPL Popularity of Programming Language Index](#). There are many experienced developers that will be able to provide support with developing future Studio client extensions.
- Enables reduced investment in Studio client customizations and provides a perfect starting point for TypeScript/npm Studio client development.
- Using TypeScript leads to an extended range of available IDEs. JetBrains IDEA Ultimate, JetBrains WebStorm and Microsoft Visual Studio Code have all been tested. Any other TypeScript IDE should work as well.
- TypeScript provides a modern approach to static typing that is superior to ActionScript.
- *npm* is JavaScript's de-facto standard for package and dependency management. *pnpm* is a new, popular, very efficient, and convenient tool to build a *npm* workspace.
- Provides the ability to use modern, standard test frameworks like *Jest* for Studio client code.

11. Developer Preview of new Richtext Editor

CKEditor 4 has provided a solid foundation for richtext editing in CoreMedia Studio for many years. However, the latest version, CKEditor 5, is a complete rewrite and CKEditor 4 will not receive new features in the future. Based on this we will switch to the CKEditor 5 framework providing new features for the entire lifetime of CoreMedia Content Cloud v11.

The previous CKEditor 4 framework will remain available, however, and will receive bugfixes until the next major release, for customers who prefer to keep their version with its custom extension for now.

Since the CoreMedia CKEditor 4 plugins will need to be rewritten from scratch for data-processing, we decided to include an early developer preview in this release.

Developers can enable this opt-in preview of the upcoming new richtext editor in a non-production environment to estimate the potential scale of their plugin upgrade efforts or get an early start on plugin development. The opt-in developer preview is part of the Blueprint workspace. To enable this preview the Studio client must be updated. The Studio developer manual contains the required instructions. Developers can follow our development by watching our open-source GitHub repository (see <https://github.com/CoreMedia/ckeditor-plugins/>).

The open-source GitHub repository serves as the starting point for the development of custom plugins with a concise documentation and sandbox environment.

The following screenshot provides a sneak peek at this new richtext editor:

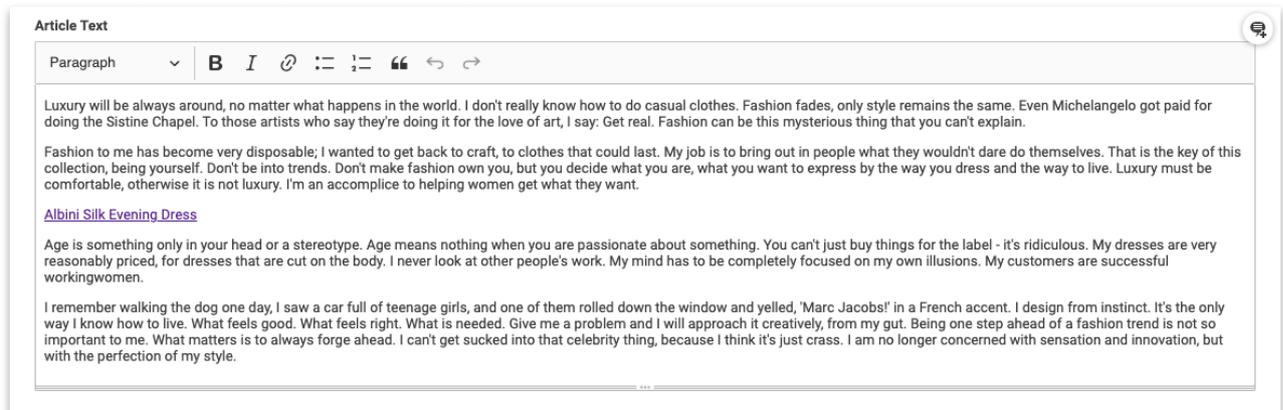


Figure 13: CKEditor 5 richtext editor framework

The benefits of this enhancement include:

- The new richtext editor will be based on the modern and fully customizable CKEditor 5 framework which provides numerous plugins to boost editorial efficiency
- The integration with CoreMedia Richtext will be a standard CKEditor plugin itself. This should simplify the usage and development of other plugins.