

CoreMedia Digital Experience Platform 8

COREMEDIA



# CoreMedia DXP Release Notes

COREMEDIA



# CoreMedia DXP Release Notes

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CoreMedia AG

Ludwig-Erhard-Straße 18

20459 Hamburg

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1. Preface .....	1
1.1. Audience .....	2
1.2. Typographic Conventions .....	3
2. Release Information .....	4
2.1. Overview .....	5
2.2. Improvements and Changes .....	6
2.2.1. Release 7.5.45 .....	6
2.2.2. Release 7.5.44 .....	13
2.2.3. Release 7.5.43 .....	19
2.2.4. Release 7.5.42 .....	28
2.2.5. Release 7.5.41 .....	40
2.2.6. Release 7.5.40 .....	50
2.2.7. Release 7.5.39 .....	53
2.2.8. Release 7.5.38 .....	56
2.2.9. Release 7.5.37 .....	59
2.2.10. Release 7.5.36 .....	64
2.2.11. Release 7.5.35 .....	71
2.2.12. Release 7.5.34 .....	72
2.2.13. Release 7.5.33 .....	74
2.2.14. Release 7.5.32 .....	78
2.2.15. Release 7.5.31 .....	87
2.2.16. Release 7.5.30 .....	89
2.2.17. Release 7.5.29 .....	96
2.2.18. Release 7.5.28 .....	113
2.2.19. Release 7.5.27 .....	115
2.2.20. Release 7.5.26 .....	115
2.2.21. Release 7.5.25 .....	119
2.2.22. Release 7.5.24 .....	129
2.2.23. Release 7.5.23 .....	131
2.2.24. Release 7.5.22 .....	131
2.2.25. Release 7.5.21 .....	139
2.2.26. Release 7.5.20 .....	140
2.2.27. Release 7.5.19 .....	142
2.2.28. Release 7.5.18 .....	144
2.2.29. Release 7.5.17 .....	150
2.2.30. Release 7.5.16 .....	150
2.2.31. Release 7.5.15 .....	153
2.2.32. Release 7.5.14 .....	158
2.2.33. Release 7.5.13 .....	160
2.2.34. Release 7.5.12 .....	163
2.2.35. Release 7.5.11 .....	170

2.2.36. Release 7.5.10 .....	176
2.2.37. Release 7.5.9 .....	180
2.2.38. Release 7.5.8 .....	185
2.2.39. Release 7.5.7 .....	187
2.2.40. Release 7.5.6 .....	189
2.2.41. Release 7.5.5 .....	190
2.2.42. Release 7.5.4 .....	192
2.2.43. Release 7.5.3 .....	193
2.2.44. Release 7.5.2 .....	195
2.2.45. Release 7.5.1 .....	197
2.2.46. Release 7.5.0 .....	201
3. Support .....	210

# 1. Preface

This manual contains the release notes for all *CoreMedia Digital Experience Platform* releases. You will find the latest version of this manual at the following URL: <http://documentation.coremedia.com/dxp8/release-notes>.

## 1.1 Audience

This manual is intended for everyone who wants to know the changes between the *CoreMedia DXP* releases. It is specifically intended for developers and operators who want to update their CoreMedia system.

## 1.2 Typographic Conventions

This manual contains different fonts and types in order to label different elements. The following table lists typographic conventions for this documentation:

Element	Typographic format	Example
Source code	Courier new	cm systeminfo
Command line entries		
Parameter and values		
Menu names and entries	Bold, linked with	Open the menu entry <b>Format Normal</b>
Field names	Italic	Enter in the field <i>Heading</i>
CoreMedia Components		The <i>CoreMedia Component</i>
Entries	In quotation marks	Enter "On"
(Simultaneously) pressed keys	Bracketed in "<>", linked with "+"	Press the keys <Ctrl>+<A>
Emphasis	Italic	It is <i>not</i> saved
Buttons	Bold, with square brackets	Click on the <b>[OK]</b> button
Glossary entry	>>-shaped icon	>> WebDAV
Code lines in code examples which continue in the next line	\	cm systeminfo \ -u user

Table 1.1. Typographic conventions

## 2. Release Information



## 2.1 Overview

This chapter lists all changes that have been made for the CoreMedia modules:

- *CoreMedia CMS*
- *CoreMedia Blueprint*
- *CoreMedia Blueprint Base*
- *CoreMedia Studio*
- *CoreMedia Adaptive Personalization*
- *CoreMedia Elastic Social*

And for the CoreMedia development tools:

- *CoreMedia Application Maven plugin*
- *CoreMedia Blueprint Maven Plugin*

CoreMedia CMS contains the following applications:

- *Content Server*
- *Workflow Server*
- *Content Application Engine*
- *Search Engine*
- *Unified API*
- *Site Manager*
- *Importer*
- *Content Feeder*
- *Server Utilities*

## 2.2 Improvements and Changes

### 2.2.1 Release 7.5.45

This chapter contains all changes made in Release 7.5.45 of *CoreMedia Digital Experience Platform 8*.

#### Highlights in this Release

- The CAE Feeder prioritizes small changes now, so that in many situations newly created content will be indexed earlier, even if the change of an expensive dependency has triggered reindexing of lots of documents before (aka "invalidation storm" / "feeder storm").
- Removed NPM version dependency. An explicit NPM version is not needed anymore, instead the build is now using the NPM version bundled with NodeJS (3.10.8).
- All Maven plugins have been updated to the newest working version to reflect the transition from Maven 2 dependencies to pure Maven 3 dependencies.
- The IncludeTag (lc:include) now has an optional parameter "HttpStatusVar" for storing the HTTP status code of a fragment request.
- Support for IBM WebSphere Commerce cumulative APAR JR56287 is added.



Follow the [CoreMedia DXP 8 Help Center section](#) to receive release and product announcements automatically.

### Modules and Tooling

Release 7.5.45 contains the following CoreMedia modules:

- CoreMedia Blueprint
- CoreMedia CMS
- CoreMedia Studio
- CoreMedia Elastic Social

In addition, *CoreMedia DXP 8* uses the following tooling:

*Table 2.1. Tooling of CoreMedia DXP 8*

Product	Key	Version
CoreMedia Application Maven Plugin	APPPLUGIN	2.7.9
CoreMedia Project Maven Extension	PROJEXT	1.0.5

## CoreMedia CMS Changes and Improvements

- The postgresql setup in the flexible deployment with Chef was not configured for performance, this change sets better defaults for some caching and memory settings.

*Reduce time to publish test content in postgresql setup*

In addition to this DB performance tuning, the publishall action of the content resource supports the concurrency flag of the publishall tool. To support an increased memory footprint in case of concurrent publication, the JVM memory settings for the tools bulkpublish and publishall can now be configured in the flexible deployment.  
(CMS-8076)

## CoreMedia Studio Changes and Improvements

- The limit for contributions in the "All contributions" section is increased to 5000. Items are loaded lazy and accessed with infinite scrolling.  
(CMS-2432)

*Increase limit for "All contributions"*

## CoreMedia Blueprint Changes and Improvements

- Updated jQuery to latest 1.x Version (1.12.4) for Preview Driven Editing in Studio.  
(CMS-7703)
- Update node.js to new LTS version 6.9.1. With frontend-maven-plugin version 1.3 an explicit npm version is not needed anymore, instead it uses the node.js bundled npm version (3.10.8). Update node module dependencies in themes too.  
(CMS-7348)
- All components have been tested with spring 4.3.4.RELEASE  
(CMS-5939)
- All Maven Plugins have been updated to the newest working version to reflect the Transition from Maven 2 dependencies to pure Maven 3 dependencies.  
(CMS-5889)

*Update jQuery*

*Spring 4.3.4 Compatibility*

*Maven Plugins Updated*

## CoreMedia Elastic Social Changes and Improvements

- Update of mongo-java-driver from 2.13.0 to 3.4.1 (CMS-7914)

## Miscellaneous Changes and Improvements

- The IncludeTag (lc:include) now has an optional parameter "HttpStatusVar" for storing the http status code of a fragment request. (CMS-8110)
- The CAE Feeder prioritizes small changes now, so that in many situations newly created content will be indexed earlier, even if the change of an expensive dependency has triggered reindexing of lots of documents before (aka "invalidation storm" / "feeder storm").

*HttpStatusVar for IncludeTag*

*CAE Feeder prioritizes content creation*

The new column `priority` was added to the database tables `ppckeys` and `pdcinvalidations`. The CAE Feeder adds the column automatically when starting on an existing database. (CMS-7426)

- A new interface `AssetResolvingStrategy` has been introduced to provide a customization point for the `AssetService`. To use a custom `AssetResolvingStrategy` use a customize replace for the property `assetResolvingStrategy` of the `assetService` bean or declare the custom `AssetResolvingStrategy` as primary bean. (CMS-5644)

*New interface AssetResolvingStrategy for the LiveContext AssetService*

## Fixed Issues

- **CMS-8580: IBM WCS Prerequisites**

The prerequisites for IBM WCS have changed. The mandatory cumulative APAR JR56287 is now required along with JR56662 and JR57043.

- **CMS-8558: Deadlock in CAE Feeder after start**

Fixed a bug that can cause a deadlock in the CAE Feeder shortly after startup. Such a deadlock could happen if the CAE Feeder was down for some time, must catch up latest repository changes and additional repository listeners are registered during CAE Feeder startup. The Blueprint CAE Feeder registers such an additional repository listener since 7.5.33 but other versions are affected as well, if repository listeners are added in custom code during CAE Feeder startup.

- **CMS-8396: CVE-2016-3092 commons-fileupload 1.3 denial of service vulnerability**

commons-fileupload has been updated to 1.3.2

→ **CMS-8313: Date filter for "All Contributions" (Elastic Social)**

A date filter is added to the "All Contributions" section of Elastic Social Moderation. Now it is possible to filter the contributions on a daily base. The total number of search result items is displayed in the footer. If the number of search result items exceeds the maximum length of the list (5000), a hint is displayed.

→ **CMS-7862: Search Customizations are overwritten by Cumulative Fix JR57043**

with cumulative APAR JR57032 IBM has updated several config files in the search module. Please make sure to carefully update the newest files with the required code for CoreMedia LiveContext. Our delivered example files have been adapted to match the new files from IBM.

→ **CMS-7632: Removed WordBreakSolrSpellChecker from solrconfig.xml**

The spellcheck configuration for Solr queries in the CAE was changed so that the WordBreakSolrSpellChecker is not used anymore. Queries with long words became extremely slow with this spellchecker, so we decided to remove it from the configuration file `modules/search/solr-config/src/main/app/solr-home/configsets/cae/conf/solrconfig.xml`.

→ **CMS-7411: CVE-2016-6809 – Arbitrary Code Execution Vulnerability in Apache Tika's MATLAB Parser**

The thirdparty library Apache Tika, that we use to extract text from various binary formats, has a transitive dependency to the jmatio parser for MATLAB files. This parser deserializes Java objects embedded in MATLAB files. A malicious user could inject arbitrary code into a MATLAB file that would be executed in the *Content Feeder* and *CAE Feeder*.

We now exclude the jmatio parser from Apache Tika's transitive dependencies to fix this security issue. This disables parsing of MATLAB files.

→ **CMS-7407: Linking an embedded picture in richtext causes rendering error**

Fixed the creation of external links on images in the richtext properties in Studio.

→ **CMS-7313: Solr index schema change to fix Feeder deadlock**

The definition of field `feederinfo` in `modules/search/solr-config/src/main/app/solr-home/configsets/content/conf/schema.xml` and `modules/search/solr-config/src/main/app/solr-home/configsets/cae/conf/schema.xml` was changed to attribute `indexed="false"`.

In some cases, the Feeders store error messages in this field and indexing would repeatedly fail for very long messages. As there's no need to search in the internal `feederinfo` field, we simply skip indexing for that field. You do not need to reindex after this schema change.

→ **CMS-6694: Current developer flow does not work when being offline**

Since `node-sass v3.12` all frontend dependencies are cachable. To build the workspace offline, make sure it was build online once.

→ **CMS-6526: XLIFF Import - Handling of ignorable whitespaces in Trans-Units**

**XLIFF Import - Handling of ignorable whitespaces in Trans-Units**

A new property `translate.xliff.import.ignorableWhitespaceRegex` has been introduced to configure a regular expression that determines which characters are counted as ignorable whitespace. This configuration is only used when `translate.xliff.import.emptyTransUnitMode` is set to `IGNORE_WHITESPACE`. The default expression has been changed from `\s*` to `{{\s|p|{Z}\}*}}`, so that especially the NBSP character (U+00A0 <No-break space>) is ignored by now.

→ **CMS-6426: Commerce connection initialization**

A commerce connection used to be initialized with `CommerceConnectionInitializer.init(Site)`, which in turn stored the connection in a thread local.

This was changed so that a commerce connection is to be initialized with `CommerceConnectionInitializer.getCommerceConnectionForSite(Site)`, which does not store the connection in a thread local. However, if that is desired, it has to be done explicitly with `Commerce.setCommerceConnection(CommerceConnection)` and—very important—`{{Commerce.clearCurrent()}}` must be called afterwards (preferably in a `finally` block).

→ **CMS-6320: Link Handling of Encoded UriComponents Enhanced**

As described in JavaDoc of `@Link` tag the recommended return value for link handlers is the class `UriComponents`. Some link post processors (see tag `@LinkPostProcessor`) were not aware of possibly already encoded `UriComponents` and provoked a doubled URL encoding.

To provide better support for link post processors dealing with encoded `UriComponents` the utility class `UriComponentsHelper` has been extended by the following methods:

→ `prependPath2(String, UriComponents):UriComponents`

This is the recommended replacement for `prependPath(String, UriComponents):UriComponentsBuilder` as it handles already encoded `UriComponents` correctly. The path is assumed not to be encoded.

→ `prependPath(UriComponents, UriComponents):UriComponents`

The first argument will be used to extract the path and prepend it to the second argument. This way you can flag the path as already encoded or not yet encoded.

→ `override(UriComponents, UriComponents):UriComponents`

Creates `UriComponents` where the first is overridden with non-empty values from the second.

→ `appendOverride(UriComponents, UriComponents):UriComponents`

Creates `UriComponents` where the first is overridden or (if applicable) appended with non-empty values from the second.

→ `appendOverride(UriComponents, UriComponents, boolean):UriComponents`

Same as the two above despite that you can control append or override behavior by boolean flag.

The following methods are now aware of the encoded state of `UriComponents`:

→ `prefixUri(String, String, UriComponents):UriComponents`

→ `withTrailingSlash(UriComponents):UriComponents`

The following methods got a warning notice that you need to deal carefully with the encoding state of the supplied `UriComponents` when using them:

→ `fromUriComponents(UriComponents):UriComponentsBuilder`

→ `prependPath(String, UriComponents):UriComponentsBuilder`

→ `prependPathSegments(List<String>, UriComponents):UriComponentsBuilder`

The following method got marked as deprecated:

→ `addQueryParameters(MultiValueMap<String, String>, UriComponentsBuilder):UriComponentsBuilder`

Use `UriComponentsBuilder#queryParams (Multi ValueMap<String, String>)` instead.

**Note (1):** General advice is that post processors should not return anything else but `UriComponents` as otherwise the intermediate encoding state is lost – and of course they need to take care that incoming `UriComponents` might be encoded.

**Note (2):** You should be aware that `UriComponents.toString()` behaves different to `UriComponents.toUri().toString()`. Only the latter one is aware of the encoding status and thus should be preferred when dealing with `UriComponents`.

→ **CMS-6146: Studio becomes unresponsive when opening document with lots of referrers**

Due to technical limitations the number of entries shown in the referrers list is now limited to 500 entries by default. With the help of the config parameter `maxListLength` of the `ReferrerListPanel` you can re-define this limit but be aware that the Studio might freeze with bigger values. The limit applies to both, documents in production and deleted documents. Thus depending on the checkbox if to show deleted contents or not the actual list length might differ from the configured length.

If the restriction applies the user will get a text message below the referrer list indicating that the list has be cut off.

→ **CMS-5999: Internal link is broken when linked text contains tags**

Creating internal links in Studio now also works correctly if parts of the underlying text are marked bold.

→ **CMS-3949: Copy & Paste in SiteManager**

Recent MS Word versions produce a clipboard format similar to <https://msdn.microsoft.com/en-us/library/Aa767917.aspx> . If you observe unwanted pasted data like

```
Version:1.0 StartHTML:0000000105 EndHTML:0000020973 StartFragment:0000020855 EndFragment:0000020933
```

in the SiteManager's richtext panes, you should set the flag

```
editor.richtext.clipboard.consider-msword-format=true
```

in the `editor.properties` file. Default is false (backward compatible), because the recognition of such clipboard data is only heuristic and thus not reliable.



## 2.2.2 Release 7.5.44

This chapter contains all changes made in Release 7.5.44 of *CoreMedia Digital Experience Platform 8*.



### Highlights in this Release

- Platform: Update to Tomcat 7.0.72
- Platform: Monitoring of license information via JMX added
- Platform: CAE Spring profile "disableDataViews" added
- Frontend: Update to latest versions of frontend-maven-plugin 1.1, node.js 4.6.0, npm 3.10.8
- Various public API deprecations
- Various bugfixes and improvements
- Known issues: Do not upgrade to Adobe Bridge 6.3.x or Adobe CC 2017. The Adobe Drive client integration is not compatible with this version of Adobe Bridge. Adobe CC 2017 does not support Adobe Drive anymore at all. Recommended workaround by Adobe: Keep CC 2015 versions in use. (see <https://helpx.adobe.com/drive/kb/drive-compatibility-cc-2017-apps.html>)

Follow the [CoreMedia DXP 8 Help Center section](#) to receive release and product announcements automatically.

## Modules and Tooling

Release 7.5.44 contains the following CoreMedia modules:

- CoreMedia Blueprint
- CoreMedia CMS
- CoreMedia Studio
- CoreMedia Elastic Social

In addition, *CoreMedia DXP 8* uses the following tooling:

*Table 2.2. Tooling of CoreMedia DXP 8*

Product	Key	Version
CoreMedia Application Maven Plugin	APPPLUGIN	2.7.9
CoreMedia Project Maven Extension	PROJEXT	1.0.5

## CoreMedia CMS Changes and Improvements

- Content servers now expose their license validity information via JMX. MBean: `com.coremedia.Server` Properties: `licenseValidFrom`, `licenseValidUntilSoft`, `licenseValidUntilHard` (CMS-5718)
- Introduced spring profile "disableDataViews" to speed up startup time of CAE. The 'dataViewFactory' bean is still available but ignores further dataview configuration. Beans are returned as-is. (CMS-5712)

*Contentserver license information is available via JMX*

*Added spring profile to prevent loading (and auto-generation) of dataviews*

## CoreMedia Studio Changes and Improvements

- Added a method `skipOnException` to skip entries in searches and queries of the Elastic Core if an exception for one result entry occurs. The returned search result will contain all results which did not cause a `Model- or SerializerException`. This is especially useful for REST calls in the CoreMedia Studio which might otherwise break features if otherwise no result at all would be returned. Be aware that skipped entries will mess up the limit of the result list. If you query with a limit of 10 results, the search result will have less than 10 results if exceptions occur and are skipped. There will not be any additional query to fill up the skipped entry. (CMS-5358)
- The interface `MimeTypeService` has been extended with a method to detect the mime type of a resource based on its contents. The new bean `tikaMimeTypeService` implements this method based on Apache Tika. This bean is now used to detect the mime type of resources during Studio uploads. It allows for a much more reliable mime type detection than simply mapping a file extension.

*Elastic core queries may skip broken models*

*MimeTypeService extensions*

The old implementation, `DefaultMimeTypeService` with bean `mimeTypeService`, is still present, but deprecated. It will be replaced by the `tikaMimeTypeService` in a future release. (CMS-3660)

## CoreMedia Blueprint Changes and Improvements

- Update `frontend-maven-plugin` to latest version 1.1, `node.js` to 4.6.0 and `npm` to 3.10.8. Since `frontend-maven-plugin` is threadsafe, the blueprint can be build multithreaded (`-T1C`) without skipping themes (`-DskipThemes`) again. (CMS-6458)
- The tomcat dependencies have been updated to 7.0.72 (CMS-6452)
- **IBM WAS updates as of August 2016**
  - CoreMedia recommends to use the latest IBM WAS 8.5.5 Fix Pack 10 and IBM WebSphere Java SDK 7.1 Service Refresh 3 Fix Pack 40 (CMS-6238)

*Update Tomcat to 7.0.72*

*IBM WebSphere AppServer 8.5.5.10 / IBM Java SDK 7.1-3.40*

## Miscellaneous Changes and Improvements

- `PATH_SPLITTER` and `PATH_JOINER` have been moved from `UriConstants` to `HandlerBase`, since they are used only there, and they have nothing to do with `UriConstants`. If you use them elsewhere, you can make them public, copy them, move them elsewhere, as you like.

*Cleaned up UriConstants and ContentLinkBuilder*

`joinPath` and `splitPathInfo` have been deleted from `ContentLinkBuilder`. They were unused, had nothing to do with content link schemes, and they were only trivial one-line usages of `PATH_SPLITTER` and `PATH_JOINER`, so they are not worth bloating the interface. If you like them, move the implementations into your project code:

```
public List<String> splitPathInfo(String path) {
    return newArrayList(PATH_SPLITTER.split(path));
}

public String joinPath(List<String> nodes) {
    return PATH_JOINER.join(nodes);
}
```

(CMS-6849)

- Either use the `uapi` connection cache or build a new cache instance yourself (CMS-6490)

*Deprecated class 'com.coremedia.object-server.util.ApplicationContextCacheFactoryBean'*

- The class `hox.corem.Corem`` should not be used anymore and thus has been deprecated. (CMS-6424)
- The following public API methods and fields were deprecated and will be removed in a future release.
  - method `getNamedLoginServiceIORUrl` in `hox.corem.Corem`
  - field `condition` in `com.coremedia.workflow.common.actions.AbstractAction`
  - field `condition` in `com.coremedia.workflow.common.actions.AbstractLongAction`
  - methods `addRunningAction` and `removeRunningAction` in `com.coremedia.workflow.common.actions.AbstractClientAction`
  - method `setMbeanRegistry` in `com.coremedia.workflow.common.util.SpringContextManager`

*Deprecated class  
`hox.corem.Corem`.*

*Deprecated API*

## Fixed Issues

- **CMS-6658: Fix weight calculation of CacheKey "PropertiesKey"**

The CacheKey "PropertiesKey" now calculates the weight depending on the number of dependants, header and the value properties weight. Previously the weight of a PropertiesKey was always 1, potentially leading to much bigger UAPI cache sizes than configured.
- **CMS-6655: Commerce Cache Invalidation**

Commerce Cache Invalidation is now working again in CAE.
- **CMS-6525: Accept XLIFF files with ending .xlf**

When uploading files in Studio ending with .xliff or now also .xlf they are interpreted as XLIFF translations.
- **CMS-6507: Documentation of Blueprint Cookies**

Cookies used by the CoreMedia system have been described in the CoreMedia DXP Developer Manual.
- **CMS-6308: IBM product and category code now support spaces and slashes**

Although non-URL-friendly characters are discouraged in IBM product and category codes, slashes and spaces are supported.

→ **CMS-6305: Moved HttpSessionEventPublisher To CAE Component**

HttpSessionEventPublisher is needed to enable CSRF support.

→ **CMS-6304: Renamed property cae.blobtransformer.capacity to blobtransformer.capacity**

Property 'blobtransformer.capacity' configures a threshold for concurrent blob transformations in CAE and Studio.

→ **CMS-6292: Asset Widget in IBM renders JavaScript when FragmentConnector is disabled**

If the `FragmentConnector` is disabled, CoreMedia must not render anything. On product detail pages, the CoreMedia Asset Widget is rendering JavaScript without respecting the `FragmentConnector` being disabled. To resolve this issue, replace `CoreMediaAssetWidget_UI.jspf` in WebSphere Commerce with the new version, and update the template `Product.asAs sets.ftl` in the CMS.

→ **CMS-6261: Commerce cache ignores misconfigured store contexts at startup**

CommerceCacheInvalidationLifecycle ignores misconfigured store contexts at startup and issues warnings instead of tearing the whole spring application context down.

→ **CMS-6258: Safely configure filters in ComponentWebApplicationInitializer or WebApplicationInitializer implementations**

Introduced `com.coremedia.springframework.web.context.FilterUtil` to safely configure filters in `com.coremedia.springframework.web.ComponentWebApplicationInitializer` or plain `org.springframework.web.WebApplicationInitializer` implementations.

→ **CMS-6255: Search Profiles**

The CoreMedia specific search profiles for IBM WebSphere Commerce have been adapted to reduce the JSON response payload. The JSON payload is cached in memory on CAE and Studio side. Therefore only the required attributes and details should be included. Especially details about SKUs of a CatalogEntry have been reduced as they are requested by subsequent REST calls, anyhow. A custom Postprocessor (`com.coremedia.commerce.rest.search.postprocessor.solr.MinimizedSolrRESTSearchCatalogEntryViewSKUQueryPostprocessor`) has been added to the search profiles and the `coremedia-livecontext-wcs.jar` needs to be copied to the Search-Rest module, as well.

→ **CMS-6084: Added a PerformersPolicy for the ComposeTask of StudioTwoStepPublication workflow**

When an editor in Studio returns a Reviewed Publication with "Needs revision", the publication goes to the Inbox of the editors, who are members of the "composer-role" group, as a Compose Task. Until now this Compose Task didn't validate if the editors have rights to modify the content in the given publication workflow.

From now on the Reviewed Publication workflow limits the list of editors, who can receive publication workflows returned with "Needs revision" in their Inbox. Only editors, who have rights to modify the content in a Reviewed Publication workflow will receive such workflows back.

### Migration

You need to perform the following migration steps due to changes in the Reviewed Publication workflow:

- **Reviewed Publication workflow:** You need to upload the updated `studio-two-step-publication.xml` definition to your workflow server, because the `Compose Task` has a `performers` policy now. You can do this by executing `cm upload -n studio-two-step-publication.xml`
- **Workflowconverter:** you need to execute `cm workflowconverter -x` in order to convert any Reviewed Publication workflows, which have not finished yet. *Make sure the Workflow Server is not running when you convert the workflows.*

See the "Upload" and "Workflowconverter" sections in the Workflow manual for more information about the tools.

The class `com.coremedia.cap.undoc.workflow.plugin.AssignableResourcePermissionsPerformersPolicy` was moved to `com.coremedia.cap.workflow.plugin.AssignableResourcePermissionsPerformersPolicy`. The class `com.coremedia.workflow.common.policies.ResourcePermissionsPerformersPolicy` was moved from module `cap-workflow-server` to module `cap-unified-api`. This class is called `com.coremedia.cap.workflow.plugin.ResourcePermissionsPerformersPolicy` now.

- **CMS-5965: Vagrant helper script removed**  
The `prepare-vagrant-once.bat` helper script has been removed.
- **CMS-5757: Data view auto completion ignores getters with return types defined as generics type parameter**

Data view auto-completion was improved for getter methods that use a generics type parameter as return type. The data view definition will now also be auto-completed with such getters, if they are defined in a super class

and the type parameter can be resolved for the concrete class to some type from the auto-complete configuration.

The public API interface `com.coremedia.cae.aspect.contentbean.AbstractAspectContentBean` was slightly changed to support data view auto-completion for its `#getAggregator` method. Its type parameter is now bounded: `T extends ContentBean`. This reflects the existing behavior as `#getAggregator` always returns `ContentBean` instances.

#### → **CMS-5256: Delete unused profile images**

Unused profile images that are not referenced any more will now by default be deleted. Detecting unreferenced profile image requires a little bit of time on each persisting of a user profile. You can disable the feature by configuring the property `users.images.delete.unused=false`. The change only has an effect on newly persisted user profiles. Older unreferenced images will not be deleted.

#### → **CMS-5232: Bulk Rights Retrieval**

The method `AccessControl.filterReadableContents` and its backing REST call `/api/content/bulk/rights` have been optimized for huge content sets so that no timeouts occur.

## 2.2.3 Release 7.5.43

This chapter contains all changes made in Release 7.5.43 of *CoreMedia Digital Experience Platform 8*.

### Highlights in this Release

- Image Editor Update: Site-specific crops introduced, various bugfixes and stability improvements,
- Image Editor Update: Read support for JPEG images using the CMYK color model
- Translation Workflow Improvement: added "In Translation" state with new Dashboard widget and warning
- LiveContext: Updated Freemarker version
- LiveContext: new `asDefaultFragmentView` - Categories and Articles can easily be added as teasers into placements
- LiveContext: Fragment Highlighting mode in Studio for Commerce rendered pages (CMS-6134)
- LiveContext: New B2B Demo Content and Preview Personas in Default Content



- The tomcat dependencies have been updated to 7.0.70 (due to CVE-2016-3092)
- Various bugfixes and improvements

Follow the [CoreMedia DXP 8 Help Center section](#) to receive release and product announcements automatically.

## Modules and Tooling

Release 7.5.43 contains the following CoreMedia modules:

- CoreMedia Blueprint
- CoreMedia CMS
- CoreMedia Studio
- CoreMedia Elastic Social

In addition, *CoreMedia DXP 8* uses the following tooling:

Product	Key	Version
CoreMedia Application Maven Plugin	APPPLUGIN	2.7.9
CoreMedia Project Maven Extension	PROJEXT	1.0.5

Table 2.3. Tooling of CoreMedia DXP 8

## CoreMedia CMS Changes and Improvements

- Freemarker 2.3.25-incubating (CMS-6190)
- Together with the new image editor, the site specific image variants have been enabled by default. This means that the CAE and the Studio reading all variants information like the minimum width and height or the preview width from the settings documents 'Responsive Image Settings' that must be available for every site. In addition, a global fallback setting exists that contains all variants of all sites.

Since each image variant has it's own preview width/height setting now, the previously introduced setting "maxPreviewImageWidth" has been removed. (CMS-6036)

*Updated Freemarker Version*

*Site Specific Image Variants*



- Improved logging in Content Feeder and CAE Feeder when Apache Tika is used to extract text from binary formats. Warnings from Apache Tika or parser libraries such as PDFBox are now logged with additional information about the source content. (CMS-5981)
- The translation overview dashboard widget and the translation library filter now distinguishes content that is currently in translation. When searching for new or updated content to translate, such content is not included, reducing the risk of duplicate translation workflows.

*"In Translation" State*

In addition, an API method `isInTranslation` was added to `com.coremedia.cap.multisite.ContentObjectSiteAspect`.

### Migration

As workflow definitions changes as well as database schema and user permissions you need to perform some migration steps:

- **Translation Workflow:** You need to upload the updated `translation.xml` to your workflow server, because the `RollbackTranslationAction` was changed to correctly track "in translation" states.
- **Workflowconverter:** You should also run `cm workflowconverter -c` in order to update the definition of running translation processes.
- **Spring Configuration:** In the project workspace, a Spring bean for cleaning up in-translation states after aborted workflows has been added to the `workflowserver-blueprint-component`.
- **User Rights:** The group `translation-workflow-robots` needs additional permissions:
  - Approve (A) on `/Sites` for content type `Document_` and
  - Approve (A) on `/Sites` for content type `Folder_`
- **Database Update:** A database schema update to the content server is automatically applied. (CMS-5799)
- Introduced a new `asDefaultFragment` view that is used instead of the default view for any placements that do not render a full page but a fragment only (e.g. in main, tab, header, footer, etc.). This enables editors to also directly place e.g. Augmented Categories or Articles in a pagegrid without rendering them in full length but as teaser, only. Demo Layouts for Commerce Composer and `Header.jsp` as well as `Footer.jsp` in WCS workspace have been adapted accordingly. (CMS-5781)

*asDefaultFragment*

- Image transformations now support JPEG source images that use the CMYK color model.

*Read support for JPEG images using the CMYK color model*

CMYK images are converted to sRGB before further processing. The conversion utilizes a ICC color profile in order to map the CMYK colors to the sRGB color space as accurate as possible.

When there is a suitable color profile embedded within the source image, that color profile is used for conversion. It is highly recommended to save a CMYK JPEG image with an embedded color profile before uploading it into the CMS.

If there is no embedded color profile, conversion falls back to a platform specific "generic" CMYK color profile. If the resulting colors are not acceptable, there is the possibility to specify your own ICC color profile used for conversion. All that is needed is to put a properties file "com/twelvemonkeys/imageio/color/icc\_profiles.properties" into the classpath and define the key "GENERIC\_CMYK" with the path to your profile, e.g.

```
GENERIC_CMYK=/usr/share/color/icc/MyGenericCMYKProfile.icc
```

Writing CMYK images is not supported. Moreover, writing image metadata is not supported for images originating from CMYK source images. Any metadata is removed before writing the image, as if the removeMetadata (rm) operation has been applied. This is done in the Blueprint CAE anyway in order to generate small and compact images.

(CMS-5685)

- Added JVM option `-XX:OnOutOfMemoryError='kill -9 %p'` for Tomcat under Linux, so that the JVM terminates immediately when an `OutOfMemoryError` occurs.

*Tomcat JVM option*

(CMS-4634)

## CoreMedia Studio Changes and Improvements

- A new feature has been implemented to visualize the placements delivered from CoreMedia CMS on Shop pages from a Commerce System. For more information read the Studio User Manual.

*Feature: Highlight CMS Placements on Shop pages*

(CMS-6134)

- When starting a translation workflow, a warning is shown for content that is already in translation. In the translation detail view, a warning is shown for content that is the target of multiple translation workflows at the same time. Overlapping translation workflows should be avoided because the master version to be translated cannot be determined properly.

*"In Translation" Warning*

(CMS-6009)

- The Image Editor has been updated to a new version. There are a few changes in usability, but mainly it has been made much more robust.

*Image Editor Update*

The new Image Editor must be configured in Studio image document forms as an `ImageEditorPropertyField`. The configuration options can be found in the *CoreMedia Studio Manual Chapter Document Type Model Section Image Cropping and Image Transformation*.

The Image Editor now uses the variants (a.k.a. crops) which are defined via configuration and not through the image document form.

Various issues with the Image Editor have been solved by this update. Some fix highlights include:

- The old Image Editor sometimes miscalculated crop ratios. This led to an automatic content check-out when the user opened the image with Studio. In the new Image Editor the crops are correctly calculated, but these changes are not saved until the content is checked-out by the user. This solves both the problem with crop miscalculation and with automatic check-out of images.
- Image Cropping validation issues: in the new Image Editor, the "crops are too small" validation now takes place on the server, so that violations appear as content warnings.
- Reverting an image preserves the format of previous image: has now been resolved.
- Undo history in the Image Editor is no longer truncated, but shows the entire undo history list.

(CMS-5990)

- Removed "livecontext.catalog.root content" Struct Settings from example content as it is not required. These settings are not used by the implementation and only cause confusion. The catalog root is only determined via external reference to the virtual "ROOT" category. For your convenience, simply use the "augment category" action on the "Product Catalog" node in the e-Commerce-part of the library.

(CMS-5903)

- A confirmation dialog has been introduced when renaming a non-empty folder, because this has implications for all content below that folder, and may lead to expensive recomputations on the web site or in the search engine. A similar dialog was already implemented for folder move operations.

(CMS-5788)

- In the new Image Editor, previews for slider values are never shown before the sliding is complete.

(CMS-3656)

- When a translation task is accepted, changes to non-translatable properties in the master content are now applied to the derived content automatically if possible without conflicts. This helps to keep binary and structural data in sync between sites, such as images, crops, settings, and the navigation

*Confirmation dialog for folder rename*

*Translation automatically applies structural updates*

hierarchy, and complements the XLIFF-based update of translatable properties. When a translation task is rejected, all changes to the derived contents are reverted, including automatic changes applied by the workflow. This feature requires an updated translation workflow definition `translation.xml` which should be uploaded to the workflow server. Due to changes to the workflow action classes, existing translation workflows should be completed before upgrading. If you still have running translation workflows after upgrading the Studio, please run the workflowconverter (see section Workflowconverter in CoreMedia Workflow Manual) in order to be able to finish the open workflows.

(CMS-3634)

- Image Editor: clicking on "undo" dropdown always undoes last transformation: fixed with the new Image Editor.

(CMS-2648)

## CoreMedia Blueprint Changes and Improvements

- The tomcat dependencies have been updated to 7.0.70

(CMS-5937)

*Update Tomcat to 7.0.70*

## CoreMedia Elastic Social Changes and Improvements

- Previously, the modification date of a CommunityUser was defined to only reflect changes in the moderation. As a property with this name is often used in a different way, the property is updated now whenever a user is saved including user-made changes.

(CMS-5900)

*Changed meaning of "modificationDate" of community users*

## Miscellaneous Changes and Improvements

- Made it possible to configure implementations of `FeedablePopulator<Content>` for feeding additional properties in the *CAE Feeder*. Before this change, only implementations of `FeedablePopulator<ContentBean>` could be used in the *CAE Feeder*. You can now add both types of populators to the *CAE Feeder's* Spring bean "feedablePopulators".

*CAE Feeder customization*

This changes makes it easy to reuse `FeedablePopulator` implementations written for the *Content Feeder* in the *CAE Feeder* as well. For example, the `PropertyPathFeedablePopulator` can now be used in both feeders to index values of specified nested struct properties.

(CMS-6116)

## Fixed Issues

- **CMS-6495: vagrant coremedia/base box dependency locked to 1.16.0**

locked centos/6.7 box (with virtualbox/5.0.0 guest additions) via:

```
config.vm.box_version = "~> 1.16.0"
```

to avoid 1.18.0 centos/6.8 box update (with virtualbox/5.1.4 guest additions) for now (waiting for vagrant/1.8.6 release)

See also <https://atlas.hashicorp.com/coremedia/boxes/base/>

→ **CMS-6487: B2B Contracts should use discount on List Price, not Offer Price**

AuroraB2B Price Rules in demo data now use list prices as basis for discount.

→ **CMS-6485: Teaser in Hotzone of Image Map should link to Teaser target and not to Teaser**

Links in Image Maps now use the target property of CMTeasable in order to link to a CMTeaser's target instead to the CMTeaser itself.

→ **CMS-6263: Struct Editor Security**

An XSS vulnerability in the struct editor was fixed.

→ **CMS-6250: CrowdUserProvider**

The `CrowdUserProvider` did not behave correctly when there were errors accessing Crowd. Instead of passing technical exceptions to the caller it silently ignored the exceptions and returned `null` which is a signal for: Crowd does not know the user. The same was true for accessing groups.

The fix will now only ignores the exceptions `UserNotFoundException` and `GroupNotFoundException`. All other exceptions are forwarded to the caller.

In case you do not want to update to this version just change the methods `getUser` and `getGroup` as described above.

**Note:** Using the new `CrowdUserProvider` might pop up issues within your Crowd access you were not aware of before, as the exceptions were hidden and the symptoms were possible at very different places. So applying this change also might mean that you need to fix your Crowd set up.

→ **CMS-6153: Richtext Toolbar menu button icons now maintain focus in the richtext area**

Clicking on the arrow next to richtext toolbar menu buttons previously resulted in the loss of selection within the richtext area (at least optically). This

has been fixed by increasing the size of the menu icons to be 34x24 pixels - large enough to cover the area with the arrow. Those wishing to create custom buttons with menu dropdowns for the richtext area may consider creating the icons in this size with the actual icon picture shifted towards the left size of the canvas (in order to provide space for the overlaid arrow).

→ **CMS-6077: IBM Rest interface "byParentCategory" uses paging**

changed maxRows property of CoreMedia\_findSubCategories search profile in wc-search.xml to find more than 50 subcategories by default

→ **CMS-6065: Hybrid scenario (commerce- and content-led): Inconsistency: request's site is known... sometimes**

SiteHelper (com.coremedia.blueprint.base.multisite.SiteHelper#getSiteFromRequest) now also works in the commerce-led / fragment scenario.

→ **CMS-6059: Metadata Resolution**

The method `resolveMetadataOfBlobMetadataResolver` implementation is only called if the method `canHandle` returned `true`, contrary to earlier implementation that called `resolveMetadata` too often.

→ **CMS-6005: MongoDB aggregation framework replaces Map-Reduce**

The average and histogram counters are now calculated using the MongoDB Aggregation Framework replacing the former Map-Reduce implementation. As the internal storage format needed to be changed you need to trigger the refreshing of these counters per JMX. See [here](#) for instructions on how to refresh counters. The counters will also be triggered automatically, but that can take up to 24h (unless configured differently). This means that after an update the top rated lists etc. will be empty until the counters are refreshed.

→ **CMS-5986: Search Landing Pages**

A dedicated and more intuitively named Page "LiveContext Search Landing Pages Hidden Page" with segment "livecontext-search-landing-pages" is added to the demo content. The default property value in the blueprint for "livecontext.slp.segmentPath" was changed to "livecontext-search-landing-pages", accordingly. All Search Landing Page documents are moved to that Page and all non-Search Landing Pages are kept in the old LiveContext Fragments Hidden Page and will not be rendered as Search Landing Pages in the preview, anymore.

→ **CMS-5964: Image map does not show links to non-valid products**

Links to products and the corresponding link areas are no longer rendered if the product is not visible by contract (or is in another workspace).

→ **CMS-5963: Image map does not show links to non-valid categories**

Links to categories and the corresponding link areas are no longer rendered if the category is not visible by contract, by time-validity (or is in another workspace).

→ **CMS-5924: CONTAINS query for structs**

In the UAPI, it is now consistently possible to query for structs CONTAINing strings using both server-side (`poseContentQuery`, `cm query`) and client-side queries (`getContentsFulfilling`, `getReferrersFulfilling` etc.).

→ **CMS-5898: Allow negative facet.limit in SolrSearchQueryBuilder**

Changed the default value of `SearchQueryBean#getFacetLimit` from -1 to 100, which is the correct default value for Solr. If a different, possibly negative value is set with `#setFacetLimit` that value is send to Solr. Negative values can now be used for unlimited facet results.

→ **CMS-5895: WCS error handling improved with CoreMedia Studio**

A WCS error could lead to a freeze of the Studio Library (e.g. in case of connectivity problems or problems with the user authorization). These issues are resolved.

→ **CMS-5657: LiveContext: Product quantity typically is a float, not string**

Avoiding `ClassCastExceptions` in `com.coremedia.livecontext.e-commerce.ibm.inventory.AvailabilityInfoImpl#getQuantity()`. `DataMapHelper` now also uses Spring's Conversion Service to convert between types (e.g. String to Float).

→ **CMS-5642: Resource Bundle Linklist is missing for Augmented Pages.**

Augmented Pages now have a Resource Bundle linklist in the Studio form under Localization

→ **CMS-5397: Content of type "Augmented Page" does not show teaser thumbnail image in library**

Augmented Pages now their Teaser Picture in library thumbnail view

→ **CMS-5236: Image Editor Breaks after Adding and Removing Variant**

Image Editor Breaks after Adding and Removing Variant: The new Image Editor can now handle dynamic variants.

→ **CMS-5222: Reverting a picture does not clear the undo history**

Reverting a picture does not clear the undo history: in the new Image Editor, the undo history is reset upon reverting the image.

→ **CMS-5216: Image incorrectly flipped if rotated**

Image incorrectly flipped if rotated: For example, if the image was rotated by 90 degrees, then a horizontal flip appeared as a vertical flip as the flip action was performed with respect to the original image. In the new Image Editor, the flip actions are performed with respect to the rotated image.

→ **CMS-4896: Undo history of image editor sometimes truncated**

Undo history in the Image Editor is no longer truncated, but shows the entire undo history list.

→ **CMS-4798: Image blank when changing rotation or contrast**

Image blank when changing rotation or contrast: Fixed with the new Image Editor

→ **CMS-3654: Individual Image Crops in overview do not update on each flip-action**

Individual Image Crops in overview do not update on each flip-action: Fixed with the updated Image Editor

→ **CMS-3488: Console error when applying fine rotation**

Fine rotation is broken for some images: fixed in the new Image Editor

→ **CMS-2410: No crop boundaries shown after rotate, flip, brightness or contrast change**

In the new Image Editor, crop boundaries remain visible after all editing operations.

→ **CMS-1706: Lazy Loading Image Editor creates broken Tabs**

No more broken crop tabs on large picture upload in the new Image Editor.

## 2.2.4 Release 7.5.42

This chapter contains all changes made in Release 7.5.42 of *CoreMedia Digital Experience Platform 8*.

### Highlights in this Release

- Pagegrids for PDPs now leverage inheritance
- Optimized image delivery
- Updated third party libraries (e.g. Spring Social, Spring Security, Tomcat, Node, npm)
- Fixed issues and optimizations





Follow the [CoreMedia DXP 8 Help Center section](#) to receive release and product announcements automatically.

## Modules and Tooling

Release 7.5.42 contains the following CoreMedia modules:

- CoreMedia Blueprint
- CoreMedia CMS
- CoreMedia Studio
- CoreMedia Elastic Social

In addition, *CoreMedia DXP 8* uses the following tooling:

Table 2.4. Tooling of CoreMedia DXP 8

Product	Key	Version
CoreMedia Application Maven Plugin	APPPLUGIN	2.7.9
CoreMedia Project Maven Extension	PROJEXT	1.0.5

## CoreMedia CMS Changes and Improvements

- Added a configuration option for the Studio web application to disable the groups filter query in Solr search requests: `studio.rest.searchService.useGroupsFilterQuery=false`

Normally, you do not need to set this option. It's recommended to not disable the groups filter query in search requests. However, if you've changed the default Content Feeder configuration and set `feeder.indexGroups=false`, you may disable the groups filter query with the new option because the filter query does not have an effect in that case.

(CMS-5812)

- Serverexport now omits `masterVersion` property if translation state is set in order to avoid irrelevant diffs on exported content. The specific number of the master version does not matter, because it is overwritten after import. (CMS-5806)

*masterVersion in Serverexport*

- The thirdparty library Apache Tika has been updated from version 1.7 to version 1.13. Apache Tika is used for text and meta-data extraction from binary formats, for example in the Content Feeder and CAE Feeder.

*Apache Tika update*

The update fixes a security vulnerability that exists in older versions of Apache Tika: CVE-2016-4434: Apache Tika XML External Entity vulnerability

As part of this update, the following transitive dependencies of Apache Tika had to be updated as well:

- commons-codec from 1.9 to 1.10
- commons-compress from 1.8.1 to 1.11
- gson from 2.2.2 to 2.2.4
- metadata-extractor from 2.6.2 to 2.8.1
- org.json:json from 20131018 to 20140107
- pdfbox from 1.8.8 to 2.0.1
- poi from 3.11 to 3.15-beta1

Apache Tika has lots of transitive dependencies for various binary formats. To restrict the total number of libraries in the classpath, we've excluded transitive dependencies for less common formats, that were newly introduced with Apache Tika 1.13. For details, have a look at the dependency management in `cms-thirdparty-bom/pom.xml`.  
(CMS-5805)

- Merged resources contained in `cae-component-shared-resources` into `cae-component`.  
(CMS-5734)
- Loading of component (identified by the name of their component XML or properties file) can be prevented by passing 'components.disabled=X' to the application where X is a comma-separated list of component names. Introduced base class `com.coremedia.springframework.web.ComponentWebApplicationInitializer` for components that set up servlet listeners, filters or servlets. When converting web-fragments to subclasses of `ComponentWebApplicationInitializer`, ordering can be defined using spring's `Order` annotation but no longer via relative ordering by name. `WebApplicationInitializers` can be used along with web fragments and are initialized before web-fragments.  
(CMS-5695)
- The pagegrid for PDPs inherits their placement contents from the root channel even if there is no "pdpPagegrid" struct property in the root channel. That means it is no longer necessary to define header and footer contents twice (typically done on the content tab and on the product content tab of the augmented root category).  
(CMS-5648)
- Some JavaScript or CSS frameworks only ship in a compressed package and as such there is no need to compress them twice. There are also some frameworks which are not compatible with the compressor used by CoreMedia. Consequently we have added an option to the JavaScript and CSS

*Removed cae-component-shared-resources*

*Introduced property 'components.disabled' to prevent loading of components*

*PDP pagegrid contents will also be inherited from the root channel*

*Added an option to disable compression of JavaScript and CSS*

premulars of the Studio that allows disabling compression for certain documents.

(CMS-5152)

- Reduced default JPEG compression quality from 95% to 80% for smaller images without visible changes.

(CMS-4192)

- Added description on how to access a Freemarker facade from the templates.

(CMS-3646)

- The FeedablePopulator implementation `com.coremedia.cap.feeder.populate.PropertyPathFeedablePopulator` can be used to configure indexing of specific nested struct property values in the Content Feeder and CAE Feeder.

(CMS-3278)

*default JPEG compression quality*

*Freemarker auto import description*

*Indexing nested struct property values*

## CoreMedia Studio Changes and Improvements

- The `UrlValidator` used for documents of type External Link now also allows schemeless, "mailto:" and "tel:" URLs by default, as well as anchor targets (e.g. "#somewhere). URLs with unreplaced token (e.g. {livecontext.host}) are valid if a valid schema is used.

(CMS-5896)

*ExternalLink Validator*

- Most of the image transformation functionality has been moved from the "contentbeans" module to the new core module "cap-transform". The new module allows to configure site/content specific image variants and enables the upcoming new image editor to execute service side validators.

Therefore the image variants defined in the file "mediatransform.xml" have been moved from the "contentbeans" module to the new "shared" module "image-transformation".

(CMS-5856)

*New core-module "cap-transform"*

- When creating an augmented category both page layouts are initially taken from the root category (different for the Category Overview Page and the PDP). That means the default page layouts for augmented pages for a site are set at the root category. They should meet the requirements of most catalog pages.

(CMS-5840)

*Initial page layouts for augmented categories are taken from root*

- The type of date properties in client-side structs has changed from `Date` to `com.coremedia.ui.data.Calendar`. It is now possible to select times and timezones for date properties in the Struct Editor. The defaults for new date properties are today at midnight in the default timezone for Studio installation.

(CMS-5826)

*Dates with Time and Timezone in Structs*

- The `EditorContext` method `registerThumbnailUriRenderer` has been deprecated and is replaced by the new method `registerThumbnailResolver`.

The new `ThumbnailResolver` interface is implemented in the core and is responsible for finding a thumbnail for a content. The search for a thumbnail is executed recursively for all content properties that have been registered via the `registerThumbnailResolver` method. The result of the resolver is either a `String` that represents the URL or a `Thumbnail` object that contains all data to generate the image URL.

The class `BlueprintFormsStudioPluginBase` contains the example setup for the new thumbnail resolving. Additionally, the actual rendering of the URL has been separated and can be customized by implementing the `ThumbnailRenderer` interface or subclassing the `ThumbnailRendererBase` class. This allows to let other services render all thumbnails that are displayed in the Studio, e.g. the `CaeThumbnailRenderer` is an example implementation that builds URLs to retrieve thumbnails from the CAE. The additional handler `StudioImageHandler` has been added to the `cae-base-lib` module for this.

The new thumbnail URL resolving is also applicable for commerce thumbnails. The class `LivecontextStudioPluginBase` has been changed according to the new mechanism. Custom `ThumbnailResolver` implementations have been added to the blueprint for this.

Migration hints:

- helper methods for resolving content properties have been removed from the `ImageLinkListRenderer` class
- `ImageLinkListPropertyField` or similar grid based components shouldn't use the `convert="{editorContext.getThumbnailUri}"` converter for a datafield anymore. It is sufficient to apply the renderer for a column only, e.g.:

```
<gridcolumn id="thumbnail"
            width="110"
            sortable="false"
            dataIndex="thumbnailUrl"

            renderer="{ImageLinkListRenderer.thumbColRenderer}"/>
```

(CMS-5764)

- In order to more efficiently support the cloning of derived sites with a locale variant, a prefixed variant string is available as an additional token `{7}` in the property `sitemodel.rootFolderPathPattern`. This enables the derive site method to include the locale variant in the path of the site root

*editorContext.registerThumbnailUriRenderer has been deprecated, use editorContext.registerThumbnailResolver instead*

*New Locale Variant Token for Site Root Folder*

folder. In the default configuration, the locale variant is appended to the language string, separated by an underscore "\_". The separator character can be configured using the property `siteModel.variantPrefix`.

In case you are not using CoreMedia Blueprint you need to adapt the site model configuration and change/add the following properties:

```
<bean id="siteModel" class="...">
  <!-- change -->
  <property name="rootFolderPathPattern"
    value="/Sites/{0}/{6}/{5}{7}"/>
  <!-- add -->
  <property name="variantPrefix" value="_"/>
  <!-- ... -->
</bean>
```

(CMS-5335)

- The default "Link Behavior" of the "External Link" Dialog has been changed from "Open in Current Window" to "Open in New Window".  
(CMS-4416)

## CoreMedia Blueprint Changes and Improvements

- Update `node.js` to 4.4.7, `npm` to 3.10.2, `mediaelement` to 2.21.2, `masonry` to 4.1.0 and other packages to the latest version.  
(CMS-5892)
- Site indicators (aks CMSite documents) had no settings so far. We finally added them now, so from now on you should configure settings of site wide scope in the site indicators rather than in the root channels. You do not need to migrate existing settings. The `SiteSettingsFinder` has a backward compatible fallback to the root channel in case a requested setting is not defined in the site indicator.  
(CMS-5759)
- Tomcat has been updated to 7.0.69. The update includes the `tomcat-maven-plugin` dependencies, the tomcat installation and the `catalina-jmx-remote.jar`, which is now named `tomcat-catalina-jmx-remote.jar`. There are also some additional changes being made to the configuration. The new `VersionLoggerListener` is added by default.  
(CMS-5697)
- **Module:** `cms-thirdparty-bom`  
`joda-time:joda-time` has been updated from 1.6.2 to 2.9.3. See [joda.org](http://joda.org) for change notes.

*Settings for Sites*

*Dependencies: joda-time Updated*

(CMS-5663)

→ **New CentOS 7 coremedia/base7 Vagrant box for the new flexible deployment (not for standard RPM deployment)**

- Using CentOS 7.2 March 2016 (1603-02) rolling iso
- Provided via <https://atlas.hashicorp.com/coremedia/base7>
  - CentOS 7.2.1511 including kernel 3.10.0-327.13.1.el7.x86\_64
  - bash 4.2.46-19.el7
  - openssl-1.0.1e-51.el7\_2.4
  - mod\_ssl-2.4.6-40.el7
  - VirtualBox guest additions 5.0.16
  - openjdk/1.8.0\_77
  - ibjpeg-turbo-official-1.4.2-20150921
  - Performance Co-Pilot (PCP) 3.11.1

*New CentOS 7.2 "1603-02" coremedia/base7 Vagrant box v2.3.0*

**Vagrant 1.8 and VirtualBox 5.0**

- Tested with Vagrant 1.8.1 and VirtualBox 5.0.16

(CMS-5560)

- All Blueprint Themes are build with templates by default. The Maven parameter `cae.themes.grunt.task.build` and `cae.themes.grunt.task.test` are removed. The default grunt tasks are now `grunt build` and `grunt test`, if tests are available.

*Themes build with templates*

(CMS-5323)

- The artifactId of the Tomcat Zip file to build the tomcat-installation rpm is changed from `tomcat-dist` to `tomcat` and retrieved from Maven central repository.

*Use official Tomcat installation Zip from Maven central*

(CMS-5071)

## Miscellaneous Changes and Improvements

- Updated from 18.0 to 19.0.  
(CMS-5975)
- Catalog Image calls are not redirected to the default blob handler anymore, but delivered directly instead. The response contains HTTP eTag-header-information in order to allow browsers to use conditional requests (the binary data is only sent if the eTag has changed, otherwise browsers can continue to use the cached binary). In the live environment the response contains an

*3rd Party Update: Guava*

*Catalog Images Delivery without Redirect*

additional max-age HTTP header to keep to many conditional requests away from the CAE. The TTL configuration for the conditional request is set to 5 minutes per default. This can be customized via `lc-asset-handlers.xml` spring configuration file. In the Management Environment (Preview CAE) no additional caching headers are set in order to instantly see changes to catalog images.

(CMS-5654)

- The `FragmentConnector` can be disabled by configuring the property `com.coremedia.fragmentConnector.disabled`. The property is optional. The `FragmentConnector` can be disabled while `wcs` is running. To do this add the property `com.coremedia.fragmentConnector.disabled` to the `STORECONF` table of the `wcs` instance. The `STOREENT_ID` for this property must be "0". After adding this property to the table you will have to refresh the `StoreConfigurationRegistry` in the `WCS Administration Console`. Example entry in the `STORECONF` table:

*Property to disable `FragmentConnector`, new thirdparty libraries and deprecations*

STOREENT_ID	NAME	VALUE	OPTCOUNTER
0	<code>com.coremedia.fragmentConnector.disabled</code>	true	0

To implement this feature six new thirdparty libraries were added, which must be part of the classpath from now on:

- `spring-context:4.1.7.RELEASE`
- `spring-core:4.1.7.RELEASE`
- `spring-web:4.1.7.RELEASE`
- `spring-expression:4.1.7.RELEASE`
- `spring-aop:4.1.7.RELEASE`
- `spring-beans:4.1.7.RELEASE`

Two classes were marked as deprecated and will be removed in later versions:

- `PropertiesBasedIBMLiveContextEnvironmentFactory`
- `IBMLiveContextEnvironmentFactory`

If you have references in your `web.xml` to these classes replace them with the `DefaultLiveContextEnvironmentFactory` class.

(CMS-5295)

- The `CatalogRootHelper` utility class imposed an implicit requirement upon implementations of the `Commerce API`: The ID of the root category had to be "ROOT". This was all but obvious from the `Commerce API`, and it may

*Catalog Root Category*

even be cumbersome to implement, especially if the root category is not mocked as in the IBM implementation, but the particular commerce system features a native root category with a regular ID. Therefore the `CatalogRootHelper` has been deleted and all functionality has been moved into the implementations of the Commerce API. This has two implications on the Commerce API:

- There is a new method `CatalogService#findRootCategory` which replaces `CatalogRootHelper#getRootCategory`. If you have implemented the Commerce API, you can reuse the `CatalogRootHelper` code to implement the new method in a backward compatible fashion. But maybe for your particular commerce system there is even a more obvious implementation. Whatever implementation you choose, make sure that `CatalogService#findRootCategory` and `Category#isRoot` are consistent.
- The constant `Category#EXTERNAL_ID_ROOT_CATEGORY` has been deleted, since it has no special meaning any longer. In case you used it, you can substitute it with its concrete value "ROOT" or introduce your own constant. The Studio REST service still features the special "ROOT" URL, but this URL segment is now independent of the root category's ID.

(CMS-5270)

- With the previously introduced `XmlUapiConfig` and its builder pattern it was possible to separate content, schema and rules definitions into different files and thus use the same `schema.xml` for tests using a different `content.xml`.

While the `schema.xml` has a special format only usable within such integration tests a newly introduced method now allows to actually use any `contenttypes.xml` from your project.

To do so use the builder pattern as follows:

```
XmlUapiConfig
    .builder()
    .withContent("classpath:com/test/content.xml")
    .withContentTypes("classpath:com/prod/*-doctypes.xml")

    .build();
```

For more information consult the JavaDoc of `XmlUapiConfig`.  
(CMS-4870)

- The Include Tag now has an optional parameter `exposeErrors` to expose any fragment connector errors with HTTP status code  $\geq 400$  as response code

*Using doctypes.xml in Unit Tests*

*Fragment Error Handling*



on the main page. This enables for example real 404 handling for CoreMedia Microsites and full page articles in a commerce-led scenario (e.g. in Aurora). See documentation and taglibrary for details. (CMS-4850)

## Fixed Issues

### → **CMS-6018: e-Marketing Spots**

Changes made to e-Marketing Spots within IBM WebSphere Commerce (e.g. new Description) are now getting correctly invalidated and reloaded in Studio.

### → **CMS-5995: Unuseful PDE context menu on category and product detail pages**

PDE context menu for the whole page is not rendered on category and product detail pages for shop pages in Studio, anymore. It showed a not working action before. Augmenting category pages is possible through various action in e.g. library, tab header or right toolbar. Augmenting product pages is only possible either through its category's product content page grid or via asset management.

### → **CMS-5994: e-Commerce library does not search for Augmented Categories even if preference "Show Products and Categories as Content" is enabled**

Search for augmented categories is now immediately possible after switching preference "Show Products and Categories as Content" to enabled.

### → **CMS-5987: Image Zoom Feature Breaks Preview Based Editing**

The Preview Driven Editing context menu is now also showing up on the main picture within the LiveContext Product Asset Management Widget.

### → **CMS-5940: ImageReferrerLinkList has been deleted**

ImageReferrerLinkList has been deleted and is replaced by the ReferrerLinkList which has the additional parameter "showThumbnail" to enable an additional image column for the list.

### → **CMS-5876: Content Server**

A bug in the Content Server has been fixed, which occasionally caused incorrect date values to be persisted in the Content Server database in times of high write load.

### → **CMS-5833: Site Aware CacheInvalidationListener**

The CacheInvalidationListener for IBM WebSphere Commerce is now site aware. If you configure different IBM WebSphere Commerce service endpoints (URLs) for different sites within the CMS, these different systems are

polled for cache invalidations in parallel. The CacheInvalidation therefore gathers all service endpoints for the different connected IBM WebSphere Commerce systems and starts a polling thread for each unique endpoint URL.

→ **CMS-5796: Updated Spring Social Versions**

spring-social 1.1.4.RELEASE, spring-social-facebook 2.0.3.RELEASE, spring-social-twitter 1.1.2.RELEASE

The spring-social-\* modules are used for Elastic Social user registration with a provider.

This update is required for customers who use the latest version of the Facebook App (2.6), because the Facebook API has changed. The change is backward compatible, it still works with older versions of the Facebook App.

→ **CMS-5771: Aligned themes and ViewRepository names**

In previous release the ViewRepository and the asset management theme had different names. As a result the asset management templates could not be loaded from the content but only from the CAE. By using the suggested name pattern (theme name = viewRepository) all extensions can be loaded from content now.

→ **CMS-5739: Disable script compression in CSS Importer and themes**

The CSS Importer now uses some simple tests to check if a scripts should or must not be compressed. If the JavaScript or CSS file either uses the extension *.min.js* / *.min.css* or if the script is not compatible with the YUI compressor used by the CAE then the *Disable Compression* flag of the corresponding content document is automatically set.

Additionally, the theme descriptor provides an optional *disableCompression* attribute at the *javaScript* and *css* level which allows overriding the setting implied by the CSS importer.

→ **CMS-5711: Absolute URL Prefixes**

It used to be cumbersome to introduce a new site, because you had to add a new URL prefix mapping in the Spring configuration, and thus the CAEs had to be redeployed and restarted. Now, the URL prefix mappings are maintained in the content. For details consult the Developer Manual, Appendix / Link Format / Link Post Processors / *makeAbsoluteUri*. You only need to add a simple struct to each site's settings. Depending on your particular URL prefixes, you might even be able to use the same struct for all sites of a web presence. If you want to delay the migration nonetheless, you can activate the outcommented snippet in *blueprint/modules/cae/cae-base-lib/src/main/resources/framework/spring/blueprint-links.xml* to achieve the old functionality.

→ **CMS-5662: maven property renamed**

maven property `mod_ssl.rpm.version` renamed to `mod_ssl.rpm.minVersion`

→ **CMS-5601: ImageFilter for Management Center**

Added ImageFilter that enhances the standard IBM LoadImage servlet by resolving the CoreMedia Asset Management specific `storeId` token in image URLs. Additionally, any image URLs with schemaless URLs (starting with `"/"`) will be automatically converted to `"http://"` as the IBM LoadImage servlet cannot handle these URLs. Please refer to the documentation about installation of the ImageFilter. In WCS v8 with a security fix JR49256 applied, Management Center rejects any requests that try to redirect to an unauthorized site. To show the images from CMS, we need to enable URL redirect filtering by adding a AllowedHost element inside a URLRedirectFilter element in the LOBTools module in WCS configuration file (`wc-server.xml`).

→ **CMS-5551: Multi-Site: Fix for Unpublished Master**

In a multi-site scenario, a CAE in the live environment failed to successfully deliver content items whose master had not yet been published. The obvious workaround was to publish the master. With this fix the CAE now copes correctly with unpublished masters.

→ **CMS-5483: Unicode BOM in XLIFF**

The XLIFF upload code is now robust against UTF-8 byte order markers.

→ **CMS-5410: PDPs rendered by CoreMedia are using the PDP pagegrid now**

If a Product Detail Page is rendered by CoreMedia (and not by the Commerce system) the `pdpPagegrid` is used by default (see the Product Content tab of an Augmented Category in Studio). In the past it was only the case for fragments on PDPs. The spring configuration flag `useContentPagegrid` can be used to switch back to the standard content pagegrid (see `ProductPageHandler`). Product links that point to a CoreMedia PDP can be enabled by setting the content setting `livecontext.policy.commerce-product-links` to `false`.

→ **CMS-5351: Store ID comparison**

For particular technical reasons we had to weaken store ID comparison to case insensitivity. I.e. `"myStoreID"` is considered identical to `"Mystoreid"` now. If the names of all stores used in a LiveContext instance are still unique wrt. the new comparison, there is nothing to do. Otherwise, you need to rename your stores or roll back the comparison in `LiveContextSiteResolverImpl#siteHasStore` in the Blueprint's `lc` extension.

→ **CMS-4568: Content server query fails on Oracle: column ambiguously defined**

Fixed a bug that caused database exceptions when version queries with limit and order by clause were executed on an Oracle database.

→ **CMS-2901: Attach rpm files to boxes artifact and use default maven deploy mechanism**

As rpm metadata is generated regardless of group and artifactId, we can simply attach all artifacts to the boxes pom and deploy that using default

```
mvn deploy:deploy -Prespository-upload
```

. As a result the properties `rpm.upload.groupId` and `rpm.upload.version` are now obsolete and have been removed.

→ **CMS-2477: Update spring-security to 3.2.9.RELEASE**

The dependency spring-security has been updated to 3.2.9.RELEASE.

→ **CMS-1716: Error message in External Library is not helpful: Kaltura and Perfect Chef**

Removed Kaltura Demo Content

## 2.2.5 Release 7.5.41

This chapter contains all changes made in Release 7.5.41 of *CoreMedia Digital Experience Platform 8*.

### Highlights in this Release

→ null



Follow the [CoreMedia DXP 8 Help Center section](#) to receive release and product announcements automatically.

## Modules and Tooling

Release 7.5.41 contains the following CoreMedia modules:

- CoreMedia Blueprint
- CoreMedia CMS
- CoreMedia Studio

→ CoreMedia Elastic Social

In addition, *CoreMedia DXP 8* uses the following tooling:

Table 2.5. Tooling of CoreMedia DXP 8

Product	Key	Version
CoreMedia Application Maven Plugin	APPPLUGIN	2.7.9
CoreMedia Project Maven Extension	PROJEXT	1.0.5

## CoreMedia CMS Changes and Improvements

- The Product Asset Management widget now uses the picture URL stored in IBM WebSphere Commerce, if no product asset pictures are assigned within CoreMedia Product Asset Management for this product or category. If you have configured the widget but not changed the picture URL to a CMS based URL, you will see the original IBM WebSphere Commerce picture. If you have configured the URL pointing back to CoreMedia, the default picture (e.g. Perfect Chef hat) will be shown. (CMS-5561)
- command-line tools will now log more thorough information on failure to the file `tools.log`. So if the command-line tools fails with exit code 20 (`EXIT_CODE_EXCEPTION_OCCURRED`) you will find the failure cause exception stacktrace in the log file. (CMS-5539)
- A JMX property was added that allows monitoring of the content server's current repository sequence number (a.k.a timestamp). This is useful especially in comparison with the sequence numbers obtained from associated replication live servers. (CMS-5381)
- In order to speed up test system setup, the server tools `cm serverimport` and `cm publishall` now understand an option `-t <threads>` which performs import resp. publication with multiple threads in parallel. The actual speedup depends on latencies and available system resources. Additionally, the blob size is now exported to XML during Server Export to allow to efficiently import blobs as references. (CMS-5345)
- Added the Spring configuration property `feeder.tika.config` for the Content Feeder and CAE Feeder. It can be set to the location of an Apache Tika XML configuration file with custom parsers for extracting text from binary data. (CMS-2494)

*Product Asset Management Widget*

*command-line tools logging stacktraces*

*repository sequence number monitoring*

*initial import with multiple threads*

*feeder.tika.config*

## CoreMedia Studio Changes and Improvements

- Non-catalog pages (contact-us, help, ...) can be augmented using the preview context menu. (CMS-5595) *Augmentation of non-catalog pages via PBE context menu*
  - Studio shows a warning now if the settings document with available locales (e.g. /Settings/Options/Settings/LocaleSettings) defines multiple locales with the same display name. (CMS-5490)
  - It is now possible to use in-built browser features to save username and password information. The domain is not explicitly saved by the browser; Studio chooses the domain which was last used. In order to store the domain together with the username, one can use the format `username@domain`. Then the domain chooser is ignored. (CMS-5468) *Browser Login Auto-complete*
  - The CKEditor used in the `RichTextArea` of the Studio has been upgraded to version 4.5.7. For migration instructions of CKEditor customizations see 'Studio Developer Manual / Upgrading the CKEditor'. If no customizations have been made, the new CKEditor should work out of the box. The section 'Customizing RichText Property Fields' has been adapted to the changes in CKEditor as well. *CKEditor upgrade to version 4.5.7*
- API Changes:**
- `richTextAction: option dialog` has been removed
  - introduced `richTextMenuCheckItem` as replacement for standard `menucheckitem` when using together with `richTextActions` (CMS-5428)
  - The Start Translation Workflow now always points out content errors and warnings in the master content before starting a translation. Previously, only content errors were shown, and only if the content was still checked out. This change helps global site managers in resolving issues such as cross-site links before sending problematic content to derived sites. (CMS-5357) *Content Issues in Start Translation Workflow*
  - The visual appearance of read-only fields has been improved and consolidated for enhanced usability. (CMS-4625) *Styling of Read-Only Fields*

## CoreMedia Blueprint Changes and Improvements

- **New flexible deployment approach (based on "binary" war files)** *New flexible deployment approach generally available with 7.5.41 / 1604.2*  
We provide a new deployment approach supporting the configuration of applications at deployment time to increase flexibility, reduce complexity

and build time. With this approach, **Service Discovery integration** becomes possible without the need to restructure the workspace or using proprietary Maven build magic. Multi-node cluster environments will especially benefit from this flexibility.

The underlying refactoring happened "under the hood" in parallel to the existing deployment (known as *virtualized setup*) and we already validated the new approach internally with 7.5.36 as part of our AWS Demo Cloud. Our website team is using it intensively too. It is the default approach in releases > 7.5 (1604).

#### Directives:

- Customers want to deploy more often and only update modified applications
- Customers want to install a project update by simply replacing the war file („binary“), while keeping existing deployment configuration (managed by *Consul Template*, for example)
- Keep knowledge about deployment environments (for example dev, staging or production) outside the artifact packaging
- Avoid filtering and deployment decisions at **build time** like the token replacement and the static packaging model under `/packages/services/` and `/packages/apache-overlays/`
- Deprecate current inflexible RPM build approach (limited to CentOS 6/Apache 2.2)
- Introduce new *out-of-the-box* Test System Setup based on *Kitchen* (part of Chef DK) for CentOS6/Apache 2.2 as well as CentOS7/Apache 2.4
- Customers preferring to use plain yum and do not want to use Chef in their production environment, may continue to build RPM packages by leveraging the new Chef deployment and FPM (<https://github.com/jordansissel/fpm>) only in their development environment. A working example of this build process is provided with the `blueprint-dev-tooling` cookbook in the blueprint workspace.

We introduced the automated Chef deployment with 7.0 in October 2012 and learned a lot in the meantime. The new flexible deployment approach enables project-specific implementations like Ansible or Docker as an alternative to the *out-of-the-box* Chef deployment which continues to be our reference implementation.

#### More information is available at our markdown documentation:

- Follow the links in `deployment/chef/README.md` (blueprint workspace) for a complete reference of all Chef cookbooks, the recommended Chef setup, and development how-to instructions

Feedback is highly appreciated! Please do not hesitate to contact CoreMedia Support in case of any questions and suggestions.

(CMS-5797)

→ **IBM WAS updates as of March 2016**

→ CoreMedia recommends to use the latest IBM WAS 8.5.5 Fix Pack 9 and IBM WebSphere Java SDK 7.1 Service Refresh 3 Fix Pack 30

(CMS-5668)

→ Update `frontend-maven-plugin` to latest version 1.0, `node.js` to 4.4.3, `npm` to 3.8.6 and `grunt` to 1.2.0 in all blueprint themes.

(CMS-5519)

→ **Chef v12 updates as of March 2016**

→ CoreMedia strongly recommends to use Chef Development Kit 0.12.0

→ The preconfigured Chef Client in our test setup is now 12.8.1 (bundled with Chef DK 0.12.0)

(CMS-5239)

→ Due to legal concerns we had to separate generic livecontext features from IBM WCS specific implementations. Therefore we moved the following modules from the `lc` extension to a new extension "ecommerce-ibm":

→ `lc-ecommerce-ibm-lib`

→ `lc-ecommerce-ibm-component`

*IBM WebSphere  
AppServer 8.5.5.9 /  
IBM Java SDK 7.1-3.30*

*Chef 12.8.1*

*New extension ecom-  
merce-ibm*

ecommerce-ibm also includes an `ecommerce-ibm bom` which manifests the actual extension and some new modules which are responsible for the wiring of the `ecommerce-ibm` features into the CAE and Studio applications:

→ `lc-ecommerce-ibm-cae-component`

→ `lc-ecommerce-ibm-studio-lib`

The Studio features related to WCS (esp. the links to the WCS Management application) have been extracted from `lc-studio` to `lc-ecommerce-ibm-studio`. The WCS related features of `lc-es-cae` have been extracted to `lc-ecommerce-ibm-es-cae-component` in another new extension `ecommerce-ibm-es`.

Themes, `lc-es-templates` and `test-data` have also been moved to `ecommerce-ibm` and `ecommerce-ibm-es`. Although they have no technical dependencies on IBM WCS, they are strongly related to the WCS integration and not useful independently.

The remaining `lc` extension still accesses some `ecommerce` properties which are conceptually generic, but have IBM WCS specific values. In order to avoid confusion, we renamed these properties in the `lc` extension and declared suitable aliases in `lc-ecommerce-ibm.properties` (at the very bottom).



By default the ecommerce-ibm extension is active in the Blueprint, and the system shows no behavioural change wrt. this refactoring.  
(CMS-5217)

## Miscellaneous Changes and Improvements

- A Warning is logged if LiveContextSiteResolverImpl does not find a suitable CMS site for a Fragment Request. Debug message is logged if one was found.  
(CMS-5798)
- Added section describing that "Multiple Logon for the same User" configuration in IBM WebSphere Commerce Server is required.  
(CMS-5794)
- the blueprint/servlet prefix in our default testdata for product and category images was removed. It is not necessary because rewrite rules are used.  
(CMS-5729)
- Third-Party Software in Blueprint Themes are updated to latest versions and will be installed via npm. Support for older browsers like Internet Explorer 8 is removed.  
(CMS-5614)
- We enhanced the CommerceBean interface with a method `getStatus`. Since this was a requirement driven by a particular project, our default implementation in `AbstractCommerceBean` returns null, and the method is not used anywhere in the Blueprint. If you have implemented your own CommerceBeans from scratch, you must implement `getStatus` in order to fulfill the interface. If you have subclassed `AbstractCommerceBean`, you only need to recompile against the new CMS version. If you have no custom CommerceBeans, you are not affected by this change.  
(CMS-5524)
- The `PrefixLinkPostProcessor` has been deprecated, because it was too monolithic and inflexible. There are two new `LinkPostProcessors`, `LinkAbsolutizer` and `BaseUriPrepender`, which take over the tasks of the `PrefixLinkPostProcessor`. The new `LinkPostProcessors` support predicates to control their responsibility, in case the type feature of the `@LinkPostProcessor` annotation is not powerful enough.

*Logging Enhancement*

*Product Asset Management testdata*

*Update Third-Party Software in Blueprint Themes*

*New method `CommerceBean#getStatus`*

*`PrefixLinkPostProcessor`*

The Spring configuration of the `LinkPostProcessors`, previously in `bpbase-links-services.xml`, is now located in `blueprint-handlers.xml`, so that project developers can control it. I.e. if you update `blueprint-base` only, you will lose the `PrefixLinkPostProcessor` bean and have to add the declaration to your project Spring configuration. (Or even better, use the new `LinkPostProcessors`.)

The old `PrefixLinkPostProcessor` implements `InitializingBean` now. If you have subclassed it and implemented `afterPropertiesSet`, you must add a super call.

(CMS-5251)

- WCS does no longer duplicate CAE's `previewBootstrap` and `jquery` JS files. Instead of serving its own `previewBootstrap` and `jquery` JS files, WCS relies on `preview` CAE serving them.

*WCS JavaScript delivery*

(CMS-5233)

- `com.coremedia.blueprint.base.links.UriConstants#Prefixes` and `com.coremedia.blueprint.base.links.UriConstants#Patterns#DYNAMIC_URI_PATTERN` have been moved to `com.coremedia.blueprint.links.BlueprintUriConstants` on popular demand.

*UriConstants*

(CMS-2416)

## Fixed Issues

- **CMS-5732: Prerequisites**

The latest IBM WebSphere Commerce Cumulative Interim Fix IFJR55049 is now required as prerequisite for both, FEP7 and FEP8 support. Additionally, FEP7 support now requires FP9. Please refer to the latest Prerequisites, including additional interim fixes (APARs), in the documentation.

- **CMS-5728: Customizing the IBM WCS Solr Index**

IBM WebSphere Commerce cumulative fix JR55049 (<http://www-01.ibm.com/support/docview.wss?uid=swg24041617>) might break the customized search index customization as described in earlier LiveContext releases. Please refer to the chapter "Customizing the IBM WCS Solr Index" for the new customization approach that keeps required CoreMedia customizations functional.

- **CMS-5714: Shoppable Video does not show configured start picture**

Shoppable videos now show the configured picture from the content repository and the big play button instead of the first video frame.

- **CMS-5626: Enable multiple top level domains in commerce led scenario**

To enable our commerce led solution to support multiple top level domains, the cookie handling have been adapted. To use this the CoreMedia CMS and the Websphere Commerce have to be configured: The properties `livecontext.cookie.domain` (in CMS) and `com.coremedia.fragmentConnector.cookieDomain` (in Websphere Commerce) now support mutliple top level domains which must be listed comma separated.

- **CMS-5622: Language Attributes**

Rendering of HTML language attributes in templates has been changed to use IETF BCP 47 as defined by W3C in [w3.org: Declaring language in HTML](http://w3.org: Declaring language in HTML). To adapt further templates replace expressions like `self.locale` or `self.locale.language` by `self.locale.toLanguageTag()`.

In accordance to this a new FTL function `getPageLanguageTag` has been introduced to `core.ftl` and usages of `getPageLanguage` have been replaced by `getPageLanguageTag`.

→ **CMS-5609: Edited Web Development Chapter**

The Web Development Workflow chapter has been edited and updated to the new structure.

→ **CMS-5603: Translation with Deleted Derived Content**

In order to more efficiently support the partial rejection of content pushed from the master site, translation workflows can now be completed even if some derived contents have been deleted.

→ **CMS-5585: CAE renders absolute URLs to include preview JS/CSS resources**

Links to preview resources are rendered absolute so that HTML fragments bootstrapping preview integration can be included in HTML pages generated on another system, e.g., a commerce system including CAE page fragments.

→ **CMS-5548: Publishing Content with Deleted Master**

In order to more consistently decouple the lifecycle of content items in master and derived sites, a deleted master is no longer reported as a content error, allowing the derived content to be published.

→ **CMS-5547: Changing embedded image properties does not save rich text**

Fixed a bug where richtext would not be saved when changing image properties.

→ **CMS-5546: Open in Tab for internal links in side-by-side view**

Fixed a bug in the differencing side-by-side view where "Open in Tab" would sometimes not be available on internal links in richtext.

→ **CMS-5513: New Price REST Handler with HTTP GET Method for WCS FEP8+**

Added the Price REST Handler with HTTP GET Method to get the entitled prices for catalog entries by part numbers which is used in combination with WCS version FEP8+.

→ **CMS-5476: Preview Token Lifetime**

Increased the default value for the `previewToken` lifetime to 3 hours and made `preview token` lifetime configurable via `com.coremedia.livecontext.ecommerce.ibm.login.LoginServiceImpl#setPreviewTokenLifetimeInSeconds`. It is ensured that `preview token` lifetime is at least twice as long as cache duration of `preview tokens` in the cache.

→ **CMS-5421: Resolve wcs version: Studio does not start without WCS**

Studio now starts correctly if no WCS is available during startup. However the e-Commerce library and connection is unavailable until WCS is connected, again.

→ **CMS-5257: Support for multiple SEO Segments**

IBM WCS REST handler responses do not distinguish the SEO keyword overridden by an Extended Site by default. If you have overridden the SEO keyword in the Extended Site, then you will get multiple SEO keyword in the response, without knowing which SEO keyword belongs to which store. To be able to distinguish the SEO keyword overridden by a store, the Solr field is extended by adding the customized `CM_SEO_TOKEN` field in the Solr index. This customized `CM_SEO_TOKEN` field concatenates the store ID and the SEO keyword and is interpreted by LiveContext primarily. Please refer to the documentation about the necessary steps to add the denoted Solr and REST fields. This feature is backward compatible, meaning that if you do not add the denoted `CM_SEO_TOKEN`, the default IBM REST response field is processed. In this case from now on only the first SEO token in the WCS REST response is used, which is the SEO token from the Extended Sites catalog.

→ **CMS-5195: Module importer-config moved**

The core module `importer-config` has been moved to `blueprint/examples`, since it requires specific configuration.

→ **CMS-4991: TaskQueue collections are created on non worker nodes as well**

Non-worker nodes must be able to queue tasks, even if a worker node has not started yet. Therefore task queue collections are now initialized for all nodes, i.e. worker nodes and non-worker nodes.

→ **CMS-4703: Content Feeder does not connect to Workflow Server**

The default configuration of the Content Feeder was changed to not open a connection to the Workflow Server (property `repository.workflow=false`). The Content Feeder does not need to access workflows.

→ **CMS-4682: Unified API Blobs**

The UAPI has been enhanced to observe the configured `blobCacheSize` more precisely and in a more timely fashion. In the context of this work, the `Blob` interface now defines a new method `dispose`, which can be called to indic-

ate that a freshly created blob is no longer needed, even before the `Blob` is subject to garbage collection. Custom subclasses of `Blob` must also implement this method, but it is acceptable if the implementation is empty, ignoring the call.

#### → **CMS-4482: PagingRuleType**

We simplified the usage of the `PagingRuleType` enum. It features now a single public method `createPaginator` which takes care for the subtle relation between `Paginator` and `PagingRule`.

#### → **CMS-4253: Update Freemarker Library to 2.3.24**

The Freemarker Library was updated to patch version 2.3.24-incubating. See [Changelog for more informations: http://freemarker.org/docs/versions\\_2\\_3\\_24.html](http://freemarker.org/docs/versions_2_3_24.html)

#### → **CMS-3844: Solr and CAE Feeder changes for topic page search**

The Blueprint CAE Feeder contained code (`TaxonomyReferrersFeedablePopulator`) to set the Solr index field `taxonomyReferrersInSite`, which was used by the CAE to implement topic page search. This code caused performance problems in the CAE Feeder.

Both the Solr index field and the `TaxonomyReferrersFeedablePopulator` have been removed now from the Blueprint and the topic page search implementation was changed to not require the index field anymore.

It's not necessary to reindex from scratch.

#### → **CMS-3841: strange (component) property loading behavior**

Default properties with nested placeholders are now resolved by the first property placeholder configurer without considering further configurers, but using the application context's environment. The default properties are registered at the environments property sources as Spring configuration class to expose the default properties.

#### → **CMS-2238: Resource Bundles**

The Blueprint supports Spring's `MessageSource` for localized messages. However, configuration of resource bundles was limited to sites' root channels. Now you can also add or override messages in lower channels, which is useful for micro sites, campaigns and the like.

The Blueprint also features the `SettingsService` for technical settings. While these two services are technically independent and conceptually different, we backed them with the same data so far, namely the `linkedSettings` linklist. As a side effect of the improved `MessageSource` support we have now untangled this mess and moved the resource bundle documents for the localized messages to a new linklist property `CMLinkable#resourceBundles`.

We recommend that you adapt this separation. The Blueprint examples directory provides a content migration tool `resourcebundle-migration` which can do this more or less automatically, depending on how much you deviate from the Blueprint's content structure. The tool identifies resource bundle documents in the `linkedSettings` property and moves them to the new `resourceBundles` property. You can also do this manually. It concerns only the root channel of each site, since our `MessageSource` support had been restricted to those.

If entries of the same settings document are accessed by both services, you can put it into both linklists.

If, for some reason, you do not want to apply this change, you can alternatively exchange the `linklistPageResourceBundleFactory` by the `settingsPageResourceBundleFactory` bean in the `blueprint-i18n.xml` Spring configuration file, and everything works like before. In this case, you should also remove the new `resourceBundlesForm` from the `MultiLanguageDocumentForm` and preserve the old chooser folders of the `LinkedSettingsForm` in Studio, in order to avoid confusion on your editors' behalf.

#### → **CMS-1957: Remove item from WCS Cart**

Removing items from WebSphere Commerce Cart now works on cart detail page in Perfect Chef.

## 2.2.6 Release 7.5.40

This chapter contains all changes made in Release 7.5.40 of *CoreMedia Digital Experience Platform 8*.

Follow the [CoreMedia DXP 8 Help Center section](#) to receive release and product announcements automatically.

### Modules and Tooling

Release 7.5.40 contains the following CoreMedia modules:

- CoreMedia Blueprint
- CoreMedia CMS
- CoreMedia Studio
- CoreMedia Elastic Social

In addition, *CoreMedia DXP 8* uses the following tooling:

*Table 2.6. Tooling of CoreMedia DXP 8*

Product	Key	Version
CoreMedia Application Maven Plugin	APPPLUGIN	2.7.9
CoreMedia Project Maven Extension	PROJEXT	1.0.5

## CoreMedia Studio Changes and Improvements

- The page title for an Augmented Category is now correctly initialized (CMS-5197)

## CoreMedia Blueprint Changes and Improvements

- The outdated example chef configuration of roles, databags and environments contained in `blueprint/boxes/chef/chef-repo/roles` has been removed. Please refer to the Vagrant test setup for a tested example configuration. (CMS-5248)

### → **New CentOS 7 coremedia/base7 Vagrant box**

- Using CentOS 7.2 January 2016 (1601) rolling iso (released February 3rd)
- Provided via <https://atlas.hashicorp.com/coremedia/base7>
  - CentOS 7.2.1511 including kernel 3.10.0-327.4.5.el7.x86\_64
  - bash 4.2.46-19.el7
  - openssl-1.0.1e-51.el7\_2.2
  - mod\_ssl-2.4.6-40.el7
  - VirtualBox guest additions 5.0.14
  - openjdk/1.8.0\_71
  - ibjpeg-turbo-official-1.4.2-20150921
  - Performance Co-Pilot (PCP) 3.11.0

*New CentOS 7.2 coremedia/base7 Vagrant box v2.1.0*

### **Vagrant 1.8 and VirtualBox 5.0**

- Tested with Vagrant 1.8.1 and VirtualBox 5.0.14 (CMS-5150)
- Introducing a global installation directory for nodejs and npm, used by all themes to avoid multiple downloads of the same files.

(CMS-5148)

- In order to reduce coupling of the coremedia cookbook to database cookbooks, the dependencies to `mysql`, `postgresql` and `mongodb` have been removed from the `coremedia` cookbook.

The only place they were used, was the `db-schemas` recipe, a pure development recipe, not to be used in production. The `db-schemas` recipe only needed them to install the client tools of the databases. Now it is either up to the base image/box to provide the client tools or they have to be installed by chef, adding the previously included recipes to the runlist. In order to do so, they are now added to the runlists of the roles `management` and `replication`. They were also added to the vagrant role `storage`.

(CMS-5102)

*Remove unnecessary cookbook dependencies from coremedia cookbook*

## Miscellaneous Changes and Improvements

- PhantomJS 2.1.1 is now supported for the Unit Tests of the blueprint workspace (CMS-5193)

*PhantomJS 2.1.1 is supported*

- The CoreMedia-specific StoreInfoHandler in WebSphere Commerce returns the `wcsVersion` information from now on. Therefore it is not required to configure the property `livecontext.ibm.wcs.version` within the blueprint workspace anymore. If the StoreInfoHandler is not yet updated on the WebSphere Commerce side you still may configure the `livecontext.ibm.wcs.version` property via `application.properties` of the CAE and Studio webapps as before. The `wcsVersion` received from the StoreInfoHandler has precedence and a warning is written into the logfile if the `wcsVersion` differs from the value defined as `application.properties`.

(CMS-5191)

*Dynamic wcsVersion Information via StoreInfoHandler*

- Added a new BooleanProperty `enableRetinaImages` to all Sites in the Blueprint. Disabled by default, except of the new "Chef Corp" Site. If enabled, the Javascript `jquery.coremedia.responsiveimages.js` is choosing a larger image according to the `devicePixelRatio`.

(CMS-2905)

*Add configurable setting for HiRes images*

## Fixed Issues

- **CMS-5230: Template `basic#CMDDownload.asLink.ftl` generates incorrect HTML**

Template `CMDDownload.asLink.ftl` does not write UNDEFINED into link, anymore, and sets target attribute correctly now.

- **CMS-5137: Large CSS files are truncated**



Fix CSS and Javascript delivery in CAE as merged and minified files. Large files could be truncated.

→ **CMS-5112: Documentation of WCS Connector contains obsolete class names**

Updated WCS customization documentation, removed obsolete and outdated configuration and code snippets and refer to files in workspace, instead.

→ **CMS-4565: Missing info in ReferrersChangedEvent for historic replay leads to problems with Feeders**

The Content Server now also stores referring content type and property for ReferrersChangedEvents in its change log. To this end, the Content Server automatically adds two columns `sourceType` and `property` to its `LinkChangeLog` database table when started. This change avoids unnecessary possibly expensive reindexing when the CAE Feeder is restarted. It also ensures that the Content Feeder correctly updates the taxonomies of tagged contents after restarts of the Content Feeder.

→ **CMS-1388: Replace vagrant-ohai plugin with an ohai recipe**

With the introduction of the new `blueprint-testing` cookbook, it is no longer necessary to install the `vagrant-ohai` plugin. The new cookbook contains a `ohai` recipe, that installs an `ohai` plugin that sets the correct `node 'ipaddress'` attribute. This recipe should only be used in the context of a virtualization setup using a hostonly adapter.

## 2.2.7 Release 7.5.39

This chapter contains all changes made in Release 7.5.39 of *CoreMedia Digital Experience Platform 8*.

Follow the [CoreMedia DXP 8 Help Center section](#) to receive release and product announcements automatically.

## Modules and Tooling

Release 7.5.39 contains the following CoreMedia modules:

- CoreMedia Blueprint
- CoreMedia CMS
- CoreMedia Studio
- CoreMedia Elastic Social

In addition, *CoreMedia DXP 8* uses the following tooling:

Product	Key	Version
CoreMedia Application Maven Plugin	APPPLUGIN	2.7.9
CoreMedia Project Maven Extension	PROJEXT	1.0.5

Table 2.7. Tooling of CoreMedia DXP 8

## CoreMedia Studio Changes and Improvements

- For video documents, the new view type "Shoppable Videos" is now selectable. Once selected, the new property editor "Product Assignments" appears where time intervals can be added. Each interval has a start time and a linked target. So when the video is played and the start time of the corresponding interval is reached, the linked content is shown next to the video.

If no interval is defined or the first interval does not start at 0 seconds, the content linked in the "Default Product" link list is shown. (CMS-5048)

- It is now possible to create a dashboard widget from the Save Search Dialog in the Library. (CMS-4990)
- Added copy and paste buttons for the taxonomy linklists. (CMS-4921)
- The class `fixedSearchWidgetState` has been removed. A fixed search widget is configured by the widget type id, only, so that you can use a `widgetState` object instead. (CMS-4917)
- The `RichtextPropertyField`'s change event buffer can now be configured via `property changeBuffer`, defaulting to 1000. (CMS-4827)
- The corresponding keys have been moved to `BlueprintStudio.properties` and `blueprintDocumentTypes.properties`. (CMS-4704)

*Added new Property Editor for Product Assignments to Videos*

*Save Search to Dashboard Widget*

*Dashboard widgets*

*Blueprint.properties have been deleted*

## CoreMedia Blueprint Changes and Improvements

- Update `node.js` to latest LTS version 4.2.6, `npm` to 3.5.3 and `frontend-maven-plugin` to 0.0.27. (CMS-5101)
- The blueprint now supports alternative media formats like videos or 360 degree views in the same fashion as simple images. So we weakened the content type of the `CMTeasable#pictures` link list from `CMPicture` to `CMMedia`. This allows to add other kinds of media where previously, only pictures

*Update Themes Dependencies*

*Changed CMTeasable#pictures to CMMedia*

were allowed. In order to avoid migration issues, we preserved the property name "pictures" even though it is not exactly appropriate any longer. `CMTeasable#getPictures` remains backward compatible, i.e. it returns only the `CMPicture` documents of the link list. There is a new method `CMTeasable#getMedia` which returns the complete list. (Apart from the type constraints, both methods are subject to validators like the validity period check.)

While we separated `getPictures` and `getMedia`, we also simplified the type of `getPictures` from `List<? extends CMPicture>` to `List<CMPicture>`. Overriding methods must weaken their return type accordingly.

(CMS-4842)

- The cookbook dependency 'chef\_handler' of the `coremedia` cookbook has been updated from a strict 1.1.4 to 1.2.0. *Cookbook update*  
(CMS-4481)
- All Maven plugins have been updated to be compatible with Maven 3.3.3, which is now the recommended version for CoreMedia projects. *Maven*  
(CMS-4282)

## Miscellaneous Changes and Improvements

- There is a new property editor for editing a list of non-empty strings. In the blueprint, the editor is used for showing and editing the list of product codes in an asset's meta data. The editor supports addition, modification, deletion and reordering the elements in the list. For further details, consult the asdoc of `com.coremedia.cms.editor.sdk.config.stringListPropertyField`. *New component  
StringListPropertyField*  
(CMS-5055)
- The maximum z-index for slideshows used in LiveContext sites is now 99 by default. *Adjusted z-index for  
slideshows in LiveCon-  
text sites*  
(CMS-4745)

## Fixed Issues

- **CMS-5158: ProductTeaser image does not work for SKUs/ProductVariants**  
ProductTeaser images now work for SKUs/ProductVariants.
- **CMS-5156: CoreMedia specific JSPs in WCS throw Errors due to wrong include**  
Fixed include-paths in CoreMedia specific JSPs in WCS workspace.
- **CMS-5141: 360 Spinners are sometimes not displayed correctly**

Increased search limit in Asset Service from 10 to 500 by default and making this value configurable via application property `livecontext.assetService.resultLimit`

→ **CMS-5094: "Long Description" FormField for Categories and Products is too big**

"Long Description" FormField for Categories and Products is now reduced in height and made resizable.

→ **CMS-5015: Layout for Product Teaser of Aurora Products is broken for responsive preview**

Product Teasers of Aurora Products without CoreMedia-managed product pictures are now working in responsive view/preview.

→ **CMS-4553: Service init scripts are not Centos 7 compatible**

Tomcat init scripts are now compatible for Centos 7 compatibility layer for SystemV scripts. Still Centos 7 may remove that layer in future releases.

→ **CMS-4381: Copy RPMs from shared folder to a folder owned solely by the box**

To prevent maven builds from interfering with chef resources, the rpm repodata needs to be created in a folder owned solely by the box. To achieve this all platforms now run a shell provision step in advance of the chef run to copy the artifacts from the shared folder to `/var/tmp/rpm-repo`.

→ **CMS-4147: "Deleted concurrently" message after every tab close**

The message "A content item had to be closed because it was deleted concurrently" is not shown anymore, if the current user has closed the tab by reverting the initial version or deleting the content. The message is still shown if other users delete or destroy the content.

→ **CMS-3815: Use execution resource to execute tool commands**

All executions using backticks have been replaced with the execution resource using the `sensitive=true` option to suppress passwords from the command in the chef log.

## 2.2.8 Release 7.5.38

This chapter contains all changes made in Release 7.5.38 of *CoreMedia Digital Experience Platform 8*.

Follow the [CoreMedia DXP 8 Help Center section](#) to receive release and product announcements automatically.

## Modules and Tooling

Release 7.5.38 contains the following CoreMedia modules:

- CoreMedia Blueprint
- CoreMedia CMS
- CoreMedia Studio
- CoreMedia Elastic Social

In addition, *CoreMedia DXP 8* uses the following tooling:

Product	Key	Version
CoreMedia Application Maven Plugin	APPPLUGIN	2.7.9
CoreMedia Project Maven Extension	PROJEXT	1.0.5

Table 2.8. Tooling of CoreMedia DXP 8

## CoreMedia Studio Changes and Improvements

- All reloadable dashboard widgets are reloaded automatically at a fixed interval when the dashboard is visible. The interval is configurable via application property `studio.dashboard.refresh.interval` and defaults to 30 seconds. (CMS-4957)
- Studio sessions are closed automatically after a period of user inactivity even if the application is still running in the browser and connected to the backend. This avoids session leaks and improves security. The session timeout can be configured in the file `application.properties` of the Studio web application using the property `studio.security.autoLogout.delay` and defaults to 30 minutes. Please consult the section Security / Auto Logout in the Studio Developer Manual for further details. (CMS-4688)

*Automatic Dashboard Refresh*

*Auto Logout*

## CoreMedia Blueprint Changes and Improvements

- **New CentOS 7 coremedia/base7 Vagrant box**
  - Using CentOS 7.2 (released Dec 14) plus updates
  - Provided via <https://atlas.hashicorp.com/coremedia/base7>
    - CentOS 7.2.1511 including kernel 3.10.0-327.3.1.el7.x86\_64

*New CentOS 7.2 coremedia/base7 Vagrant box v2.0.4*

- bash 4.2.46-19.el7
- openssl-1.0.1e-51.el7.9
- mod\_ssl-2.4.6-40.el7
- VirtualBox guest additions 5.0.12
- openjdk/1.8.0\_65
- ibjpeg-turbo-official-1.4.2-20150921
- Performance Co-Pilot (PCP) 3.10.9

#### **Vagrant 1.8 and VirtualBox 5.0**

- Please use at least Vagrant 1.8.1 and VirtualBox 5.0.12 (CMS-3827)

## **Fixed Issues**

### → **CMS-5045: Fixed version in npm dependency resolution for jQuery**

After jQuery release 2.2.0 the corporate page can't include jQuery after re-build of its theme. The jQuery version is now set to the fixed version 2.1.4 in the npm dependency management.

### → **CMS-4970: Create folder in Asset Repository**

Fixed a bug where the "Create Folder" button in the studio was wrongly disabled, making it impossible to create a folder.

### → **CMS-4916: Struct builder**

The method `StructBuilder.declareStrings()` allowed to specify a maximum string length. However, the given value was not persisted, causing the declared property to change when re-read from the server. For consistency, the maximum length of strings in string lists is globally fixed to `Integer.MAX_VALUE` now. For compatibility, a maximum length can still be passed to `StructBuilder.declareStrings()`, but it is ignored.

### → **CMS-4915: Structs**

The comparison of structs did not take the target type and other specific property descriptor attributes into account. Now property descriptors are compared exactly.

### → **CMS-4784: Command-Line Tools Logging**

The logging configuration for command-line tools has changed introducing a common configuration for a logger named `stdout`. This way it is now easy

to write your own command-line client and use CoreMedia standard way of logging in command-line clients. You just have to create the logger instance prefixed with "stdout." like:

```
Logger LOG =
    LoggerFactory.getLogger(
        String.format(
            "stdout.%s", MyTool.class.getName()
        )
    );
```

If you are extending `AbstractUAPIClient` the method `getLogger()` will provide the appropriate logger for you.

For a detailed description of command-line tool logging have a look at `com.coremedia.cmdline.AbstractUAPIClient` and its method `getLogger()`.

#### → CMS-3371: XSS vulnerabilities in tool tips

Some potential XSS vulnerabilities in studio tooltips were fixed. By default, the `AddQuickTipPlugin` now strips any code from quick tips. Project code should use the `qtip` (or `unsafeQtip`) formatting macro within `XTemplates`, and the `QtipUtil.formatQtip` (or `QtipUtil.formatUnsafeQtip`) method within source code.

## 2.2.9 Release 7.5.37

This chapter contains all changes made in Release 7.5.37 of *CoreMedia Digital Experience Platform 8*.

Follow the [CoreMedia DXP 8 Help Center section](#) to receive release and product announcements automatically.

## Modules and Tooling

Release 7.5.37 contains the following CoreMedia modules:

- CoreMedia Blueprint
- CoreMedia CMS
- CoreMedia Studio
- CoreMedia Elastic Social

In addition, *CoreMedia DXP 8* uses the following tooling:

Product	Key	Version
CoreMedia Application Maven Plugin	APPPLUGIN	2.7.9
CoreMedia Project Maven Extension	PROJEXT	1.0.5

Table 2.9. Tooling of *CoreMedia DXP 8*

## CoreMedia CMS Changes and Improvements

- Most (see note below) command line tools now provide an extension point similar to the Application Architecture as described in *Concepts and Architecture* of the *CoreMedia Manual*.

Details are described in JavaDoc of `com.coremedia.cmdline.AbstractSpringAwareUAPIClient`.

The previously existing approach for providing custom beans by overriding `getApplicationContextPath()` still exists as an option if you require to have beans exclusively reserved for your command line tool.

*Note:* This change is only applies to command line tools derived from `AbstractSpringAwareUAPIClient`. For command line tools provided by *CoreMedia* this applies to most but not all command line tools. (CMS-4791)

- The creation of Page ContentBeans in PageHandlerBase is now implemented via Spring instead of direct instantiation from Java, allowing for easier customization (such as injection of services). (CMS-4080)

*Component Extension Point for Command Line Tools*

*Page ContentBeans*

## CoreMedia Studio Changes and Improvements

- moved preview date components to blueprint-base
- deleted unused component PathDoctypeContentSelectorPropertyField.xml
- deleted unused component ViewtypeContentSelectorPropertyField.xml
- moved NewContentSettings.properties resource bundle to the Editor.properties
- moved all resource bundles from blueprint-components to blueprint-forms
- moved all plugin usages from blueprint-components to blueprint-forms

*Clean up of blueprint-components module*



- moved ImageContextLinkListPropertyField to bpbase-studio-components
- moved NavigationLinkField to bpbase-studio-components
- deleted unused InvertedInlineBooleanPropertyField.xml
- deprecated BlueprintStudioPlugin.xml: use BlueprintFormsStudioPlugin.xml instead  
(CMS-4677)
- The properties of the default lookup paths for configurations has been moved to the application.properties of the studio-webapp. The following two properties are now mandatory, e.g. to configure topic pages or taxonomies:
  - studio.siteConfigurationPath=Options/Settings
  - studio.globalConfigurationPath=/Settings

If a Studio plugin needs a settings document for configuration the ConfigurationService can still be used, which has now been moved to the module "bpbase-studio-rest".

If a Studio plugin requires to read settings data on the client side, the StudioConfigurationUtil.as should be used for this. It will use the same lookup path like the ConfigurationService on the Java side.  
(CMS-4198)

## CoreMedia Blueprint Changes and Improvements

- In order to integrate seamlessly into the eCommerce API, the new content type CMSpinner needs to extend CMVisual. However, CMSpinner cannot implement CMVisual#getData with return type Blob in a reasonable manner, since it has no single blob property which holds all image data of the spinner. So we slightly changed CMVisual.
  - The data property has been removed from the CMVisual content type. Since it is overridden in all existing subtypes (CMPicture, CMVideo, CMInteractive) anyway in order to refine the mimetype, this is compatible with existing repositories.
  - CMVisual#getData (with return type Blob) has been removed from the CMVisual interface. CMVisual inherits CMMedia#getData now, which has Object as return type. This allows us to declare CMSpinner#getData as List<CMPicture>. The refinement to return type Blob has been pushed down to the interfaces CMPicture, CMVideo and CMInteractive, so that they are effectively unchanged.

*Removed data Property from CMVisual*

If you have custom content types derived from CMVisual, you should adapt them in the same fashion.

(CMS-4794)

- The properties "longDescription" and "shortDescription" have been removed from CMProduct and CMCategory document types.

For CMProduct, these properties have been mapped to "teaserText" and "detailText".

For CMCategory, the property has been removed.

(CMS-4756)

- A new Maven Plugin has been implemented to convert web resources (e.g. css, js, images...) to a xml file, which can be imported using the CoreMedia Serverimport tool. This allows content and web resources to be managed without redundance and to be deployed in the same format. The blueprint has been adapted to use the new plugin. For further details, please consult the documentation of the [CoreMedia Webresources Maven Plugin](#)

(CMS-4403)

*Properties "longDescription" and "shortDescription" removed from CMProduct and CMCategory*

*CoreMedia Webresource Content Maven Plugin*

## CoreMedia Elastic Social Changes and Improvements

- changed default property "configure.ELASTIC\_MAIL\_HOST" from formerly "mail.server.com" to "localhost" (CMS-4678)

*changed default value for ELASTIC\_MAIL\_HOST*

## Miscellaneous Changes and Improvements

- New Doctype: CMExternalPage To augment pages from websphere commerce we introduced a new doctype CMExternalPage with two properties:

1. externalId

The Page Id from websphere commerce. It will be used to find the page in CMS (must match the pageId parameter which is sent by the lc-include tag).

1. externalUriPath

The external uri path if the augmented page is not a seo managed page. If an external uri path is given it will be directly used for link building.

In Studio the appropriate document is called Augmented Page and the new properties can be filled in the navigation tab.

Migration: CMExternalChannel which are representing a page in aurora must be migrated to the new doctype CMExternalPage (e.g. /Sites/Aurora Augmentation/United States/English/Navigation/Aurora Augmentation). In particular, the homepage needs to be converted. In the most cases the externalId field can be left empty for the aurora homepage.

(CMS-5430)

*New Doctype CMExternalPage*

- → jangaroo-tools has been updated to version 2.0.17
- jangaroo-libs has been updated to version 2.0.15

*Jangaroo Update*

See [jangaroo-tools issue tracker](#) and [jangaroo-libs issue tracker](#) for a list of changes.

(CMS-4829)

- The Corporate Website Blueprint can display Videos now. Supported formats are Youtube, Vimeo and uploaded videos. The video playback based on native browser support. See [https://developer.mozilla.org/en-US/docs/Web/HTML/Supported\\_media\\_formats#Browser\\_compatibility](https://developer.mozilla.org/en-US/docs/Web/HTML/Supported_media_formats#Browser_compatibility) for compatible media formats.

*Add Video support*

The Superhero teaser type displays a large full-screen looped video in the background. All other teasers are indicated by a play overlay icon and open the video in a responsive full-screen popup.

(CMS-4782)

## Fixed Issues

- **CMS-4868: Increase heap for publishall**

The heap available to the tool `cm publishall` has been increased to 128 MByte to ensure stability during large publications.

- **CMS-4813: Cache headers for dynamic requests only set when Live Context extension is active**

Replaced `com.coremedia.livecontext.handler.NoCacheHeaderInterceptor` by `com.coremedia.springframework.web.servlet.support.OrderedWebContentInterceptor` whose base class was already used in the `cae-base-lib` module.

Applying custom cache mappings to the URL patterns of your extension is as easy as adding the following configuration to your Spring application context:

```
<util:map id="customCacheMapping"
map-class="java.util.LinkedHashMap">
  <entry
key="#{T(com.extension.CustomHandler).URI_PATTERN}"
value="0"/>
</util:map>

<customize:prepend id="appendCustomCacheMapping"
bean="uriToCacheSecondsMapping"
custom-ref="customCacheMapping"/>
```

This code snippet adds basically the same Cache-Control response headers as the *NoCacheHeaderInterceptor* to all requests with the given URI pattern.

➔ **CMS-4746: commons-collections 3.2.2**

The thirdparty library `commons-collections:commons-collections` has been updated to most recent version 3.2.2. This fixes a security issue in `InvokerTransformer`. See [\[COLLECTIONS-580\] Arbitrary remote code execution with InvokerTransformer \(ASF JIRA\)](https://issues.apache.org/jira/browse/COLLECTIONS-580) | <https://issues.apache.org/jira/browse/COLLECTIONS-580> for details.

➔ **CMS-4637: New configuration for the sorting of collection view lists**

From now on two new configuration properties for sorting the lists in the collection view exist. With the attribute `defaultSortColumn` one column can be marked as default column. If no default column is set the old behaviour will be used. With the attribute `defaultSortDirection` the sort direction of the default sort column can be set. Valid values are `asc` (ascending) and `desc` (descending). If not set the column will be sorted ascending.

## 2.2.10 Release 7.5.36

This chapter contains all changes made in Release 7.5.36 of *CoreMedia Digital Experience Platform 8*.

Follow the [CoreMedia DXP 8 Help Center section](#) to receive release and product announcements automatically.

### Modules and Tooling

Release 7.5.36 contains the following CoreMedia modules:

- ➔ CoreMedia Blueprint
- ➔ CoreMedia CMS
- ➔ CoreMedia Studio
- ➔ CoreMedia Elastic Social

In addition, *CoreMedia DXP 8* uses the following tooling:

Product	Key	Version
CoreMedia Application Maven Plugin	APPPLUGIN	2.7.9
CoreMedia Project Maven Extension	PROJEXT	1.0.5

Table 2.10. Tooling of CoreMedia DXP 8

## CoreMedia CMS Changes and Improvements

- As introduced in CMS-2929 CoreMedia CMS speeds up XML parsing via Spring's `org.springframework.beans.factory.xml.XmlBeanDefinitionReader`, which optionally can be disabled via the flag `skip.redundant.spring.imports`.

*Speed Up XML Bean Definition Parsing*

The corresponding replacement for the `XmlBeanDefinitionReader` is now available as public API:

- `com.coremedia.springframework.xml.ResourceAwareXmlBeanDefinitionReader`

Having this you can now also use this reader in your Spring configuration as for example during tests based on `SpringJUnit4ClassRunner`:

```
@RunWith(SpringJUnit4ClassRunner.class)
@ContextConfiguration(classes = MyTest.LocalConfig.class)
public class MyTest {
    @Configuration
    @ImportResource(
        value = "my-test-context.xml",
        reader =
ResourceAwareXmlBeanDefinitionReader.class)
    public static class LocalConfig { }
}
```

As an example a test which previously took 60 seconds is now done within 15 seconds.  
(CMS-4615)

- The Blueprint Content Feeder for the corporate extension sets parent categories of `CMCategory` documents in the Solr index fields `directProductCategories` and `allProductCategories` now. In previous releases these fields were only set for `CMProduct` documents. This change makes it possible to search for product categories in the internal product catalog in Studio after they have been reindexed.  
(CMS-4596)

- The command line tool "cm publishall" now offers a new option "-a" which publishes the entire contents of the content management server to an empty master live server. Exclusions can be defined through a content query using the new "-cq" option. This feature is intended for use in CI pipelines or for initial project setup.  
(CMS-4583)

*faster publication of entire content base*

## CoreMedia Studio Changes and Improvements

- The tooltip of a content tab is dynamically enriched with site and locale information. (CMS-4606) *Enhanced Tooltips for Studio Tabs*
- The Studio document tab is now showing document type icons for all document tabs. For own doctypes two additional CSS classes need to be added, please refer to Studio Developer Manual chapter "Defining Content Type Icons" for details. (CMS-4556) *Doctype Tab Icons*
- → moved filters to core *Removed library-studio-plugin*
- → moved column model configuration to blueprint forms
- → moved image gallery and image map dialogs to bp-base components (CMS-4536)
- → In order to remove the blueprint-components module, some of the initialization calls made in the base class "BlueprintStudioPluginBase.as" have been moved to the base class "BlueprintFormsStudioPluginBase.as". *Clean up of blueprint-components module*
- → The utility class ImageLinkListRenderes.as have been moved to the core, the updated usage can be found in "BlueprintFormsStudioPluginBase.as"
- → Introduced the new component "ImageReferrerLinkList" to have an image preview of documents referring to the active content tab. (CMS-4317)
- → the "preferences-studio-plugin" has been resolved and it's components and plugins have been moved to the Studio core. *Resolved "preferences-studio-plugin"*
- → bookmarks are now part of the Studio core (CMS-4263)

## CoreMedia Blueprint Changes and Improvements

- Extensions can now provide content zips via the `content` extension point. In order to be copied and merged into one `content-users.zip` by the `boxes` module, content zips must be marked using `content` as Maven classifier. (CMS-4587) *Content extension point added*
- The blueprint studio plugin "contentchooser" has been moved to blueprint-base. (CMS-4457) *Moved contentchooser to blueprint-base*

## Miscellaneous Changes and Improvements

- You can configure additional base paths in your CAE Feeder extension module by adding a customizer to the module's Spring configuration:

```
<customize:append id="productBasePathListCustomizer"
bean="basePathList">
  <list>
    <value>/Products</value>
  </list>
</customize:append>
```

*Extendable "feeder.contentSelector.basePath" for CAE Feeder extensions*

The method `PathAndTypeContentSelector#setBasePath(String basePath)` has been deprecated and will be completely replaced by `PathAndTypeContentSelector#setBasePath(List<String> basePaths)` in the future. (CMS-4612)

- **XLIFF Import - Handling of Empty Trans-Units**

A new property `translate.xliff.import.emptyTransUnitMode` has been introduced to configure the handling of empty trans-unit targets on XLIFF import. Possible values are:

- `IGNORE` (Empty targets are allowed)
- `FORBIDDEN` (No empty targets are allowed)
- `IGNORE_WHITESPACE` (Empty targets are only allowed where the matching source is empty or contains only whitespace characters) (default)

*XLIFF Import - Handling of Empty Trans-Units*

- Configuration of LiveContext Environment has moved from `web.xml` to `coremedia-connector.properties`. This is the default way to configure the Connector from now on, but it is up to you if you want to configure via `web.xml` or `coremedia-connector.properties`. (CMS-2767)

*Configuration of CoreMedia Fragment Connector*

## Fixed Issues

- **CMS-4624: CAE Feeder: error creating database schema on MySQL**

Database schema creation has been fixed for MySQL by setting the utf8 character set on indexed varchar columns.

- **CMS-4446: TestInfrastructureBuilder Replacement**

The `TestInfrastructureBuilder`, used for XML backed content repository tests is deprecated since some time now recommending to use `SpringJUnit4Runner` instead to set up a custom application context.

Now some convenience API is public to easily migrate your `TestInfrastructureBuilder` based tests. It contains especially a configuration class which reads your `content.xml` just as the `TestInfrastructureBuilder` did before.

### Required Dependency:

To use the convenience API you require a dependency on `cap-client-xml`:

```
<dependency>
  <groupId>com.coremedia.cms</groupId>
  <artifactId>cap-client-xml</artifactId>
  <scope>test</scope>
</dependency>
```

### Most Basic Usage:

```
@RunWith(SpringJUnit4ClassRunner.class)
@ContextConfiguration(classes = MyTest.LocalConfig.class)
public class MyTest {
    @Inject
    private CapConnection connection;
    @Configuration
    @Import(XmlRepoConfiguration.class)
    public static class LocalConfig {
    }
}
```

If your tests deals with requests and responses you have to annotate your test in addition with `@WebAppConfiguration` to use Spring MVC Test Framework (also known as `MockMvc`).

### Deal With Component Scan Conflicts:

If you happen to have a component scan on your test package you might need to restrict `LocalConfig` lookup to your test class exclusively using profiles as follows:



```

@RunWith(SpringJUnit4ClassRunner.class)
@ContextConfiguration(classes = MyTest.LocalConfig.class)
@ActiveProfiles(MyTest.LocalConfig.PROFILE)
public class MyTest {
    @Inject
    private CapConnection connection;
    @Configuration
    @Import(XmlRepoConfiguration.class)
    @Profiles(LocalConfig.PROFILE)
    public static class LocalConfig {
        public static final String PROFILE = "MyTest";
    }
}

```

#### Usage With Custom content.xml:

Just the LocalConfig here, everything else stays the same:

```

@Configuration
@Import(XmlRepoConfiguration.class)
public static class LocalConfig {
    @Bean
    @Scope(BeanDefinition.SCOPE_SINGLETON)
    public XmlUapiConfig xmlUapiConfig() {
        return new
        XmlUapiConfig("classpath:/MyTest-content.xml");
    }
}

```

For more information consult the JavaDoc of `XmlRepoConfiguration` and the related classes.

The chapter *Unit Testing a CAE Application* in the *CAE Developer Manual* got updated accordingly.

#### Migrating Existing Tests:

Migrating tests based on the `TestInfrastructureBuilder` especially means to replace existing calls to the `TestInfrastructureBuilder` with appropriate Spring configuration. The following pattern for `ImportResource` shows mappings for the various methods like `withLinkFormatter`:

```

@ImportResource(
    value = {

```

```

// withCache
XmlRepoResources.CACHE,
// withContentBeanFactory
XmlRepoResources.CONTENT_BEAN_FACTORY,
// withDataViewFactory
XmlRepoResources.DATA_VIEW_FACTORY,
// withHandlers
XmlRepoResources.HANDLERS,
// withIdProvider
XmlRepoResources.ID_PROVIDER,
// withLinkFormatter
XmlRepoResources.LINK_FORMATTER,
// withViewResolver
XmlRepoResources.VIEW_RESOLVER,
// withSites (7.1)
"classpath:framework/spring/multisite-services.xml",

// withSites (7.5)
"classpath:/com/coremedia/blueprint/base/" +
  "multisite/bpbase-multisite-services.xml",
// withBeans
"classpath:myConfig.xml",
},
reader = ResourceAwareXmlBeanDefinitionReader.class
)

```

In contrast to this `withContentRepository` gets replaced by the `XmlUapiConfig` bean described above, just providing the same path to the `content.xml` as you used for the `TestInfrastructureBuilder`.

To register custom beans, i. e. to replace `TestInfrastructureBuilder.withBean()` you just add an additional bean to your `LocalConfig`.

*One special case to deal with is `asWebEnvironment`:* To migrate tests using `asWebEnvironment` you first have to add the annotation `@WebAppConfiguration` to your test (**not** to your `LocalConfig`). Having this you will automatically have some beans available like `MockHttpServletRequest`, `MockHttpServletResponse` and especially `WebApplicationContext`. To send request you typically use Spring's `MockMvc`. You could provide it as bean in your `LocalConfig`:

```

@Bean
@Scope(SINGLETON)
public MockMvc mockMvc(WebApplicationContext wac) {
    return MockMvcBuilders.webAppContextSetup(wac).build();
}

```

and perform a handler test like this:

```
@Test
public void testHandleMergedLink() throws Exception {
    MvcResult mvcResult =
        mockMvc
            .perform(
                MockMvcRequestBuilders
                    .get(LINK_TO_MERGED_CONTENT_RESOURCE)
                    .requestAttr("key", "value")
            )
            .andExpect(MockMvcResultMatchers.status().isOk())
            .andReturn();
    ModelAndView mav = mvcResult.getModelAndView();
    // further assertions
}
```

### → CMS-514: Content Feeder Taxonomy Feeding

The Blueprint Content Feeder now correctly reindexes documents with taxonomies after changes to the taxonomy tree when they happen while the Content Feeder is running. Reindexing is done by a background thread with lower priority and does not block feeding of editorial changes.

Changes to the taxonomy tree that happen while the Content Feeder is down are not yet reflected in the index. This is another bug, known as CMS-4565.

## 2.2.11 Release 7.5.35

This chapter contains all changes made in Release 7.5.35 of *CoreMedia Digital Experience Platform 8*.

Follow the [CoreMedia DXP 8 Help Center section](#) to receive release and product announcements automatically.

### Modules and Tooling

Release 7.5.35 contains the following CoreMedia modules:

- CoreMedia Blueprint
- CoreMedia CMS
- CoreMedia Studio
- CoreMedia Elastic Social

In addition, *CoreMedia DXP 8* uses the following tooling:

Product	Key	Version
CoreMedia Application Maven Plugin	APPPLUGIN	2.7.9
CoreMedia Project Maven Extension	PROJEXT	1.0.5

Table 2.11. Tooling of CoreMedia DXP 8

## Fixed Issues

### 2.2.12 Release 7.5.34

This chapter contains all changes made in Release 7.5.34 of *CoreMedia Digital Experience Platform 8*.

Follow the [CoreMedia DXP 8 Help Center section](#) to receive release and product announcements automatically.

## Modules and Tooling

Release 7.5.34 contains the following CoreMedia modules:

- CoreMedia Blueprint
- CoreMedia CMS
- CoreMedia Studio
- CoreMedia Elastic Social

In addition, *CoreMedia DXP 8* uses the following tooling:

Product	Key	Version
CoreMedia Application Maven Plugin	APPPLUGIN	2.7.9
CoreMedia Project Maven Extension	PROJEXT	1.0.5

Table 2.12. Tooling of CoreMedia DXP 8

## CoreMedia CMS Changes and Improvements

- If a richtext contains an internal link pointing to a CMDownload object, the link lead to another site containing only the link to the blob. Now the link contained in the richtext points directly to the blob. (CMS-4466)

*CMDownload Links in Richtext Point to Blob Directly*

## CoreMedia Studio Changes and Improvements

- The packages `com.coremedia.rest.intercept`, `com.coremedia.rest.cap.intercept`, `com.coremedia.rest.validation` and `com.coremedia.rest.cap.validation` and all respective subpackages have been moved from the module `cap-rest-service` to the modules `coremedia-rest-plugins` and `cap-rest-plugins`. No classes have changed their package, but it might be necessary to update dependencies of modules containing custom interceptors and validators. (CMS-4549)
- Control Room: *Content sets* as logical containers for contents are replaced by fully-fledged *projects*. A project encompasses not only content items but also members, to-dos and due dates. For details, we refer to the *Studio User Manual*. There is no migration tool/path for transferring former content sets to projects. (CMS-4542)

*Interceptors, postprocessors and validators moved*

*Content Sets are replaced by Projects*

## CoreMedia Blueprint Changes and Improvements

- Update `frontend-maven-plugin` to latest version 0.0.26, `node.js` to 4.1.1 and `npm` to 3.3.4 in all blueprint themes. (CMS-4472)

## Miscellaneous Changes and Improvements

- In order to improve performance and unnecessary executions, bean customizers destroy themselves when done. (CMS-4527)
- The cms catalog document types `CMProduct` and `CMCategory` featured the property `metaDescription`. Since it has the same meaning as `htmlDescription`, inherited from `CMLinkable`, we dropped `metaDescription` and use only `htmlDescription`. The ecommerce API remains unchanged. I.e. the `getMetaDescription()` methods are still supported, but they are backed by the `htmlDescription` property now. (CMS-4519)

*Bean Customizer Destroys Itself When Done*

*Obsolete document property metaDescription*

## Fixed Issues

- **CMS-4532: Collapsible Group with issue should be uncollapsed**  
Fixed auto expand of empty titles in collapsibles
- **CMS-4463: changed tomcat cache directory**

The default directory for temporary files with tomcat has changed from `/var/tm/coremedia/to` `/var/cache/coremedia` to prevent accidental removing cache files needed by CoreMedia applications.

→ **CMS-4458: Solr schema.xml changed to use autoGeneratePhraseQueries**

The attribute `autoGeneratePhraseQueries="true"` was added to the field type `text_general` in the Solr `schema.xml`. This fixes a bug where searching for a word with a dash (e.g. `tv-show`) returned documents that matched only parts of the query (e.g. just contained `tv`).

There's no need to reindex because this setting does not affect indexing but only query processing.

→ **CMS-3637: Naming constraint for cache keys**

The `CacheKey` name, defined by `com.coremedia.cache.CacheKey#cacheClass(Cache, T):String`, must not contain the reserved colon character `:`.

## 2.2.13 Release 7.5.33

This chapter contains all changes made in Release 7.5.33 of *CoreMedia Digital Experience Platform 8*.

Follow the [CoreMedia DXP 8 Help Center section](#) to receive release and product announcements automatically.

## Modules and Tooling

Release 7.5.33 contains the following CoreMedia modules:

- CoreMedia Blueprint
- CoreMedia CMS
- CoreMedia Studio
- CoreMedia Elastic Social

In addition, *CoreMedia DXP 8* uses the following tooling:

Product	Key	Version
CoreMedia Application Maven Plugin	APPPLUGIN	2.7.9
CoreMedia Project Maven Extension	PROJEXT	1.0.5

Table 2.13. Tooling of CoreMedia DXP 8

## CoreMedia CMS Changes and Improvements

- Spring XML files for custom blob stores no longer support the `#\{...\}` syntax for dynamically reloaded properties. Instead, this syntax is reserved for Spring EL expressions now. Note that the Spring EL syntax is still not available in other *Content Server* and *Workflow Server* configuration files. (CMS-4054)

*Custom Blob Storage*

## CoreMedia Studio Changes and Improvements

- In order to ease translation of documents nested in folder hierarchies, folders can now be added to a translation workflow. They will be automatically expanded to their contained documents.

*Translation of Folders*

As this operation might possibly cause high load in CoreMedia Studio the number of expanded documents is limited to 100 by default. This limit can be configured through the `ContentUtilConfigurationPlugin`:

```
<editor:contentUtilConfigurationPlugin
  expandFolderLimit="100"/>
```

(CMS-4376)

- The class `com.coremedia.cms.editor.sdk.desktop.InvalidateAllAction` has been removed from the product. Because invalidations are automatically pushed to the client, it is not longer necessary to invalidate the client-side beans manually. (CMS-3742)

*InvalidateAllAction*

- Introduced configuration option for new CSP level 2 directive `frame-ancestors` in Studio. The directive is used to avoid clickjacking attacks in supporting browsers. It is enabled by default with the value `none`, i. e. you cannot load it into any frame. For details see Studio Developer Manual, section Security/Content Security Policy. (CMS-789)

*New Content Security Policy Configuration Option*

## CoreMedia Blueprint Changes and Improvements

- The string property `productCode` has been added to the document type definition of `CMProduct`. This document type is used by the Corporate Blueprint and its `catalog` extension. It is a required property for products of the CMS catalog. If you're already using the document type `CMProduct`, then you need to perform the following steps as part of the update:

*New property productCode for document type CMProduct*

- Set `sql.schema.alterTable=true` once when starting a Content Server to let it automatically adapt the database schema for the new property.
- Edit all existing documents of `CMProduct` and enter a non-empty product code. The product code has to be unique within a site's catalog and must not contain slashes, colons or whitespace characters. Studio displays a warning for products that don't have a valid product code

The product code is also indexed in the newly added `productCode` field in Solr. The new field was added to the default search fields so that it is possible to find products in Studio and on the website by their product code. It's not necessary to reindex from scratch to get the product codes into Solr. Existing products are automatically reindexed with their product code when they are edited in Studio.

(CMS-4375)

- Moved QuickCreate and related components to "blueprint-base-components":
  - moved quick create to blueprint-base components
  - moved FolderCombo to blueprint-base components
  - added `AddDefaultFolderComboEntry` configuration plugin to support calculated path information for the FolderCombo
  - provided function support for the folder property of the quickcreate editors: the folder combo for a new content creation can be left empty. A separate function can be passed instead to calculate the target folder for the newly created content
  - added "AddDefaultFolderComboEntry" plugin to support the calculation of the default entry of the folder combo with a function

*QuickCreate and related components have been moved to "blueprint-base-components"*

In order to move the quick create module to blueprint base, the following changes have been made previously:

- removed blueprint `ContentUtils`: new class "IdHelper" should be used for parsing the numeric content id instead
- removed unused `NewContentDialog`: this was the default dialog used for the create content menu on the favourites toolbar. Quick-Creat dialogs are used now instead. The old dialog has been deleted.
- moved new content defaults to blueprint-forms: the properties file that contains the initialization of default paths has been moved to the blueprint-forms module
- provided QuickCreate Hook: extended customization of the quick create plugin, see class "QuickCreate" for details
- removed `StyledButton`: unused component



- moved PreserveCursorPlugin to core
- removed Toaster: the toaster wasn't used in the blueprint. Use the new studio notifications instead.
- moved XMLUtil to Struct Editor plugin: The utility was mostly used by the old struct editor, so it has been removed from the blueprint.
- moved FolderChooser to bpbases-studio-components
- moved ContentCreationUtil to bpbases-studio-components
- removed blueprint Studio Logger: use the "Logger" class from the Studio core instead.
- removed ClearableTextField: unused component
- refactored several utility methods of the "studio-plugin-utils"
- moved quick create to blueprint-base components
- moved FolderCombo to blueprint-base components
- added AddDefaultFolderComboEntry configuration plugin to support calculated path information for the FolderCombo
- provided function support for the folder property of the quickcreate editors: the folder combo for a new content creation can be left empty. A separate function can be passed instead to calculate the target folder for the newly created content
- added "AddDefaultFolderComboEntry" plugin to support the calculation of the default entry of the folder combo with a function (CMS-4261)

## CoreMedia Elastic Social Changes and Improvements

- Updated the MongoDB Java client version to 2.13.0. (CMS-4347)
- The option to define a TTL collection with index options in the ModelCollectionConfigurationBuilder has been removed. It is now possible to configure a model index and a TTL collection with the same property. A merged configuration will be used for the actual index creation. (CMS-3952)

*Updated MongoDB Java client driver version  
Removed index options for TTL collections*

## Miscellaneous Changes and Improvements

- → JUnit updated from 4.11 to 4.12.
- → PowerMock updated from 1.5.2 to 1.6.2.

*Thirdparty: Test Dependencies Update*

- Mockito updated from 1.9.5 to 1.10.19.
- Objenesis updated from 1.4 to 2.2.  
(CMS-4377)

## Fixed Issues

### → **CMS-4459: DymnamicPricing typo**

Fixed a typo in String Constant AbstractStoreContextProvider#CONFIG\_KEY\_DYNAMIC\_PRICING\_ENABLED

### → **CMS-3734: Added order attribute to @Link annotation**

Although link handlers should typically be selected by bean- and view-type, it is now possible to override predefined link handlers using the new 'order' attribute. The order attribute of the @Link annotation follows the semantics of `org.springframework.core.Ordered#getOrder`.

### → **CMS-3004: Contradictory publication result after global publication error**

Fixes an issue where when publication / withdrawal fails with a "global" publication error - such as a Master Live server being down - the publication result window showed contradictory results

### → **CMS-484: cm destroyversions**

`cm destroyversions` is now bundled only with the command line tools for the content management server as it is not advisable to execute this command on any other content server (master/replication).

## 2.2.14 Release 7.5.32

This chapter contains all changes made in Release 7.5.32 of *CoreMedia Digital Experience Platform 8*.

Follow the [CoreMedia DXP 8 Help Center section](#) to receive release and product announcements automatically.

## Modules and Tooling

Release 7.5.32 contains the following CoreMedia modules:

- CoreMedia Blueprint
- CoreMedia CMS
- CoreMedia Studio

→ CoreMedia Elastic Social

In addition, *CoreMedia DXP 8* uses the following tooling:

Product	Key	Version
CoreMedia Application Maven Plugin	APPPLUGIN	2.7.9
CoreMedia Project Maven Extension	PROJEXT	1.0.5

Table 2.14. Tooling of *CoreMedia DXP 8*

## CoreMedia CMS Changes and Improvements

- The Freemarker integration now uses the recommended `DefaultObjectWrapper` as object wrapper. This leads to some changes in using Java objects, especially lists and maps in Freemarker templates. The `BeansWrapper` mixed map keys with method names with preference to method names. The `DefaultObjectWrapper` does not leak Java methods. It does not allow to use Java methods of a Map like "get()" and "keys()" directly, but requires you to use Freemarker built-ins. It only allows you to use Strings as keys of a Map.

Here are some examples for required changes for existing templates:

```
aMap.keySet() => aMap?keys aMap.size() => aMap?size aMap.get(key) => aMapkey
```

The newly configured implementation is more strict about the used syntax. E.g. if your bean is a list (or sequence in Freemarker), you need to use the built-in "seq\_contains", not "?contains". It does not allow you to compare beans of different types, e.g. a list with a string. For more information look at the Freemarker documentation.

(CMS-4167)

- Artifacts `base-nonblocking-component` and `cae-nonblocking-component` are removed. Use `base-component` and `cae-base-component` instead. The asynchronous loading classes (servlet, filter and context loader) are configured in those base components but can be disabled at runtime using servlet context init parameter, JNDI parameter, system property or system environment parameter `com.coremedia.springframework.web.context.disableAsynchronousLoading`

(CMS-4165)

- The index field `htmlDescription` has been added to the Solr schema.xml for the Blueprint CAE Feeder. This field contains the value from the `CMTeasable` document property with the same name and can be used for search result highlighting.

*removed artifacts base-nonblocking-component and cae-nonblocking-component*

*Solr schema.xml change*

The field name has also been added to the constants defined in `com.coremedia.blueprint.cae.search.SearchConstants.FIELDS` (CMS-4119)

- The Freemarker Library was updated to patch version 2.3.23. See Changelog for more informations: [http://freemarker.org/docs/versions\\_2\\_3\\_23.html](http://freemarker.org/docs/versions_2_3_23.html) (CMS-3989)
- Several `cm` command line tools have been enhanced to respect UAPI queries for content selection. The changes apply to:

*Update Freemarker Library to 2.3.23*

*enhanced cm tools*

- `cm query`
- `cm cleanversions`
- `cm publish`
- `cm approve`
- `cm destroy`
- `-cq | --contentquery <query>`

To select contents by a content query

- `-vq | --versionquery <query>`

To select contents by a version query (not supported by all clients).

- `-R | --recyclebin`

Select contents in the recycle bin (not supported by all clients).

- `-l | --limit <limit>`

Limits the objects to run the client on.

- `-I | --id <id>`

Convenience parameter to explicitly select by id. Usage of this parameter is encouraged if you want to mix selection by id with other selection parameters.

- `-t | --path`

Selection via path.

All content selection parameters are ORed, thus you can for example select some contents explicitly by id and others by even multiple queries.

`cm approve` hid the verbose parameter because it uses `\-v` for specifying versions. In order not to break existing scripts a workaround for verbose flag

has been added to `cm approve`: Use `-v` instead. Of course `\-\-verbose` works, too.

To run unified API queries the new parameters `-cq` and/or `-vq` should be used instead. The old parameter has been kept for backward compatibility and only the arguments of `-q` will be respected if you want to translate legacy queries to UAPI queries.

To straighten the behavior of `-q` versus for example `-cq` you can now also hand multiple legacy queries at once to `cm query` to translate (and possibly execute).

```
$ bin/cm query -u Adam \
-vq "TYPE Document_" \
-cq "TYPE Folder_" \
--recyclebin \
--limit 10
```

Lists all document versions, all folders and all contents of the recyclebin with up to 10 results.

```
$ bin/cm cleanversions -u Adam \
-cq "TYPE Document_ : NOT BELOW PATH '/Excluded'"
```

Will run clean versions on all documents despite those in path `/Excluded`. Mind that because of `cleanversions` default behavior to traverse folders recursively you can prevent possibly unexpected results by explicitly selecting documents only inside the queries (as seen in the example above).

For more information consult the Contentserver Manual.  
(CMS-2533)

## CoreMedia Studio Changes and Improvements

- The demo content contains a setting OpenCalais which contains the configuration for the OpenCalais service. This setting contains a struct named "openCalais" which contains optional sub structs "apiKey" and "apiUrl". This setting overwrites the given OpenCalais configuration defined in properties files when it is linked to a site.  
(CMS-4290)

*OpenCalais Configuration in Content*

- Thomson Reuters Open Calais does not longer support its legacy OpenCalais service. In order to support this integration in Blueprint further on, the new API is supported now. The j-calais third party library has been removed completely. (CMS-4233)
- The "external-library" studio plugin has been refactored into a real blueprint-extension. (CMS-4200)
- removed blueprint struct editor password field and struct-editor-rest-extension (CMS-4186)
- The method `getMasterVersionNumber()` of `com.coremedia.cms.editor.sdk.sites.SitesService` will now return 0 instead of -1 when no master version exists. (CMS-4084)

*Support new Thomson Reuters Open Calais (TM)*

*Moved "external-library-extension" to a real extension*

*removed blueprint struct editor password field and struct-editor-rest-extension Sites Service*

## CoreMedia Blueprint Changes and Improvements

- **Chef v12 updates as of August 2015**
  - CoreMedia strongly recommends to use Chef Development Kit 0.7.0 or later (a major version bump to 1.0 coming soon)
  - The preconfigured Chef Client in our Vagrant test setup is now 12.4.1 (bundled with Chef DK 0.7.0)
  - A dedicated Chef Server 12.1.2 or later is recommended for production deployments
  - A dedicated private Chef Supermarket server 2.0.0 or later is recommended to improve your Chef Cookbook release process (CMS-4266)
- The plugin had only one class that has been moved to the blueprint-form studio plugin. (CMS-4262)
- CMLinkable gets a new string property called "htmlTitle" which describes the text to be rendered for the "title" tag/to be displayed for the browser tab.  
  
If no value has been defined, the "title" property value will be used as fallback. (CMS-4049)
- **Vagrant 1.7 and Virtualbox 5.0 updates as of August 2015**
  - CoreMedia recommends to use Virtualbox 5.0.2

*Leverage Chef v12 ecosystem*

*Removed "quick-create-extension" studio plugin*

*Changes in Blueprint Document Types*

*Vagrant and Virtualbox*

- The preconfigured test setup requires Vagrant 1.7.4 and uses the updated CentOS 6.7 coremedia/base box 1.16 (<https://atlas.hashicorp.com/coremedia/boxes/base>)
- Required Vagrant plugin versions are now checked automatically
- Please refer to the Vagrantfile for the required plugin versions and further details  
(CMS-3190)

## CoreMedia Elastic Social Changes and Improvements

- The Elastic Social Studio Plugin now contains information about the number of comments and users that require information. You also get information about the number of comments that are online and the number of activated users. These numbers are calculated using the configured search engine. You need to reindex the search indexes 'comments' and 'users' using JMX. Please see the Elastic Social manual for further instructions.  
(CMS-3721)

*Moderation statistics are available*

## Miscellaneous Changes and Improvements

- Added property

```
lc.contracts.processing.enabled
```

to LC CAE component. Defaults to true to support B2B scenario. Set to false to disable contract processing.  
(CMS-4325)

*Contracts Processing can be switched off in CAE*

- The FragmentConnector's "environment" parameter (determining a concrete CMS site, instead of a lookup by storeId and language) can now be set on a per-store basis in the STORECONF table. For example you set the environment to "site:Aurora" for Store with ID 10303 by using: INSERT INTO WCUSER.STORECONF (STOREENT\_ID, NAME, VALUE, OPTCOUNTER) VALUES (10303, 'com.coremedia.fragmentConnector.environment', 'site:Aurora', 0); Do not forget to refresh the IBM WCS Storeconf Registry (see [http://www.ibm.com/support/knowledgecenter/S21C\\_700/ibm.commerceadmindocs/registry.html#en](http://www.ibm.com/support/knowledgecenter/S21C_700/ibm.commerceadmindocs/registry.html#en)) afterwards or restart your WCS.  
(CMS-4323)
- Guava (com.google.guava:guava) got updated from 14.0.1 to 18.0. If you happen to have used Guava in your project you might experience migration efforts as some Guava API has changed, as for example Stopwatch

*3rd Party Update: Guava*

and `Objects`. The latter one especially deprecates methods which are either replaced by `java.util.Objects` or Guava's `MoreObjects`. For a complete list please refer to Guava's change notes.

(CMS-4321)

- The `pageId` parameter for the `lc:include` tag can now be overwritten from within a JSP file. If omitted, the `pageId` is automatically retrieved from the current URL, as before.

(CMS-4305)

- The recommended way to use custom fragment keys in the CAE Feeder or in Persistent Cache applications is to wrap calls to `PersistentCache#get` with such a key in an in-memory `CacheKey`. The Blueprint implemented this pattern for the CAE Feeder in class `com.coremedia.blueprint.cae.feeder.WrappedPersistentCache` of module `caefeeder-lib`.

The `WrappedPersistentCache` class and its Spring bean `wrappedPersistentCache` have been removed now and replaced with functionality of the core Persistent Cache implementation. To this end, the new extended interface `com.coremedia.cap.persistentcache.PersistentCache2` provides the method `getCached`, which basically calls `PersistentCache#get` but wraps the call in an in-memory cache key just as the `WrappedPersistentCache` did before. The Spring bean with name `persistentDependencyCache` implements the new `PersistentCache2` interface.

The standard Blueprint has been adapted to use `PersistentCache2` instead of `WrappedPersistentCache`. However, if you use `WrappedPersistentCache` in your own code, you should change it to call `PersistentCache2#getCached` instead, or alternatively keep the `WrappedPersistentCache` implementation from the previous Blueprint version in your workspace.

(CMS-4129)

- **`com.coremedia.cap.content.ContentRepository`** The interface `ContentRepository` provides a new method `copyCheckedInVersionsRecursivelyTo(...)`, which copies the latest checked-in versions skipping content that has never been checked-in.

**`com.coremedia.cap.content.results.CopyResultItem`** The class `CopyResultItem` provides the new method `getVersion()` that allows to retrieve the version of the source content which the content has been copied from.

(CMS-4030)

- The Corporate Blueprint provides website search functionality now. It supports searching for pages based on page grids of `CMChannel` documents. To this end, the CAE Feeder is configured to feed parts of the page grid with `CMChannel` documents.

*pageId parameter in lc:include*

*PersistentCache Fragment Keys*

*Content Repository*

*Corporate Blueprint Website Search*



The CoreMedia 8 manual describes website search in a new section in the "CoreMedia 8 Corporate Blueprint" chapter.

(CMS-3929)

- The "quick create" dialog in Studio suggests a folder for the new content item - this was previously determined by a property in the bundle files. Thus, you could only have one default target folder per document type, which would apply to all sites in the system. Therefore, when you have differing folder layouts for different sites, the suggested path wouldn't be very helpful.

*Settings-based default folders for Quick Create Dialog in Studio*

Therefore, you can now specify a default folder per document type on a site-level. To that end, create a setting in `<site_root/Options/Settings/Content Creation` named according to the pattern `paths.<document_type_name>` which, when present, will override the default folder from the properties bundle

(CMS-3757)

## Fixed Issues

- **CMS-4291: LC2 only uses language and ignores Locale in Communication with IBM WCS**

The CoreMedia-custom LanguageMapHandler (REST) on IBM Commerce side and the Store Context on CMS side now use the locales (country and language) from IBM Commerce LanguageRegistry instead of languages, only. Thus you can have two different Sites in CMS for the same store (e.g. 10301), one with locale `en_GB` and one for `en_US`.

- **CMS-4168: Taxonomy still includes old SAP tags**

Removed unused Taxonomy tags "Monitors", "Notebook", "Printers", "Software" and "Content Class"

- **CMS-4163: "Editorial Blog" teaser on Aurora B2C Women's Apparel Page shows non-editorial content**

"Editorial Blog" teaser on Aurora B2C Women's Apparel Page now only shows Content tagged with "Apparel"

- **CMS-4145: Remove extras parameter for cm.include**

Removed the `extra` parameters of the Freemarker macros `cm.include` and `cm.hook`. Use the "params" parameter to add any additional parameters.

- **CMS-4133: cms worksapce build fails on corporate-theme module because of npm dependency**

Update `node.js` to latest version 0.12.7 and `npm` to 2.13.4 in corporate-theme.

→ **CMS-4130: PersistentCache API RevalidatingFragmentPersistentCacheKey**

The signature of method `getBytesForHashing` in class `com.coremedia.cap.persistentcache.RevalidatingFragmentPersistentCacheKey` has been fixed to match the generics type parameter of the interface.

→ **CMS-4047: ExternalLink has no validator for url**

Add validator in Studio to check for empty property url of `CMExternalLink`.

→ **CMS-3876: Upload Files fails with "Not enough storage is available to complete this operation." and freezes afterwards**

Added error handling for possible preview error caused by insufficient memory.

→ **CMS-3809: Sitemaps**

Sitemap generation had been a little untended over the last few releases and was recently working only for one site of the Blueprint. In order to support sitemaps for multiple sites, we had to rework the sitemap package in the blueprint quite largely. The major benefits are:

- Out of the box sitemaps for all perfectchef and corporate sites.
- Automatic robots.txt entries, no content configuration required any longer.
- Easy activation of sitemaps for new sites, requires only one string setting at the root channel, no more subtle request parameters.
- The cron job to generate the sitemaps has been replaced by a CAE internal scheduled executor, which reduces deployment complexity.

For details see the Sitemap section in the Platform Developer Manual.

→ **CMS-3374: Custom Inline Styles**

Handling of custom inline styles such as font-size, color in the rich text editor has been improved. The current style is correctly shown as the selected menu item, and "remove" is only enabled when there a style is currently defined.

→ **CMS-3129: Create tomcat temporary folder also on rpm update**

If the temporary folder for tomcat, by default `/var/tmp/coremedia/<APPLICATION_NAME` was deleted before an update, the update process was not recreating it. Now the folder will be recreated in any postinstallation case.

→ **CMS-2976: Change source-token JAVA\_HOME to CM\_JAVA\_HOME**

To prevent Jenkins jobs configured as Maven projects to replace `@JAVA_HOME@` with the `JAVA_HOME` configured in Jenkins, the source-token has been renamed from `JAVA_HOME` to `CM_JAVA_HOME`. The Chef and RPM configuration facade is not affected by this change as the target-token remains `configure.JAVA_HOME`. Only projects that use preconfigured artifacts need to change their `JAVA_HOME` value to `CM_JAVA_HOME` in `packages/src/main/filters/preconfigure.properties`.

### → **CMS-1154: Using RedirectAttributes**

The *Content Application Developer Manual* describes in section *Working with Forms* how to preserve attributes on a redirect using `RedirectAttributes`.

Unfortunately, as soon you use this pattern, `LinkHandlers` cannot be selected by type anymore. This is because of the behavior described in Spring Bug [SPR-10516](#) that all objects in `ModelAndView` get transformed to Strings very early in the redirect process as soon as you make use of the `RedirectAttributes`.

You might experience two consequences:

- the redirect will cause a 500 Internal Server Error if the bean cannot be transformed to a String
- `LinkHandler` filtering by type does not work anymore as the bean will be of type String.

To get around this the section mentioned above got extended by a note which describes an approach using the newly introduced method in `HandlerHelper: redirectBuilder(bean)`. Mind that in addition to this (also described in the note) you might need to add a converter to `bindingConverters` to prevent the Internal Server Error.

## 2.2.15 Release 7.5.31

This chapter contains all changes made in Release 7.5.31 of *CoreMedia Digital Experience Platform 8*.

Follow the [CoreMedia DXP 8 Help Center section](#) to receive release and product announcements automatically.

### Modules and Tooling

Release 7.5.31 contains the following CoreMedia modules:

- CoreMedia Blueprint
- CoreMedia CMS
- CoreMedia Studio

→ CoreMedia Elastic Social

In addition, *CoreMedia DXP 8* uses the following tooling:

Product	Key	Version
CoreMedia Application Maven Plugin	APPPLUGIN	2.7.9
CoreMedia Project Maven Extension	PROJEXT	1.0.5

Table 2.15. Tooling of CoreMedia DXP 8

## CoreMedia Studio Changes and Improvements

→ `com.coremedia.cms.editor.controlroom.workflow.WorkflowStateTransition`

*Workflow Configuration*

The `WorkflowStateTransition` class provides a new config option `defaultStep` which allows to configure the step that should be selected by default.

(CMS-3974)

## CoreMedia Blueprint Changes and Improvements

→ The properties `htmlDescription` and `extDisplayedDate` were added to the `CMLinkable` document type.  
(CMS-4118)

*New CMLinkable document properties*

→ **Chef v12**

*Chef v12 recommended*

→ The Chef client in our Vagrant setup is currently still v11 (e.g. 11.18.12)

→ Chef v12 (e.g. 12.4.0) is recommended though and will be the default in future releases

(CMS-4043)

→ The chef version in the Vagrantfile has been updated to 11.18.12.  
(CMS-4008)

*Chef version update in Vagrantfile*

→ As of this version the minitests have been removed from the `coremedia` cookbook, because the `minitest-chef-handler` is not compatible with Chef `>= 12.4.0`. As a replacement, we strongly recommend the usage of `TestKitchen` in combination with `ServerSpec`.

*Minitests have been removed from coremedia cookbook*

(CMS-3938)

## Fixed Issues

→ **CMS-4125: IBM APAR prerequisites**

This release has IBM APAR JR53438 ("Mandatory cumulative Interim Fix for WebSphere Commerce Version 7 Feature Pack 8") as prerequisite which contains all of the previous required APARs.

Additionally, for B2B Stores with Customer Segments based on user account, APAR JR53688 ("Customer Segment REST API does not return segments with Account conditions") is required.

→ **CMS-3939: blueprint.site.mapping Values**

The values of the `blueprint.site.mapping` application properties (prefixes for absolute URLs) used to be normalized by cutting off trailing slashes. In some corner cases this led to unwanted results, though. Therefore we deleted the normalization and thus give projects full control over the URI prefixes. In order to achieve backward compatibility, you must delete any trailing slashes from your `blueprint.site.mapping` values. The Blueprint's default values had no trailing slashes even before this change. If you preserved this pattern, there is nothing to do.

→ **CMS-3701: Workflow Server Registration**

The Workflow Server registers itself with the Content Management Server at startup time now. The Content Management Server no longer has to retrieve the Workflow Server's main CORBA IOR through HTTP. It is no longer necessary to set the property `cap.server.workflow.server.url` in the file `contentserver.properties`. In order to ensure a controlled startup sequence, the Workflow Server is registered only after all of its service and all of its custom managers have been started. This ensures that client see a fully initialized server, but it also means that custom manager cannot open a Unified API connection that connects back to its own Workflow Server during startup.

## 2.2.16 Release 7.5.30

This chapter contains all changes made in Release 7.5.30 of *CoreMedia Digital Experience Platform 8*.

Follow the [CoreMedia DXP 8 Help Center section](#) to receive release and product announcements automatically.

## Modules and Tooling

Release 7.5.30 contains the following CoreMedia modules:

- CoreMedia Blueprint
- CoreMedia CMS
- CoreMedia Studio

→ CoreMedia Elastic Social

In addition, *CoreMedia DXP 8* uses the following tooling:

Product	Key	Version
CoreMedia Application Maven Plug-in	APPPLUGIN	2.7.9
CoreMedia Project Maven Extension	PROJEXT	1.0.5

Table 2.16. Tooling of CoreMedia DXP 8

## CoreMedia CMS Changes and Improvements

- **Removal of path-based fallback logic** Whenever computing master or derived content items the classes in `com.coremedia.cap.multisite` implemented a fallback logic that used a path-based approach, when no master link property was available. This fallback logic has been removed.

*Module cap-multisite*

`com.coremedia.cap.multisite.ContentObjectSiteAspect` The method `ContentObjectSiteAspect#getMasterDirectly()` has been deleted. It had been introduced to explicitly prevent the path-based fallback mechanism to apply. Please use the method `ContentObjectSiteAspect#getMaster()` instead. (CMS-3921)

- `com.coremedia.cap.multisite.Site`

*Module cap-multisite*

The root document of a site can be null. A site is called readable if the `siteIndicator` and the `siteRootFolder` are readable. To test if a site is readable use the new method `Site#isReadable()` The method `Site#isUnderConstruction()` has been removed, as sites under construction cannot be retrieved anymore. (CMS-3824)

- Added Solr index fields `directProductCategories` and `allProductCategories` for the Blueprint Content Feeder in `modules/search/solr-config/src/main/app/solr-home/configsets/content/conf/schema.xml`. These fields are used for the product catalog in the corporate extension of the Blueprint. (CMS-3659)

- Document type definition files are validated using XML Schema now. The old DTD-based doctype syntax is no longer supported. To this end, the property `cap.server.documentTypes.xmlSchema.enable` in the file `contentserver.properties` has been removed. If you are still using DTD-based document type definitions, adapt your document type definition files by removing the DOCTYPE header and adding the `xmlns="ht`

*Document Type Definitions*

`tp://www.coremedia.com/2009/documenttypes"` default namespace declaration to the XML root element.  
(CMS-754)

## CoreMedia Studio Changes and Improvements

- The user menu (top right corner) is now configurable for every user regarding its displayed elements:
  - user name
  - preferred site name
  - preferred site locale

*Studio User Menu*

By default all elements will be enabled although you won't see preferred site information unless you have selected a preferred site.  
(CMS-3948)

- `com.coremedia.ui.config.AddQuickTipPlugin`

*Module ui-components*

The `AddQuickTipPlugin` has been extended by the following two config options:

- `bindTo`: A value expression evaluating to a string to be added as a quick tip to the main DOM element rendered by the component. If set the config option 'text' is ignored.
- `elementMapping`: A function that evaluates to the element that the quick tip should be attached to (optional). Signature: `function map(component:Component):Element`

(CMS-3847)

- A user can show and hide columns in the repository view and the search view of the library now. Using drag and drop, the columns can also be re-ordered. The custom configuration is persisted and restored during the next Studio start.  
(CMS-3833)

*Library Configuration*

- A new dashboard widget and a new library filter have been introduced to support the user in the process of translating a site. The widget gives you an overview of the translation state of a selected site and displays for example the number of updated documents in the master site. The library filter then helps you find these documents, so that you can directly start a translation. For details please consult the Studio User Manual. To implement this feature, the Solr schema of the Content Feeder has been extended. In order for the search to work correctly on existing content, the master site or sites must be indexed again. See the section "Operation of the Content Feeder" in the CoreMedia Search Manual for details on how to re-index all documents below the master site root folder.

*Translation State*

(CMS-3823)

- The Studio device preview does now fully emulate device resolutions, including width, height, and aspect ratio. This change improves support for complex media queries and effects based on the scroll position.

*Enhanced Device Preview in Studio***Changes**

- Visual: Devices are now framed, scaled to fit the preview area, and centered.
- Device slider: A new *Desktop* mode is added to the device slider enabling a full size preview using all the available space of the preview area. There is no fixed width/height in this mode.
- Preview metadata:
  - The metadata property `_cm_isResponsive_` was removed.
  - A new metadata property `_cm_preferredWidth_` was introduced. If set, the *Desktop* mode offers a full width option to scale down the preview until the configured width fits the available preview area width. The mode still uses the full height of the preview area.
- Scrollbars: Scrollbars can be disabled for the Studio preview. A new setting was added to the preferences dialog.

(CMS-3820)

- **Extended Studio Logging** Studio authentication events are now logged. This includes successful authentication, authentication failures, logout operations and authorization events.

*Logging of Studio Security Events*

The events are logged with the following SLF4j markers:

- `security`
  - `authorization`
  - `authentication`

Thus you can define an own logging appender for redirecting such events to extra log files using the following expression in `ch.qos.logback.core.filter.EvaluatorFilter`:

```
return marker != null
    && marker.contains("security");
```

For details refer to Studio Developer Manual, Section *Security, Logging*.



(CMS-3188)

- Enable rendering of thumbnails in the library for certain document types like `CMArticle`, `CMCollection`, `CMSymbol` and more.

An example configuration can be found in `BlueprintStudioPluginBase`.

Use `IEditorContext#registerThumbnailUriRenderer` to register a custom function for each doctype. Document type hierarchy is respected. `IEditorContext#getThumbnailUri` provides the URI for a thumbnail image for a given content.

The blueprint's `ImageLinkListRenderer` is now also based on this registry. (CMS-2133)

## CoreMedia Blueprint Changes and Improvements

- Added two new document types for the product catalog of the Corporate Blueprint. The new document types `CMProduct` and `CMCategory`, which represent products and their categories, are defined in file `ecommerce-doctypes.xml` of the Maven module `modules/ecommerce/ec-doctypes`. They are used by the corporate extension of the Blueprint (`modules/extensions/corporate`). (CMS-3936)
- In order to turn on JVM debugging, you can now set additional `CATALINA_OPTS` which get picked up by tomcat.

To do so, you need to set a node attribute with the following structure and value.

```
"coremedia": {
  "catalina_opts": {
    "<PACKAGE_NAME>":
    "-agentlib:jdwp=transport=dt_socket,server=y,suspend=n,address=5005"
  }
}
```

where `<PACKAGE_NAME>` should match a tomcat package i.e. `cm7-studio-tomcat`.

(CMS-3923)

- For commerce-led scenario: All IBM WCS pages (incl. Commerce Composer managed pages as well as pages that are plain JSPs) can have an External Page representation in the CMS. Before, it worked only for Category Pages and PDPs, now it is also available for pages that are not included in the

*Augmenting all IBM WCS pages*

catalog hierarchy. All pages can be previewed in Studio where the external shop URL is used. To have this feature enabled for the homepage, be aware that the root channel must be of type External Page (for a pure commerce-led site). The homepage document type is changed in the default content. Please refer to the LiveContext manual for further details.

(CMS-3918)

- The `AbstractHasContextsContextFinder` was somewhat subtle: `findContextsFor(linkable, currentContext)` invoked an `isApplicable` check and delegated to `findContextsFor(linkable)`. So, extending classes had to
  - invoke the `isApplicable` check in the `findContextsFor(linkable)` again,
  - override `findContextsFor(linkable, currentContext)` if they needed the `currentContext`

*API Change in `AbstractHasContextsContextFinder`*

This turned out not to be not much helpful compared to a from-scratch implementation, therefore we improved it:

- `findContextsFor(linkable)` was abstract, is implemented now and delegates to `findContextsFor(linkable, currentContext)`, where `currentContext` is null.
- `findContextsFor(linkable, currentContext)` invokes the `isApplicable` check and eventually calls `doFindContextsFor(linkable, currentContext)`, a new abstract method.

So, all you have to do now is to implement `doFindContextsFor(linkable, currentContext)` and `isApplicable(linkable)`. You do not need to care about the invocation of `isApplicable` or about the fallback direction of the `findContextsFor` methods any longer.

If you have subclassed an earlier version of `AbstractHasContextsContextFinder`, it won't compile because of the missing `doFindContextsFor`. In order to adapt it, move your implementation of `findContextsFor(linkable, currentContext)` to `doFindContextsFor(linkable, currentContext)`, and delete any `isApplicable` checks. If your `findContextsFor` methods are independent instead of delegating to one another, you can simply keep them and implement `doFindContextsFor` by throwing an `UnsupportedOperationException`.

The following properties of commerce connections have been changed/added in the Spring configurations:

- "managementToolWebUrl" has been renamed to "vendorUrl"
- "wcsVersion" has been renamed to "vendorVersion"
- the property "vendorName" has been added to commerce connections to identify the vendor of the underlying store. The value is used to differ the store types in the Studio.

(CMS-3569)

## Miscellaneous Changes and Improvements

- For IBM WCS FEP8 B2B Stores it is now possible to configure Personas that preview WCS Contracts. E.g. you can now easily verify the behavior of the Homepage if a contract uses a catalog filter that does not allow certain categories or products. Please refer to the section "B2B Contract Based Preview" in the LiveContext manual for further customization steps. (CMS-3978)

*B2B Contract Preview*

- The products and product variants from an external e-Commerce system can be now opened as tabs in the Studio, directly.

*e-Commerce Products as Studio Tabs*

- 'Open in Tab' is now the default action: When double-clicking on product or variant items in the library or catalog link lists a new tab for the product or the variant is opened.
- The toolbar and context menu of the library and catalog link list now have this new 'Open in Tab' action.
- The tab looks very similar to a document tab but is read-only:
  - It consists of the left-side read-only form and the right-side preview.
  - The left side form provides catalog information of the product or the variant - especially the list of assets associated to the product/variant.
  - The preview shows the product detail page (PDP) in the preview mode.
  - The tab can be dragged and dropped in the same way as the products and variants out the library.

(CMS-3920)

## Fixed Issues

- **CMS-3954: Warn on Move between Sites**

If the user moves content items and this move will change the site of the content items, the user gets a warning.

- **CMS-3943: CookieLeveler**

The CookieLeveler ServletFilter also needs to be enabled for the WCS Preview Webapp, see chapter "Enabling Session Synchronization" in the LiveContext manual.

- **CMS-3859: TransformationMapBuilderTest**

`TransformationMapBuilderTest` is now independent of the configured transformations in `framework/spring/mediatransform.xml` but overrides them using transformations locally defined for the test.

→ **CMS-3811: SiteService causes cache invalidation and CAE Feeder reindexing after rule changes**

The CAE Feeder does not unnecessarily reindex anymore after rights rules have been changed for site indicator documents and their transitive parent folders including the root folder.

→ **CMS-3698: cae-base-component**

`cae-base-component` changes the query for content bean initialization in `component-blueprint-cae.properties` to the recommended setting to ignore deleted contents by adding `isInProduction` to `blueprint.contentbean.initialization.query`.

→ **CMS-3549: Article Richtext text is not floating around embedded images**

Article Richtext text is now floating around embedded images

→ **CMS-3543: jquery.coremedia.responsiveimages.js**

The determination of the best fitting image in the Responsive Image Javascript is not using the largest image as fallback. Instead it will choose the image with the lowest difference to the according container size.

→ **CMS-1908: Publication Priorities**

A new variant of the `publish` method of the Unified API's `PublicationService` allows to start a publication with a defined priority now. Using the property `studio.publicationPriority` in the `application.properties` the publication priority can be configured for publications initiated from CoreMedia Studio.

## 2.2.17 Release 7.5.29

This chapter contains all changes made in Release 7.5.29 of *CoreMedia Digital Experience Platform 8*.

Follow the [CoreMedia DXP 8 Help Center section](#) to receive release and product announcements automatically.

## Modules and Tooling

Release 7.5.29 contains the following CoreMedia modules:

- CoreMedia Blueprint
- CoreMedia CMS

- CoreMedia Studio
- CoreMedia Elastic Social

In addition, *CoreMedia DXP 8* uses the following tooling:

Table 2.17. Tooling of CoreMedia DXP 8

Product	Key	Version
CoreMedia Application Maven Plugin	APPPLUGIN	2.7.9
CoreMedia Project Maven Extension	PROJEXT	1.0.5

## CoreMedia CMS Changes and Improvements

- The Corporate Website Blueprint re-introduces a feature of the previous Media Blueprint and extends it, namely setting a viewType on a placement of a Page Grid. This can be used to facilitate editorial tasks - any item added to a preconfigured placement automatically gets the desired rendering viewType applied.

*Teaser rendering behaviour for Placements and Collections*

Examples on the Homepage:

- The "Hero" placement is set to "Superhero", which automatically renders any added content item as a full-size Superhero teaser.
- The "Placement 1" is set to "Claim", which automatically renders any added content item as Claim teasers.
- The "Placement 3" is set to "Default", so that contained Collections can set their own viewTypes specifically.

The Page Grid can and should be customized as necessary for each respective project.

Any setting on the Placement in a page takes precedence over a setting on a Collection that is inside the placement.

E.g. Placement: viewType="Square", contains Collection viewType="Claim" -> "Square" wins, collection items are rendered as "Square"

Placement: viewType="Default", contains Collection viewType="Claim" -> "Claim" wins, collection items are rendered as "Claim".

Note: In addition, through the Container facade, the same rendering templates also apply to Collections that are often used to define layout-specific rendering of teasers.

Note: In the current Corporate Website Blueprint release it is not possible to set viewTypes directly on Teasers or other single content items. This can be achieved by creating additional viewType templates. Technically, the "Container" Facade only applies to lists of items, not to single items. (CMS-3704)

→ The Corporate Website Blueprint adds Long-Scrolling-Pages.

Such pages usually have visual dividers to highlight different content sections - also called "Gaps" - that can have a parallax scrolling effect, i.e. the picture inside the gap scrolls slower than the remainder of the page around it.

To configure gaps in the content, technical editors can add local settings.

Page: For a page, the localStruct String List "placementsWithFirstItemAsHeader" is used. For each configured placement, the first item is rendered as the gap.

E.g. on the Corporate Homepage, "placement2" containing the "For Professionals" section is configured and the first item "Professionals Page" is not rendered as a regular teaser, but as a gap.

Collection: For collections, the localStruct Boolean "firstItemAsHeader" is used.

E.g. in Placement 2 on the Homepage, the first item is "For Consumers Collection" (Square). This collection has a settings document linked that sets the "firstItemAsHeader" to true. (CMS-3703)

→ Some specific CSS settings may only apply to the internal Studio preview and it is not desirable to expose them on the public website.

A separate internal-use only Preview.css is added (CMS-3690)

→ In order to avoid duplication of layout templates for both Page Placements and Collections, a joint View Type Lookup is implemented via interface `com.coremedia.blueprint.common.layout.Container`. Just create a `CMViewtype` in `Options/Viewtypes/CMChannel/` for your Layout Variant and it will be available for both Placements and Collections. (CMS-3689)

→ Each content item can now have a specific text editorially configured for the HTML Meta Tag **Description** via Studio.

Note: For articles that are embedded directly on a page in Detail view, the HTML Description of the CMChannel is used, not the one of the CMArticle. For articles that are rendered in Detail view as "leaf" content in the context of another page, the HTML Description of the CMArticle is used. (CMS-3687)

*The Corporate Website Blueprint adds Long-Scrolling-Pages with "Gap" dividers.*

*Preview.css for Studio preview only*

*CAE, Studio - Collection View Type Lookup*

*Editable HTML Description Meta Tag*

- For each teasable content item, the editorial user can set a specific "Call-To-Action" (CTA) text that is displayed as a linked button. The default text for the CTA is pre-configured per document type in the language Bundle document (e.g. Learn More for Articles). Users can override the default text or suppress the CTA button completely for each teaser.

*Configurable Call-To-Action Text for Teasers*

The Studio forms for `CMTeasable` are extended for the Corporate Website Blueprint to handle the CTA text. The CTA configuration is stored in the "localSettings" struct property with the following settings:

- `callToActionCustomText` (String)
- `callToActionDisabled` (Boolean)

(CMS-3686)

- The Breadcrumb display can be configured to omit first and last elements. E.g. a site may want to suppress "Home" as a first breadcrumb element. Or the title display of "leaf content", i.e. articles or other content items rendered in detail view, is not desired due to length and design.

*Breadcrumb display can be configured to omit first and last element*

`/Settings/Options/Bundles/Corporate_en`

- `breadcrumbHideRootElement` (boolean)
- `breadcrumbHideLastElement` (boolean)

(CMS-3685)

- A site-specific Footer text for the company name can be set by a technical editor via a Struct Setting. E.g. "Chef Corp."

*Site-specific Footer text for the company name can be configured*

`/Settings/Options/Bundles/Corporate_en`

- `footer_text` (String)

(CMS-3684)

- Automatic shortening of too long Teaser Texts can be set by a technical editor for each new teaser type with a site-specific Struct Setting.

*Automatic shortening of too long Teaser Texts can be configured.*

`Options/Settings/CAEConfig`

- `teaser.max.length` (Integer) - as in CM8
- `text.max.length` (Integer)
- `claim.max.length` (Integer)
- `hero.max.length` (Integer)
- `superhero.max.length` (Integer)
- `square.max.length` (Integer)

If the settings are not present, default values defined in templates will be used.

(CMS-3683)

- A site-specific HTML Title Suffix can be set by a technical editor via a Struct Setting.

E.g. all page titles get appended " | Chef Corp.", and pages inside the Press Release page structure get appended " | News | Chef Corp."

```
/Settings/Options/Bundles/Corporate_en
```

- `customTitleSuffixText` (String)

(CMS-3682)

- The Corporate Website Blueprint provides a modern, appealing, highly visual website template that can be copied to start a customization project. In CoreMedia 8 and LiveContext it demonstrates the capability to build localizable, multi-national, non-commerce web sites.

Built on a fully responsive, mobile-first design paradigm, the Corporate Website Blueprint leverages the Twitter Bootstrap Grid and Design framework for easy customization and adaptation by frontend developers.

It scales from Mobile via Tablet to Desktop viewport sizes and uses the CoreMedia Adaptive and Responsive Image Framework to dynamically deliver the right image sizes in the right aspect ratios and crops.

The responsive navigation visualizes 3 levels, even though the navigation structure can be arbitrary deeply nested. The floating header and the footer can be configured and re-ordered in content settings. Navigation nodes with URLs to external sites can be added via content.

Four new site-specific page types with placements are introduced:

- Corporate Homepage: A long-scroller page with a "Super Hero" full screen teaser module at the top and visual "gap" headings that span the screen width. Several default placements explain how layout settings can be done either directly on a placement or on a collection.

- Corporate Hero Page:

A secondary navigation page with a large, emotional header image that spans the content width and several placements.

- Corporate Detail Page:

A simple, standard page with header, footer, main as well as above-main and below-main placements.

- Corporate Detail Page with Sidebar:

*Configurable HTML Title Suffix*

*The Corporate Website Blueprint provides a modern, appealing, highly visual website template that can be copied to start a customization project. In CoreMedia 8 and LiveContext it demonstrates the capability to build non-commerce web sites.*



A variant of the Detail Page that displays a sidebar in a second column (desktop) or below the main placement (tablet, mobile). Useful for sections of a website with contact person teasers that can be inherited to detail article pages.

To facilitate editorial use-cases for Corporate casual users, a simplified page-centric editing model is supported via configuration:

- All centralized assets are stored in the "Assets" folder.
- Both Navigation (Pages) and Content are stored in the same repository folder structure that resembles the actual navigation structure of the site.
- The "Create page from Template" feature enables users to quickly create pages of the above layout variants. The new page is added to the navigation parent and add a new default article and image is cloned that can be replaced right-clicking in the preview and by directly uploading a new image and pasting text from Word.
- Pages are now directly "teasable" and can be added as teasers to placement without the creation of a Teaser placeholder document.
- Any teaser can have a freely editable "Call-to-Action" button.

Articles support:

- Richtext with embedded images
- In-page carousel for multiple images with full-screen lightbox view
- Related content teasers
- Sidebar (when defined in embedding page)
- Configurable "Externally Visible Date" that remains unmodified upon re-publication

New teaser types are added:

- Superhero: A large full-screen image, text and call-to-action button
- Hero: A content-width spanning image, with text and call-to-action button
- Default: Alternating left/right teaser module
- Carousel: touch-enabled carousel of teasers
- Square: Square image teaser module
- Claim / Claim (Circle): A row with of three thumbnails and teaser texts, with optional round image CSS effect

- Media List: cf. Twitter Bootstrap style
- Text: a text only teaser, e.g. for press releases
- Detail: showing the actual content of an item, e.g. to place a full article into a page

Note: CMTeasable.ftl is the teaser template that will always be used as a fallback for any document type that has no specific override.

Multi-Language/Multi-Site features:

- Demo Content in both English and German
- Language chooser in frontend that allows direct switching between language variations of the same content item
- all Studio translation, workflow and multi-site functionality is supported

SEO and conversion optimization:

- Call-To-Action Buttons
- Editable HTML Description Text
- Editable HTML Title Suffix (e.g. " | Chef Corp.")
- Sitemap in both HTML and XML

Dynamic Content features:

- News and news list based on search-based lists
- Events and events list based on search-based lists

3rd Party Integrations:

- Google Universal Analytics integration with optimization feedback loop
- Optimizely Integration for A/B-Testing
- full support for embedding dynamic 3rd party HTML/Javascript modules with examples
  - SurveyMonkey, Google Calendar, Google Forms, Pinterest, Twitter

Other (developer) features:

- General: Twitter Bootstrap is used as the layout foundation
- General: All frontend code is based on Freemarker templates

- General: CSS is built using the Sass and Grunt frameworks
- General: A simple Print.css is supplied
- General: Design and HTML were tested and optimized for Accessibility
- Studio: Configurable repository folder structure for Create dialogs
- Studio: Site-specific property dialogs to enable/disable certain form elements
- CAE: Shared template sets for teaser layout on both Placements and Collections via "Container" facade
- CAE: Specific Preview.css for Studio preview only

(CMS-3676)

- Apache Solr has been updated to version 4.10.4.  
(CMS-3628)

*Solr update*

- **Deprecated** method `com.coremedia.cap.feeder.MutableFeedable#setPartialUpdate`.  
(CMS-3388)

- The Content Feeder can use partial updates now when feeding changed document metadata into Solr. It does not need to send the whole document data to Solr anymore but only a small set of changed metadata, if only document metadata has changed. Partial updates improve the feeding performance, especially if lots of documents are affected and expensive operations such as parsing text from PDF binaries can be avoided.

*Content Feeder Partial Update Support*

Partial updates require that all index fields are defined as `stored="true"` in the Solr schema.xml, except for fields that are `copyField` destinations, which must be defined as `stored="false"`. The default `schema.xml` for the Content Feeder in `solr-home/configsets/content/conf` is already prepared for partial updates since the first release of CoreMedia 8. If you've added custom fields, you should make sure that they are stored as well to be able to use partial updates. The Content Feeder will log a warning and not use partial updates, if you've customized the `schema.xml` in a way that is incompatible with partial updates. In such a case, the Content Feeder will use the old behaviour and send updates with the full document data to Solr. You can also turn off partial updates in general with the Content Feeder's Spring property `solr.partialUpdates=false`, however this is not recommended.

By default, the Content Feeder uses partial updates only for document metadata that wasn't indexed in earlier releases, for example a document's translation state. While it makes sense to use partial updates for other aspects as well (for example to update a document's path after a parent folder has been moved), we did not activate this by default to avoid possible incompat-

ibilities with your Content Feeder customizations. You can activate partial updates for all metadata aspects without further changes, if you don't have any custom `FeedablePopulator` implementations added to your Content Feeder and if you haven't customized the `<updateRequestProcessorChain>` definition in file `solr-home/configsets/content/conf/solrconfig.xml`. To activate partial updates for all metadata aspects, set the Content Feeder's Spring property `feeder.partialUpdate.aspects=*`.

If you have custom `FeedablePopulator` implementations for the Content Feeder, you should check whether these `FeedablePopulators` should be invoked for full document updates, for partial updates with metadata changes or both. `FeedablePopulator` instances registered at property `feedablePopulators` of Spring bean `index` are called when a document gets added or updated and the whole document data is sent to the search engine. If the custom `FeedablePopulator` needs to be invoked for partial updates, then it must be registered at property `partialUpdateFeedablePopulators`. A `FeedablePopulator` can check whether it is processing a partial update by invoking `Feedable#isPartialUpdate()` and get the updated aspects with `Feedable2#getUpdatedAspects()`.

If you have customized the `<updateRequestProcessorChain>` definition in `solrconfig.xml`, then you might need to adapt it for partial updates as well, before activating partial updates for all metadata aspects. An additional update request processor chain with `name="partialUpdateChain"` has been added in the file `solrconfig.xml`, which is invoked in case of partial updates instead of the default chain. If you've added custom steps to the existing chain, you need to decide whether these steps should also be invoked in case of partial updates and possibly add them to the `partialUpdateChain`.

(CMS-462)

## CoreMedia Studio Changes and Improvements

- `ARemoteBean` returns `true` from the `isLoading()` method if its properties have been from the server at least once. Contrary to the earlier implementation, it continues to return `true` after it has been invalidated and before it has been reloaded.  
(CMS-3736)
- The external link dialog in the studio's richtext editor has been modified to allow arbitrary URL schemes. Only if no URL scheme at all is given (and the link is not just a fragment part for linking within one page), an `http://` or `mailto:` scheme is prepended automatically.  
(CMS-3731)
- For compatibility reasons, the Studio used to expose struct properties as Blobs, in addition to the typed Struct format. This feature has now been

*Remote Bean Lifecycle*

*Studio richtext allows all external URL schemes*

*Struct as Blob*

disabled for performance reasons. If you are still using the blueprint's struct-editor-studio-plugin (superseded by the StructPropertyField), or for some other reason still need to access the XML source of some structs as a Blob, it can be selectively reactivated by listing the required property names in the application property studio.structAsBlobPropertyNames as a comma-separated list.

(CMS-3708)

- Not all Sites uses the "Editorial" and "Navigation" Path to separate their contents. These Folders can now be configured for each site independently. For example in the Corporate Blueprint, both paths are set to "Content".

Name of the CMSSettings Document is:

```
SITE_ROOT_FOLDER/Options/Settings/Content Creation
```

This settings document contains a StructProperty named "paths". Within this struct, there are two LinkProperty called "editorial" and "navigation", where you can link folders. The same folder can be used for both properties.

If no folders are configured, the fallback is the already known behaviour of using the folders "Editorial" and "Navigation".

The configurable editorial path is also used for the "Upload Content" feature in addition to the default.

(CMS-3681)

- With the SiteAwareVisibilityPlugin, you can show or hide document form elements (e.g. property field editors) depending of the activation of a "feature" for a specific site.

The SiteAwareVisibilityPlugin takes a parameter called "feature", which is the name of the feature. You can group two or more plugins by giving them the same feature name.

If you bound this plugin to an ExtJS Component, this component is only visible, if this feature is configured for the site of the content to edit.

By default, the configuration for features of a site is done in a CMSSettings document, which should be named

```
SITE_ROOT_FOLDER/Options/Settings/Studio Features
```

This settings consists of a StringList named "features" and contains the string values, you give your SiteAwareVisibilityPlugin

Example Usage: This Plugin is used in the demo content for the new Corporate Website Blueprint to hide the property editors for the "Call-To-Action-Button" and "Externally Displayed Date" in the Perfect Chef site, as these

*Site Specific Configuration for Editorial and Navigation Folders of Create From Template Dialog*

*Site Specific Visibility of Document Form Elements*

properties are not used in these templates, but are only used in the new Corporate Website Blueprint for now.  
(CMS-3680)

- The newly introduced `StudioConfigurationUtil` handles studio configurations made via `CMSettings`.

*Introduction of StudioConfigurationUtil*

`StudioConfigurationUtil` looks for bundles at `SITE_ROOT_FOLDER/Options/Settings` and as fallback at `/Settings/Options/Settings` if no site specific configuration is found. Bundles can be any path to a `CMSettings` Content below the base paths.

You can provide a `context` to determine the site to search in. This can either be a `Content` or a `Site`. If a `Content` is provided, the site where the content is part of, is taken. If no `context` is provided, the users preferred site is used.

This util is function value expression aware and is dependency tracked.

The `StudioConfigurationUtil` is part of Blueprint, so it can be customized for custom paths and doctypes.  
(CMS-3678)

- No issue will be generated anymore for a derived document when its master document has been updated.

**`com.coremedia.rest.cap.validators.MasterVersionUpdatedValidator`** The following methods have been removed:

- `setExcludedProperties(List<String> excludedProperties)`
- `setExtractor(OutdatedPropertiesExtractor extractor)`

**`com.coremedia.translate`** The package `com.coremedia.translate` has been removed from the Public API including the following classes:

- `com.coremedia.translate.OutdatedPropertiesExtractor`
- `com.coremedia.translate.TranslatablePredicate`

(CMS-3633)

- Local site managers such as Piet or Pierre are now able to initiate a translation to their preferred site, so they can retrieve updates from the master site to the local site they are administrating.

*Local Site Manager can Start Translation*

You will notice a new icon in the library which is active once you have selected contents of the master site. Clicking on it will start a new translation task and directly assign it to yourself. The translation task will directly open in the Control Room so that you are able to start the translation process right away.

As alternative to initiate the translation process via button you can as usual start the translation process by dragging the master contents from the library into the translation panel of the control room.

### Changes to Groups:

`translation-manager-role:both global-site-manager` and `local-site-manager` are now members of the `translation-manager-role` and as a consequence are able to trigger translation workflows.

### Changes to Workflows:

To enable the new behavior you have to upload the workflow `translation.xml` again. Existing translation workflows will behave just as before the upgrade.

- Translation workflow has been extended with a new variable `autoSelfAssigned` which defaults to `false`. If set the translation task will be automatically and exclusively assigned to the initiator of the workflow.
- Translation workflow contains a new task `TranslateSelf` as a copy of the original `Translate` task with the difference, that `autoAccepted` is set to `true`.

### Changes in Studio:

`ControlRoomStudioPlugin.exml` has been extended with configuration for the auto accepted workflow task (compare to task `Translate`):

```
<collab:workflowStateTransition
  task="TranslateSelf"
  nextSteps="{['sendToTranslationService',
'rollbackTranslation', 'finishTranslation']}">
```

`BlueprintProcessDefinitions` resource bundle has been extended by an additional entry:

- `en: Translation_task_TranslateSelf_text=Translate`
- `de: Translation_task_TranslateSelf_text=Übersetzen`  
(CMS-3601)
- **Allow selection of library columns** The library lists in browse- and search-mode do now offer header menus for most of the displayed columns. The menus provide functionality to manage the visibility of individual library columns.

*Allow selection of library columns*

### Changes

- All columns in the library lists are now hideable by default. Set the `hideable` configuration parameter if you want to override this setting.
- All columns in the library do now show a header menu by default. Set the `menuDisabled` configuration parameter if you want to override this setting.
- The library list in browse mode does now include an optional 'Last modified' column. The column is hidden by default but it can be activated via the header menu.

(CMS-3579)

- You can now add content to My Edited Content panel by drag and drop.  
(CMS-3523)

*Drag and Drop to My Edited Content*

## CoreMedia Blueprint Changes and Improvements

- When the maven profile `websphere` is activated, it now creates a second war file for each webapp using the `websphere` plugin adjustments. The second war file is using `websphere` as the maven classifier. The filename of the war will be `{{${project.build.finalName}-websphere.war}}`.  
(CMS-3849)
- To build the new Corporate Blueprint themes, Maven 3.1 is required and is set to prerequisites in root POM. Add `-DskipThemes` to skip building of the Corporate Theme.  
(CMS-3814)
- The following transitive cookbook dependencies were updated as a result of changing the version locking from strict to pessimistic. Many of them are unused but listed here for completeness:

*websphere profile now creates a classified second war file*

*Update Blueprint Maven prerequisites*

*Cookbook updates*

```
apt (2.6.0) -> apt (2.7.0) (unused)
packagecloud (0.0.19) (unused)
runit (1.5.10) -> runit (1.7.2) (unused)
windows (1.34.8) -> windows (1.37.0) (transitive
dependency)
yum (3.3.2) - yum (3.6.1)
yum-centos (0.3.0) -> yum-centos (0.4.5)
yum-epel (0.5.3) -> yum-epel (0.6.2)
yum-mysql-community (0.1.16) ->
yum-mysql-community (0.1.17)
```

(CMS-3745)



- `CMChannel` becomes a `CMTeasable` with teaser title, teaser text and teaser image as well as optional Call-To-Action text.

`CMLinkable` gets a new date property called `extDisplayedDate` which means externally displayed date.

The editor can set this date manually as editorial date.

`CMLinkable#getExternallyDisplayedDate()` will return this date if set, or returns the last modification date of the content, if externally displayed date is not set. On the live site, the default will be the publication date, which is the last modification date.

(CMS-3677)

- Up to now the demo content of each site was packaged in a separate zip-archive. From now on all sites will be packaged in one zip-archive.

(CMS-3666)

- Changed the default value for the `SITE_MANAGER_CLEAR_TEXT_PORTS` configuration token to `41683, 43683` to match the default Content Management Server and Workflow Server CORBA ports.

(CMS-3596)

- The `SettingsService` has been enhanced with a new method "nestedSetting", which allows the lookup of hierarchical struct properties with a single call.

(CMS-3550)

- The `coremedia-enforcer-rules` have been updated to 1.1.1. The update allows to configure the `groupId` that identifies sibling projects. By default a sibling project has the same `groupId` as the current project. If however you have sibling projects with a different `groupId`, you now can define a regular expression to identify those modules.

If for example you want to add `com.coremedia.blueprint.myproject` and sub `groupIds` as sibling projects, you need to configure the enforcer rule as follows:

```
<execution>
  <id>enforce-onerepo-rules</id>
  <goals>
    <goal>enforce</goal>
  </goals>
  <phase>validate</phase>
  <configuration>
    <rules>
      <myCustomRule
implementation="com.coremedia.maven.enforcer.OneRepoEnforcerRule">

<siblingGroupIds>com\coremedia\blueprint.myproject.*</siblingGroupIds>
```

*Changes in Blueprint Document Types for Corporate Website Blueprint*

*Unified assembly of demo content*

*CORBA SSL Ports*

*SettingsService*

*Update coremedia-enforcer-rules*

```

        </myCustomRule>
    </rules>
</configuration>
</execution>
    
```

(CMS-3428)

- The FragmentParameters can now be accessed within Freemarker Templates (FTL) via

`${CM_FRAGMENT_CONTEXT.parameters.<XXX>}`

for example: `${CM_FRAGMENT_CONTEXT.parameters.view}`

(CMS-3324)

*FragmentParameters in FTL*

## CoreMedia Elastic Social Changes and Improvements

- You can use the Spring Order annotation or the Spring Ordered interface to prioritize search index customizers. Customizers with a higher priority can now change the results of customizers with a lower priority. (CMS-3538)

*Elastic Core SearchIndexCustomizers can now be prioritized*

## Miscellaneous Changes and Improvements

- This LiveContext release is a beta release. It is not recommended for production use. It is based on 7.5.28 and adds some additional features which are not yet final. (CMS-3946)
- Dynamic price rendering (e.g. personalized prices by cart/shopping value or shopping behavior) is now also disabled on CMS side by default. If this feature is not used on IBM WebSphere Commerce side then it is not necessary to turn it on on CMS side. It saves an additional call to IBM WebSphere Commerce that is not needed in such a scenario. See Live Context documentation for details. (CMS-3695)
- The config.id parameter for Live Context store configuration in the root channel's settings is not mandatory anymore. (CMS-3694)
- HTML Meta Keywords are not rendered in the HTML <head> anymore, as popular Search engines stopped using them a while ago.

*Beta Release*

*Dynamic price rendering*

*HTML Keywords Meta Tag removed*

In Studio, the HTML Meta Keywords field is removed inside "Metadata > Search Engine Optimization" and gets moved to a separate panel in Studio as "Metadata > Keywords", default is collapsed.

The Keywords field can still be used for CoreMedia Adaptive Personalization or to add keywords for internal search purposes that are not display on the external website.  
(CMS-3688)

- The modules `lc-ecommerce-api` and `lc-ecommerce-base` have been removed from Blueprint Livecontext extension and are no longer available as source code. The Maven coordinates are: For the `lc-ecommerce-api` module: `com.coremedia.livecontext:lc-ecommerce-api:7.5.x` For the `lc-ecommerce-base` module which has been renamed to `bpbase-lc-common`: `com.coremedia.blueprint.base:bpbase-lc-common:7.5.x`

*Livecontext API and base modules removed from Blueprint extension*

The classes in the old module `lc-ecommerce-base` have been moved to another base package `com.coremedia.blueprint.base.livecontext`. This change affects several classes in Blueprint.  
(CMS-3636)

- If `capListRepository`, `worklistService` or `workflowRepository` are not configured in `CapConnection`, you might get NPEs later on, for example, in CoreMedia Studio. To prevent this, `repository.assertNonNullBeans` was introduced. If this property is set to "true" (default) in the applications `application.properties` file, the application will not start and you will get an exception.  
(CMS-3518)

*New property repository.assertNonNullBeans*

## Fixed Issues

- **CMS-3727: Avoid some unnecessary blob downloads**

The blueprint's `TransformationMapBuilder` has been optimized to only parse image dimensions from binary blobs when actually required, to avoid unnecessary blob downloads to the CAE if the `CMPicture` document already contains all required crop information. This is beneficial for clustered CAE setups with external web caches.

- **CMS-3706: Studio Server Synchronization**

Performance of the "synchronize with server" operation in the studio has been improved, by not checking and reloading content that is no longer in use by the studio. This is especially noticeable during longer editing sessions.

- **CMS-3592: Added module `lc-ecommerce-webapp-component`**

The module `lc-ecommerce-webapp-component` contains webapp configuration shared by all Livecontext webapps.

- **CMS-3575: NPE in `XmplImageMetadataExtractor`**

Possible NPE in `XmplImageMetadataExtractor`

→ **CMS-3503: Supplementary Characters in XML**

A workaround for the Java bug JDK-8058175 was added. The bug would corrupt XML files during parsing if they contain supplementary characters (Unicode code points 0x10000 and up). For the workaround, the class `com.coremedia.xml.FullUnicodeInputSource` has been provided as a drop-in replacement of the standard SAX `InputSource`. You can use this class if you parse XML in your own code. The `MarkupFactory` uses the workaround implicitly.

→ **CMS-3451: P13N SearchValidator now searches for a certain data-tribute instead of a global js variable**

Instead of searching for a global JavaScript variable named `"com_coremedia_personalization_editorplugin_searchstatus"` the `SearchValidator` now expects a data attribute named `"data-personalization-editorplugin-searchstatus"` attached to a DOM element when rendering the studio preview for `CMP13NSearch`.

→ **CMS-3419: Character set utf8mb4 for MySQL**

For correct operation in the presence of 4-byte unicode characters (e.g. emoji), any MySQL database used by the CoreMedia CMS must use the `utf8mb4` character set instead of `utf8`. A Content Server will update its MySQL database schema automatically when started in a new version for the first time. This might take a significant amount of time as the database tables are migrated. Please plan the migration procedures accordingly.

Besides updating the tables, the database default encoding is also set to `utf8mb4` automatically during the schema update and during the schema creation in an empty database. Any system default is ignored. No manual intervention is required, but the database user for the Content Servers must be granted the necessary rights to perform the encoding changes.

Besides setting the character set to `utf8mb4`, the collation is set to `utf8mb4_bin`, making sure that the Content Server distinguishes upper case and lower case for names. If the database had been configured with a case-insensitive collation, the Content Server might have erroneously retrieved the wrong users and groups when searching by name.

At least version 5.1.35 of the MySQL Connector/J is recommended now.

→ **CMS-3413: XSS vulnerability**

Validation messages are properly escaped when shown in a tooltip of a property field with validation issues now, avoiding possible XSS attacks through validation message parameters.

→ **CMS-3410: Combo Boxes**

In various places in Studio, combo box values were escaped in order to prevent XSS attacks. However, this caused the value to be displayed incorrectly when shown as the selected value in the text field of the combo box. This has been fixed for built-in combo boxes.

For custom combo boxes, you should not encode the value field of the combo box store, but use a custom template for the drop-down menu that properly escapes the values. For this purpose, the `localComboBox` component provides the `encodeItems` option, which replaces the standard template by a safe template.

→ **CMS-3364: Asset Management Product Linklist does not show dropzone when having entries**

The Asset Management Product Linklist should also show a dropzone when there are already entries in the list, not only when empty.

→ **CMS-3307: LiveContext: Validity time constraint on pages is inconsistent**

Blueprint Validation Service constraints on pages now also filters fragment calls in LiveContext e-Commerce-led scenario if not valid (e.g. if only valid from tomorrow on)

→ **CMS-2848: LC2, augmentation scenario: When resolving a placement, adapt the cmpage to reflect the placement's context**

In augmentation scenario the `cmpage` reflects the placement's context when resolving a placement

→ **CMS-981: Web Resources Importer**

The Web Resources Importer imports all files in the inbox directories now, esp. images which are not referenced from css files. This makes the resources available for usage in templates. As a drawback, you have to keep your inbox clean now, or the content repository will be cluttered with useless resources. If you do not like this change, you can simply preserve your existing `css-import.properties`, and the importer will behave as before.

## 2.2.18 Release 7.5.28

This chapter contains all changes made in Release 7.5.28 of *CoreMedia Digital Experience Platform 8*.

Follow the [CoreMedia DXP 8 Help Center section](#) to receive release and product announcements automatically.

## Modules and Tooling

Release 7.5.28 contains the following CoreMedia modules:

- CoreMedia Blueprint
- CoreMedia CMS
- CoreMedia Studio
- CoreMedia Elastic Social

In addition, *CoreMedia DXP 8* uses the following tooling:

Product	Key	Version
CoreMedia Application Maven Plugin	APPPLUGIN	2.7.9
CoreMedia Project Maven Extension	PROJEXT	1.0.5

Table 2.18. Tooling of CoreMedia DXP 8

## Miscellaneous Changes and Improvements

- Fragment Calls now optionally support resolution of stable IDs. E.g. using the Product Code instead of the database ID. Activate this feature by setting `setUseStableIds(true)` in either `ProductFragmentContextStrategy` or `CategoryFragmentContextStrategy` (e.g. via Spring Customizer) (CMS-3247)
- Increased default cache sizes for LiveContext e-Commerce objects and introduced `livecontext-cache.properties` for easier cache size adaption. See Commerce Cache Configuration chapter in LiveContext manual for details. (CMS-3203)

*LiveContext Caching*

## Fixed Issues

- **CMS-3716: BLOB Cache Directories**  
 The `delivery` and `studio` recipes of the `coremedia` cookbook have been changes to create the directories configured by the `DELIVERY_UAPI_BLOB_CACHEPATH`, `STUDIO_PREVIEW_UAPI_BLOBCACHEPATH` and `STUDIO_UAPI_BLOBCACHEPATH` tokens.
- **CMS-3332: LiveContext: The fragmentHandlers order is incorrect: ExternalRef resolver must precede category and product handlers**  
 The `FragmentHandlers` order is changed so that the `ExternalRef` resolver precedes category and product handlers

## 2.2.19 Release 7.5.27

This chapter contains all changes made in Release 7.5.27 of *CoreMedia Digital Experience Platform 8*.

Follow the [CoreMedia DXP 8 Help Center section](#) to receive release and product announcements automatically.

### Modules and Tooling

Release 7.5.27 contains the following CoreMedia modules:

- CoreMedia Blueprint
- CoreMedia CMS
- CoreMedia Studio
- CoreMedia Elastic Social

In addition, *CoreMedia DXP 8* uses the following tooling:

Table 2.19. Tooling of CoreMedia DXP 8

Product	Key	Version
CoreMedia Application Maven Plugin	APPPLUGIN	2.7.9
CoreMedia Project Maven Extension	PROJEXT	1.0.5

### Miscellaneous Changes and Improvements

- This LiveContext release is a beta release. It is not recommended for production use. It is based on 7.5.26 and adds some additional features which are not yet final. (CMS-3547)

*Beta Release*

### Fixed Issues

## 2.2.20 Release 7.5.26

This chapter contains all changes made in Release 7.5.26 of *CoreMedia Digital Experience Platform 8*.

Follow the [CoreMedia DXP 8 Help Center section](#) to receive release and product announcements automatically.

## Modules and Tooling

Release 7.5.26 contains the following CoreMedia modules:

- CoreMedia Blueprint
- CoreMedia CMS
- CoreMedia Studio
- CoreMedia Elastic Social

In addition, *CoreMedia DXP 8* uses the following tooling:

Product	Key	Version
CoreMedia Application Maven Plugin	APPPLUGIN	2.7.9
CoreMedia Project Maven Extension	PROJEXT	1.0.5

Table 2.20. Tooling of CoreMedia DXP 8

## CoreMedia CMS Changes and Improvements

- The Freemarker Library was updated to patch version 2.3.22.

Also, the Freemarker Configuration is now initialized with the "incompatible\_improvements" Flag set to "2.3.22" (was "2.3.20") since some of the bug fixes and performance improvements are only used when updating the version for this flag. While this change did not cause any problems with the sites contained in the Blueprint, it may cause problems with custom templates, so this version is now configurable using the Spring Property "freemarker.incompatible\_improvements". (CMS-2843)

- It's now possible to run the `defaultFlowRunner` directly which will re-throw Exceptions thrown by `org.springframework.webflow.mvc.servlet.FlowHandlerAdapter` in order to implement behaviour relying on specific exceptions. `exceptionHandlingFlowRunner` will use `defaultFlowRunner` and catch all Exceptions, just like the now deprecated "flowRunner" bean did. (see `webflow-services.xml`) (CMS-2433)

Update Freemarker Library to 2.3.22

## CoreMedia Studio Changes and Improvements

- The studio library's performance when opening very large folders has been improved. Loading a document contained in the folder from the content

large folders



server to the studio backend is now delayed until the document's properties are first accessed.

(CMS-3275)

## CoreMedia Blueprint Changes and Improvements

- The Blueprint Maven site generation and deployment is skipped by default because the Blueprint does not contain any site content.

*Blueprint Maven site*

(CMS-3372)

- Additional `CMCSS` and `CMJavaScript` can be added to sites for Preview only. In order to use the feature add `CMCSS to Link List` setting "`previewCss`" or `CMJavaScript to Link-List` setting "`previewCss`" of a channel.

*CMCSS and CMJavaScript for Preview*

(CMS-3368)

## Miscellaneous Changes and Improvements

- LiveContext for IBM WebSphere Commerce is successfully tested against IBM APAR JR52306 - Mandatory cumulative interim fix for WebSphere Commerce Version 7 Fix Pack 8/9

*IBM APAR JR52306*

(CMS-3508)

- The LiveContext implementation for IBM WCS now uses the REST handlers of the IBM Commerce Search Servers to retrieve category and product information by default when FEP7+ is used. This speeds up initial loading and re-loading of product and category data in case of cache misses. A list of the URLs used can be found in the CoreMedia LiveContext 2.0 for IBM WebSphere Commerce manual.

*LiveContext now uses IBM Commerce Search Rest Handler for FEP7+*

(CMS-3404)

## Fixed Issues

- **CMS-3467: Timetravel in Studio now correctly sends selected timezone to IBM Commerce and in Fragment Requests**

The Timetravel functionality in Studio allows users to set a date, a time and a timezone. The LiveContext extensions now correctly sends the selected timezone to IBM Commerce in the PreviewToken REST requests and thus ensures that IBM Commerce uses the correct time. Additionally, the preview date/time is now correctly send back in fragment requests from IBM Commerce to CoreMedia CAE. Nevertheless, in cases where the Studio user selects a different timezone than the timezone of the IBM Commerce server, the user must take care of calculating the correct offset for previewing IBM Commerce data. Especially Marketing Web Activities that use date/time as constraint, only rely on the IBM-server timezone. E.g. in Demo Cloud the timezone is UTC (GMT+0) without Daylight Saving Time (DST). Thus when using timezone 8pm Europe/Berlin in Studio, the actual IBM Commerce time

is 6pm (during summertime with DST). Unfortunately, IBM does not offer different timezones to be used in Web Activities.

→ **CMS-3377: Asset Management Extension now uses Blueprint Validation-Service**

The Asset Management Extension now filters pictures according to the Blueprint ValidationService. Example: a Picture with a future validFrom date is filtered out until it is valid. If no valid picture is found for a concrete SKU (e.g. Mickey Mouse Shirt in XL white), the fallback is to get valid pictures for the "main" product (e.g. Mickey Mouse Shirt). If the "main" product does not have any valid pictures, the "missing product picture" is shown.

→ **CMS-3361: Timetravel for eSpots commerce-led not working**

Timetravel for eSpots in commerce-led scenarios now also work if the CMS renders the eSpot in a fragment. The timetravel datetime is now correctly passed from CMS to WCS and back to CMS in the fragment request.

→ **CMS-3348: Adjusted minimum system requirements documentation**

Documentation of the minimum system requirements for a development setup were increased to realistic values

→ **CMS-3316: Exit codes of XML Importer**

If you use an XML importer in automated setup scripts, you might like to get a useful exit code rather than scanning the logfile for errors and warnings. However, the importer API did not enable custom Transformers and MultiResultGenerators to control the exit code in case of recoverable errors so far. Now the AbstractTransformer (existing class) and the AbstractMultiResultGenerator (new class, recommended to be used as base class for custom MultiResultGenerators) provide methods suggestExitCode for this usecase. For details see the API documentation of the methods. Why do we speak of "suggest"? There is only one exit, so if the methods are invoked multiple times, only one suggestion can win. Moreover, in case of severe errors, the importer still sets its own error exit code.

→ **CMS-3180: CAE Feeder recovers from database connection failures**

The *CAE Feeder* and the *Proactive Engine* are now able to recover from database connection problems. If the connection to the database has been lost, they will keep retrying database calls until the connection has been restored.

→ **CMS-3141: Added var parameter of lc:include tag to documentation**

The LiveContext manual now contains a description of the var parameter of the lc:include tag.

→ **CMS-3124: FragmentConnector uses Live CAE if preview is launched from Management Center**

CoreMedia FragmentConnector now correctly uses Preview CAE when launching store preview from IBM WebSphere Commerce Management Center.

→ **CMS-2842: Using JSP Taglibs in Freemarker does not work out-of-the-box in Servlet 3.0 webapps**

After updating to Freemarker 2.3.22, it is now possible to import TLD files placed under servlet 3.0 paths. To activate this new behaviour, a system property must be set. See [Freemarker Documentation](#) for details. It is still recommended to re-implement JSP taglibs as Freemarker Functions / Macros instead of reusing JSP Taglibs.

→ **CMS-2707: Studio Library Toolbar: File Upload**

If a user has no right to upload content in the selected folder, the upload file button in the library toolbar is disabled. For uploading content to a manually entered folder path you can still use *Upload Files* entry in the *Create Content* menu.

→ **CMS-1102: IE: Richtext Context Menu rendered at wrong position when scrolled**

In a RichText field, Studio shows context menus for images and links. When using Internet Explorer and the RichText content has been scrolled, the context menu appeared at a wrong position. Now, the scroll offset is also taken into account in IE.

## 2.2.21 Release 7.5.25

This chapter contains all changes made in Release 7.5.25 of *CoreMedia Digital Experience Platform 8*.

Follow the [CoreMedia DXP 8 Help Center section](#) to receive release and product announcements automatically.

### Modules and Tooling

Release 7.5.25 contains the following CoreMedia modules:

- CoreMedia Blueprint
- CoreMedia CMS
- CoreMedia Studio
- CoreMedia Elastic Social

In addition, *CoreMedia DXP 8* uses the following tooling:

Product	Key	Version
CoreMedia Application Maven Plugin	APPPLUGIN	2.7.9
CoreMedia Project Maven Extension	PROJEXT	1.0.5

Table 2.21. Tooling of CoreMedia DXP 8

## CoreMedia CMS Changes and Improvements

### → Allow translation of a fixed version

The default translation workflow has been changed to take a list of `ContentObjects` instead of `Contents` for the contents to translate. This means that the workflow can work with a list of master `Contents` or a list of master `Versions`.

To support this scenario some `Actions` had to be adapted (see below).

It is also necessary to convert running translation processes with `cm workflowconverter -X` and to re-upload the process definition from the file `translation.xml`.

#### `com.coremedia.translate.workflow.CompleteTranslationAction`

- This action now sets the master version number of the given derived content depending on the given master content objects. If the master content objects are versions, the numbers of these versions are used; If the master content objects are contents, their latest checked-in versions are used.
- The methods `getContentsVariable()` and `setContentsVariable(...)` have been renamed to `getDerivedContentsVariable()` and `setDerivedContentsVariable(...)`
- The methods `getMasterContentsVariable()` and `setMasterContentsVariable(...)` have been added.

#### `com.coremedia.translate.workflow.GetDerivedContentsAction`

- The methods `getContentsVariable()` and `setContentsVariable(...)` have been renamed to `getMasterContentObjectsVariable()` and `setMasterContentObjectsVariable(...)`
- The methods `getTargetContentsVariable()` and `setTargetContentsVariable(...)` have been renamed to `getDerivedContentsVariable()` and `setDerivedContentsVariable(...)`

#### `com.coremedia.translate.workflow.ValidateTranslationParametersAction`

*Allow translation of a fixed version*

→ The methods `getContentsVariable()` and `setContentsVariable(...)` have been renamed to `getMasterContentObjectsVariable()` and `setMasterContentObjectsVariable(...)` (CMS-3108)

→ `ContentSiteAspect` (part of `cap-multisite`) now also provides setters for site related property values which are:

*Setters for ContentSiteAspect*

→ `setMaster(<Content>):boolean`

→ `setMasterVersionNumber(<Integer>):boolean`

→ `setMasterVersion(<Version>):boolean`

Sets both, master link and master version number.

→ `setLocale(<Locale>):boolean`

Automatically transforms the Locale into a String of valid format (language tag).

Just as the getters they are fault-tolerant in any way (property does not exist, property of invalid type, site model not available). If you want to ensure if the value got really set please query the boolean return value which is `true` when the value was set, `false` otherwise. (CMS-3106)

→ Improved indexing performance of *Content Feeder* and *CAE Feeder* by sending batch requests to Apache Solr. (CMS-3069)

→ Method `createSolrServerSearchEngines` of class `com.coremedia.cap.search.solr.SolrSearchEngineFactory` has been deprecated and will be removed in a future release. (CMS-3042)

→ Improved documentation on the behavior of *dumpusers* / *restoreusers* regarding external groups and their rights rules. (CMS-3013)

→ Apache Solr has been updated to version 4.10.3. (CMS-2844)

*Solr update*

→ Apache Tika has been updated to version 1.7. (CMS-1566)

*Apache Tika update*

## CoreMedia Studio Changes and Improvements

- Since FEP8 IBM also supports Chrome as browser for the Management Center. Now the support in Chrome is also available in Studio. (CMS-3369)
- Studio document forms were enhanced to improve usability. Specifically, the component `CollapsibleFormPanel` was added, which replaces the component `StandardCollapsibleFormPanel` for document forms. This new component has a new layout and also stores the collapse/expand state in the user preferences. All property fields are wrapped inside this new component. It allows to hide unused or unimportant fields.

If the collapsible section contains fields with validation errors, they are always expanded.

Additionally, the attribute `expandOnValues` can be applied, which forces the `CollapsibleFormPanel` to always expand if one of the configured fields (comma-separated) is not empty.

The new collapsible state for forms is applied in the version differencing view, too. Additionally, the collapse/expand state is synchronized between the two views. This means that when you expand a `CollapsibleFormPanel` in the read-only document tab, it is also expanded in the regular document tab.

`CollapsibleFormPanels` can be used nested, too. For example, each placement of the page grid editor is a nested `CollapsibleFormPanel` that persists its own state. The previous behaviour (automatic expand of editable placements) is no longer applied here.

All document forms have been reordered. The basic changes are described below.

- As a result of trying to reduce the amount of tabs in forms, the property fields of the 'Settings' tab have been moved to the 'System' tab.
- The property field 'Validity' has been moved from the 'Metadata' to the 'Content' tab. It is collapsed by default.
- The link list property field 'Navigation Context' has been removed from all forms, since it is not used in the standard blueprint content any more.
- The analytics tab for the page form has been removed completely since it is only relevant for technical users. The analytics manual provides a detailed description how to configure analytics using the settings editor.
- The property fields 'HTML Keywords' and 'URL Segment' have been grouped into the collapsible panel 'Search Engine Optimization'.

*Chrome browser supports now IBM Management Center for FEP version 8 or higher. Forms enhancements*

- The tab 'Tags' has been removed, the property fields 'Subject' and 'Location' tags have been moved to the 'Metadata' tab
- The property fields 'Valid From' and 'Valid To' have been grouped into the collapsible panel 'Validity'. If a document provides these properties, it is located on the 'Content' tab.
- The information about the site name and the site's locale have been grouped into the collapsible panel 'Site', available on the 'Localization' tag.
- The (property) fields 'Locale', 'Master', 'Master Version' and 'Derived Content' are grouped into the collapsible panel 'Localization', available on the 'Localization' tab.
- The property field 'Search' has been moved to the 'System' tab.

**Note:** The Studio forms have been rearranged using the Blueprint demo content as a reference. If you miss some property fields, you can still add them again to the corresponding form.

Furthermore, the form tabs 'System' and 'Localization' are hidden by default now. The user can hover a '...' labeled tab to expand the hidden tabs and see the corresponding property fields. Users can disable this behavior in the user preferences dialog, so that all tabs are shown by default. (CMS-3312)

- When comparing two versions of a rich text property, additions, removals, and formatting changes are highlighted inline in the rich text property field. (CMS-3253)
- When viewing a content and its master content in the side-by-side view, the differences between the displayed version of the master content and the last translated version of the content are highlighted. (CMS-3251)
- When viewing an older version of a content in the versioning side-by-side view, the properties whose value differs from the current content are highlighted.

*Rich Text Differencing*

*Version Comparison in Translation View*

*Highlight differing properties in versioning view*

The `showIssuesPlugin` is also used to highlight the property fields in differencing mode. When the property value has changed, the CSS style class `issue-change` is added to the property field DOM element. (CMS-3130)

→ **Display the Master Version in the Side-By-Side View**

*Display the Master Version in the Side-By-Side View*

It is now possible to open a premular tab in the side-by-side view with a `Content` on the right and a read-only `ContentObject` on the left. This is used e.g. to open a derived document from a translation workflow right next to the master version which should be translated.

`com.coremedia.cms.editor.sdk.desktop.ContentTabManager :`

- The method `openPremulars (premularConfigurations:Array, background:Boolean = false):void` has been added to open premular tabs for a given list of premular configurations.
- The class `com.coremedia.cms.editor.sdk.premular.PremularConfiguration` has been introduced as an extensible parameter object for `ContentTabManager#openPremulars (...)`.

`com.coremedia.cms.editor.sdk.actions.OpenInTabAction :`

- The config parameter `documentViewMode` has been removed in favor of the more generic `OpenPremularAction`.
- The class `com.coremedia.cms.editor.sdk.actions.OpenPremularAction` has been introduced to allow opening premular configurations via action.

`com.coremedia.cms.editor.controlroom.workflow.translation.AbstractStartTranslationWorkflowPanelBase :`

- The method `getProcessVariableMappings():Array` has been replaced by the method `computeProcessVariableMappings (callback:Function):void` to allow asynchronous computation of the variable mappings.
- The method `getMasterContents():Array` has been added. It returns the list of contents that are subject to translation which is used to remove the contents from my edited contents.
- Both methods must be overridden by subclasses.

(CMS-3090)

- The read-only document form can now display previous versions of a content. Property fields have to note that if the value expression provided through the option `forceReadOnlyValueExpression` evaluates to `true`, the object provided through the `bindTo` value expression might not evaluate to a content in the sense of the Unified API but to a bean that claims to be checked in and that returns the historic properties of the version to display. Correct handling of the `forceReadOnlyValueExpression` is therefore crucial. For further details please refer to the Studio Developer Manual.

*Display version in side-by-side view*

(CMS-3064)

- Richtext editor toolbars in Studio are now accessible by using `richTextPropertyField.FIND_TOOLBAR`.

*richtext editor toolbars accessible*

(CMS-3008)

- A validator was added which warns when content contains links to content in another site. See `com.coremedia.rest.cap.validators.CrossSiteLinkValidator` for further details.

*Validators*



(CMS-2922)

- Class `com.coremedia.livecontext.ecommerce.catalog.Category` has been extended with the method `getDisplayname()`. The Studio model ActionScript classes also reflect this change. This method is used e.g. to display the category name in Studio UI components (catalog tree and breadcrumb).

(CMS-2718)

- The EXML validation mode has been set to `error` for all modules. A few remaining EXML validation issues in CoreMedia Blueprint code have been fixed.

Note that this means that for your build to succeed, you have to fix EXML validation errors in your project code, or set `<validationMode>` back to `warn` in Blueprint's `pom.xml`.

When the project is imported correctly, IDEA should show all validation errors as red code. Typically, validation errors result from an incorrect sequence of EXML property sub-element or forgotten or duplicate `<exml:cfg>` declarations. When using Ext JS config options that are not declared in the Ext AS API, these have to be used with the namespace `exml:untyped`.

(CMS-203)

*Added method "getDisplayname()" to Category model to make LiveContext e-Commerce Library tree sortable by name*

*EXML validation mode set to "error"*

## CoreMedia Blueprint Changes and Improvements

- The Media site has been removed with its content, templates, web resources and configuration. The deployment properties `MEDIA_SEGMENT`, `PREVIEW_MEDIA_SEGMENT`, and `STUDIO_MEDIA_SEGMENT` have been removed as well. (CMS-3322)

*Media Site and deployment properties removed*

- The Surefire, Surefire Report and Failsafe plugins have been updated to version 2.18.1 to be able to [rerun failing tests](#). (CMS-3311)

*Update Surefire, Surefire Report, Failsafe*

- You possibly want to use the Blueprint only with the new `corporate` site, without the `lc` extension. In this case you would encounter errors importing the example content, because some of the document types are only available with the `lc` extension. In order to avoid such problems, we moved the `lc` specific content into a separate directory `blueprint/modules/extensions/lc/test-data`. The new extension `corporate` also brings some content of its own. Some global content remains in the well known `blueprint/test-data` directory. Extension content may reference global content, but not vice versa. The `lc` and `corporate` contents are independent of each other.

*Modular Example Content*

Due to the limited path length on Windows machines the content is stored with compressed file paths as created by "serverexport -cut" now. This affects

some deeply nested folders only, the file names of most example content remain the same.

The boxes module builds separate zip archives for these three content sources. By default, the Chef deployment addresses all content archives. You can configure the list of archives in `blueprint/boxes/chef/chef-repo/cookbooks/coremedia/attributes/default.rb`. (CMS-3182)

- A global logger is available for JavaScript development in Blueprint for displaying infos to JavaScript console of the browser. It is disabled by default and enabled in `developerMode`. Just use `coremedia.blueprint.logger.log("Example Log Message")` to print debug messages. (CMS-2989)

*Introduce Logging Mechanism for JavaScript*

## Miscellaneous Changes and Improvements

- Deprecated getter methods in the public API of the Proactive Engine
  - `com.coremedia.cap.persistentcache.proactive.TriggerBase#getLogger`
  - `com.coremedia.cap.persistentcache.proactive.BaseReceiver#getLogger`
  - `com.coremedia.cap.persistentcache.ProcessingCallbackBase#getLog`

*Deprecation*

Do not call these methods but construct your own `Logger` instances. (CMS-3218)

## Fixed Issues

- **CMS-3273: Automatic reloading of Views from the Content Repository**

When updating a JAR containing templates, the CAE now automatically reloads all views. It's advised to use a specific `DocumentType` for storing templates JARs (`CMTemplateSet` in the Blueprint) since all relevant changes (create, move, delete, JAR upload, publication) made to any of those documents leads to reloading the Views. The `DocumentType` is configurable, see documentation chapter "Dynamic Templating".

- **CMS-3272: View Lookup improvements**

To reduce the time spent doing view lookups, Classes with certain suffixes ("Base", "Impl", "#", "\$\$", "AssumesIdentity", "DataView", "HasCustomType", "AspectAggregatorAware", "ContentBean") are now excluded from the view lookup.

This reduces the number of view lookups made by the CAE dramatically. Without the reduction, the CAE makes over 27,000 lookups for the main "PerfectChef" page. With the optimization, only 15,000.

Depending on the structure of the templates, the ratio of saved view lookups may differ for other sites.

→ **CMS-3242: Studio comment moderation: user filter does not work with upper-case names**

The Solr schema configuration for Elastic Social has changed in file `<solr-home>/configsets/elastic/conf/schema.xml`. This fixes a bug that filtering comments by user name did not work in the Studio comment moderation for user names with upper-case characters.

Existing comments must be reindexed in Solr to apply the bugfix to them. You can reindex the Elastic Social comments by invoking the JMX reindex operation of interface `com.coremedia.elastic.core.api.search.management.SearchServiceManager` with parameter "comments". You can find the `SearchServiceManager` MBean of the elastic-worker web application for tenant media under the object name `com.coremedia:application=elastic-worker,type=searchServiceManager,tenant=media`.

→ **CMS-3229: Property change events**

A superfluous property change event used to be fired for the property containing a sub-bean when a property of the sub-bean changed. Now only the event for the actually updated property is fired.

→ **CMS-3197: e-Commerce library sorting by name is now kept on category changes**

sorting order of columns in the e-Commerce library is now kept when changing the folder/category and newly opened categories are sorted in the same way as in the category before.

→ **CMS-3192: Studio Memory Stability**

Memory stability in the studio has been improved further by fixing a leak in `PropertyPathExpressions`. This allows for slightly longer editing sessions before reloading the studio client.

→ **CMS-3163: database schema change for translation**

In order to reliably protect versions in a translation workflow from destruction by the publisher or clean-up tools, the content server's database schema has been extended. When upgrading, you need to activate the `sql.schema.alterTable` flag, so that the content server will automatically add the required columns to each document type table in the database. Depending on the database model, the process may be instantaneous or take time proportional to the number of versions. Concrete timing depends

on the installation and, for very large content volumes, should be verified prior to migration.

→ **CMS-3103: Hide Studio system Information from anonymous users**

Studio users now have to be logged-in in order to access the Studio system information. The client side `CapSystemInfo` class is now a `RemoteBean`. Please note that it is not loaded together with the `CapConnection` anymore.

→ **CMS-3092: Contentserver Folderindex slow because of non-prepared update statements**

Improved folder index performance with large folder hierarchies by using prepared statements. This reduces pauses before query execution when a query accesses the folder index using a "BELOW" clause.

→ **CMS-3038: CacheInvalidation Listener might hang in endless loop**

In rare situations the `CacheInvalidation Listener` that polls cache invalidations from IBM WebSphere Commerce, might hang in an endless loop and requests the same clearall event again and again. This is due to an issue in the `REST CacheInvalidationHandler`.

→ **CMS-3026: Spring Patch-Version Update**

The Studio performance was massively impacted by [SPR-11545](#) Spring version was updated from 4.0.1 to 4.0.9 where [SPR-11545](#) is fixed.

→ **CMS-3007: UserProvider deprecated**

The interface `com.coremedia.ldap.UserProvider` has been deprecated. Use interface `com.coremedia.ldap.UserProvider2` instead, which has an additional `close` method.

The abstract class `com.coremedia.ldap.LdapUserProvider` has been changed to implement the new `UserProvider2` interface and custom classes extending `LdapUserProvider` do not need to be adapted.

→ **CMS-2983: Perso Cookie Overflow**

`com.coremedia.personalization.context.collector.CookieSource#maxBytes` can be used to limit the size of an encoded personalization context. If `maxBytes` is exceeded, the cookie is cleared so that the cookie may grow anew.

→ **CMS-2959: SolrJ connection object not properly closed on shut down**

The interface `com.coremedia.cap.search.solr.SolrSearchEngine` has been deprecated. Use interface `com.coremedia.cap.search.solr.SolrSearchEngine2` instead, which has an additional `shutdown` method.

The method `createSearchEngine` of class `com.coremedia.cap.search.solr.SolrSearchEngineFactory` has been deprecated. Use method `createSearchEngine2` instead.

→ **CMS-2869: SolrSearchQueryBuilder does not deactivate spellchecking suggestions**

Spellchecking is turned off by default now for the request handler `/cmdismax` in the Solr configuration file `modules/search/solr-config/src/main/app/solr-home/collection1/conf/solrconfig.xml`. The *Blueprint CAE* enables spellchecking in method `search` of class `com.coremedia.blueprint.cae.action.search.SearchService` to show "did you mean" suggestions for search results.

This change improves the performance of Solr queries using the `/cmdismax` request handler which does not need spellcheck results.

If you have custom code that sends Solr queries to the `/cmdismax` request handler and expect spellcheck results in the Solr response, then you must set the `spellcheck` Solr query parameter to `true`. To this end, if you construct your query with class `com.coremedia.blueprint.cae.search.SearchQueryBean`, you just need to call its method `setSpellcheckSuggest(true)`.

→ **CMS-2835: CAE Feeder has incompatible version of ASM for Tika**

Excluded incompatible version of ASM library from *Blueprint CAE Feeder*.

→ **CMS-2820: Elastic Social search for users or comments shows error for special characters**

Fixed searching with special characters for Elastic Social users or comments in Studio.

→ **CMS-2818: Solr replication not working because of incorrect configuration**

Fixed configuration of Solr master-slave replication in the *Blueprint modules solr-master-tomcat* and *solr-slave-tomcat*.

→ **CMS-1863: XLIFF Import**

The XLIFF importer detects missing translations in rich text properties now. Affected XLIFF files will not be imported, avoiding content corruption.

## 2.2.22 Release 7.5.24

This chapter contains all changes made in Release 7.5.24 of *CoreMedia Digital Experience Platform 8*.

Release 7.5.24 contains the following CoreMedia modules:

- CoreMedia Blueprint
- CoreMedia CMS
- CoreMedia Studio
- CoreMedia LiveContext for IBM WebSphere Commerce
- CoreMedia Elastic Social

In addition, *CoreMedia DXP 8* uses the following tooling:

Table 2.22. Tooling of CoreMedia DXP 8

Product	Key	Version
CoreMedia Application Maven Plugin	APPPLUGIN	2.7.9
CoreMedia Project Maven Extension	PROJEXT	1.0.5

## Changes

### CoreMedia LiveContext for IBM WebSphere Commerce Improvements

#### Improvements

- CoreMedia LiveContext for IBM WebSphere Commerce now supports IBM WebSphere Commerce 7.0 Feature Pack 8 (Fixpack 9). Please refer to the LiveContext Manual for prerequisites and installation steps. Please note that this release of CoreMedia LiveContext only supports B2C use-cases and no specific B2B use-cases (e.g. contract-based catalog filtering is currently not supported). Also the provided demo data is currently not covering the AuroraB2BESite example store.

#### Changes

- Class `com.coremedia.livecontext.ecommerce.catalog.Category` has been extended by the method `getDisplayName()`. The Studio model ActionScript classes also reflect this change. This method is used e.g. to display the category name in Studio UI components (catalog tree and breadcrumb).

### Closed JIRA Issues

No changes found in issue tracker

## 2.2.23 Release 7.5.23

This chapter contains all changes made in Release 7.5.23 of *CoreMedia Digital Experience Platform 8*.

Release 7.5.23 contains the following CoreMedia modules:

- CoreMedia Blueprint
- CoreMedia CMS
- CoreMedia Studio
- CoreMedia LiveContext for IBM WebSphere Commerce
- CoreMedia Elastic Social

In addition, *CoreMedia DXP 8* uses the following tooling:

Product	Key	Version
CoreMedia Application Maven Plugin	APPPLUGIN	2.7.9
CoreMedia Project Maven Extension	PROJEXT	1.0.5

Table 2.23. Tooling of CoreMedia DXP 8

### Closed JIRA Issues

No changes found in issue tracker

## 2.2.24 Release 7.5.22

This chapter contains all changes made in Release 7.5.22 of *CoreMedia Digital Experience Platform 8*.

Release 7.5.22 contains the following CoreMedia modules:

- CoreMedia Blueprint
- CoreMedia CMS
- CoreMedia Studio
- CoreMedia LiveContext for IBM WebSphere Commerce
- CoreMedia Elastic Social

In addition, *CoreMedia DXP 8* uses the following tooling:

Product	Key	Version
CoreMedia Application Maven Plugin	APPPLUGIN	2.7.9
CoreMedia Project Maven Extension	PROJEXT	1.0.5

Table 2.24. Tooling of CoreMedia DXP 8

## Features

### Studio Single Sign On Integration

A new documented public API to integrate with external Single Sign On (SSO) solutions has been added to *CoreMedia Studio*. The feature allows the definition of a custom Spring Security context to replace the default authentication process. Please refer to the [Studio Developer Manual] for further details.

## CoreMedia CMS Improvements

### Spring Context Startup Accelerator

→ Due to the design of the Spring Framework and the CoreMedia CMS, it is necessary to declare many `<import/>` elements in Spring configuration files, often pointing to the same resource. This slows down the startup of the `ApplicationContext`.

Unfortunately, `org.springframework.beans.factory.xml.XmlBeanDefinitionReader` does not track imported XML files, so redundant `<import/>` elements will lead to Spring parsing the same XML files over and over again (in most cases, those XML files will contain more `<import/>` elements leading to even more parsing, ...) After moving to Servlet 3.0 resources, for each `<import/>`, the Jar file containing the XML file has to be unpacked. Also, every time that an XML file is completely parsed, Spring reads all Bean declarations, creates new `org.springframework.beans.factory.config.BeanDefinition` instances, overwriting any existing `BeanDefinitions` for the same bean ID.

This release introduces an optional system property `skip.redundant.spring.imports` that is `false` by default. If set to `true`, the first `<import/>` element will be used and all following, duplicate `<import/>` elements pointing to the same resource will be ignored. The time saved depends on the number of duplicated `<import/>` elements.

Even though this setting is recommended, it may change the `BeanDefinitions` that are loaded. (As explained above, normally, `BeanDefinitions` may be overwritten by subsequent imports, depending on how `<import/>` elements are used in a webapp).



**Security: PlainTextSerializer now escapes Markup**

- The `PlainTextSerializer` is used to strip all RichText-related XML tags from a `Markup` and only print out the character content. This character content in turn may be XML source code or any other kind of text, which is not interpreted by the CMS. When using the `PlainTextSerializer` to print the content on an HTML page, the content is interpreted as HTML by the browser if not escaped. While this may be intentional in certain cases, this poses a security risk.

For example, it was possible to write a `<script>` tag containing JavaScript into any `Markup` property and have the browser execute this JavaScript. The Blueprint uses this feature in a controlled manner to allow users to add HTML content to the page (See `CMHtml/ScriptSerializer/ScriptView`).

The behavior was changed to be secure by default, the plain text returned is now escaped. So for example a `<` is returned as `&lt;`. To restore the old behaviour, use `PlainTextSerializer#setEncode(false)`

- An option was added to `cm serverexport` for efficiently exporting content repositories that contain the same blob multiple times, which is then stored on disk only once. This is useful, for example, when multiple translations of a web site are present in the content repository, which contain copies of the same blobs (images etc.). Space requirements on export thereby correspond to space requirements in the content repository, where blobs are always deduplicated. The generated export format corresponds to that used to ship the blueprint example content.

*ServerExport with Shared Blobs*

For further details, please consult the section about `serverexport` in the CoreMedia Content Server Manual.

- In addition to various bugfixes, the behaviour of the `cm bulkpublish` tool has changed slightly. When the `--approve-versions` option is given to the `cm bulkpublish` tool, it only approves the latest (checked-in) version. The tool used to also approve any other versions newer than the latest approved version, or in the case of new documents, all versions. This results in a performance improvement when dealing with large content repositories due to a simpler query and less approval operations.

*Command Line Tools*

**Changes**

- Apache Solr has been updated to version 4.10.3.
- The *CoreMedia Search Engine* index configuration has been separated into distinct configuration sets and cleaned up. The directory `<solr-home>/configsets` contains config set subdirectories `content`, `cae` and `elastic` for *Content Feeder*, *CAE Feeder* and *Elastic Social* indices. Each type

*Third-party Updates*

*Search Engine configuration changes*

of search index has its own index schema (`schema.xml`) and index configuration (`solrconfig.xml`). Index fields and settings that are only needed for *Content Feeder* indices have been removed from the config set for *CAE Feeder* indices, and vice versa.

- Unused field types have been removed from the `schema.xml` files to keep them simple and avoid unnecessary overhead.
- The index schema for *Content Feeder* indices defines all fields with attribute `stored="true"` to allow partial document updates. Note that this change leads to larger index files. You can change the definition of the largest field `textbody` back to `stored="false"` in `<solr-home>/configsets/content/conf/schema.xml` to reduce the index disk size, if needed.
- The actual index data files are no longer written to the directory configured with JVM system property `solr.data.dir`. Each Solr core has its own directory now below the Solr Home directory, which also contains the index files. For example, the data files for the `studio` index are written to `<solr-home>/cores/studio/data`. The Solr web application needs write access to its Solr Home directory.
- The [CoreMedia Search Manual] describes the new configuration in section "Solr Home Directory" in more detail.
- Index schema changes make it necessary to reindex *Content Feeder* and *CAE Feeder* indices.
- The class `com.coremedia.cap.user.CapAuthenticationProvider.CapUserAuthority` has been removed in the course of the new SSO integration feature.

*Studio SSO Integration*

## CoreMedia Studio Improvements

- A Content Security Policy is introduced in order to mitigate Cross-Site Scripting vulnerabilities. The default policy header considers existing preview configuration and includes `frame-src` whitelisting values accordingly.  
  
The applied policy can be customized or disabled via a set of `studio.security.csp.*` properties in the `application.properties` file. For further details please refer to the security chapter of the Studio developer manual.
- The wildcard format of the `studio.previewUrlWhitelist` property in the `application.properties` has changed. All URLs must be valid Content Security Policy source values.
- Existing Studio blueprint code was adjusted to comply with Content Security Policy.

*Content Security Policy*

The following blueprint classes were changed:

- `com.coremedia.blueprint.studio.topicpages.administration.TopicsPanel`
- `com.coremedia.blueprint.studio.topicpages.administration.TopicsPanelBase`
- `com.coremedia.blueprint.studio.taxonomy.chooser.LetterListPanelBase`
- `com.coremedia.blueprint.studio.taxonomy.rendering.LinkListRenderer`
- `com.coremedia.blueprint.studio.taxonomy.rendering.SelectionListRenderer`
- `com.coremedia.blueprint.studio.taxonomy.rendering.SingleSelectionListRenderer`

The following files were removed from the taxonomy-studio-plugin:

- `taxonomy-mouse-handler.js`

The `cspHeaderFilter` was added to the `studio-webapp` `web.xml`.

The blueprint `jangaroo-libs` version was bumped to `2.0.10`.

- The `SimpleSearchWidget` restricts its searches to the preferred site now. This default can be overridden by setting the the config option `preferredSite` to `false`.
- The `PreferencesUtil` class no longer tries to store undefined values as a substruct. The undefined property is cleared instead.
- The method `com.coremedia.cms.editor.sdk.IEditorContext#setAfterLogoutHandler()` has been removed in the course of the new SSO integration feature.
- The second (optional) parameter of the method `com.coremedia.cap.common.CapLoginService#retrieveSession()` has been removed in the course of the new SSO integration feature.

*SimpleSearchWidget @ Preferred Site*

*Single Sign On Integration*

## CoreMedia Elastic Social Improvements

### Changes

- Elastic Social uses Apache Solr as search engine for users and comments now. A separate ElasticSearch installation is no longer required and ElasticSearch is not supported as search engine anymore.

*Solr as Search Engine for Elastic Social*

Users and comments are indexed into separate Solr indices. In the Blueprint, Solr maintains indices `blueprint_helios_comments` and `blueprint_helios_users` for comments and users of the tenant `helios`.

Elastic Core applications connect to Apache Solr as configured with property `elastic.solr.url`. See the [CoreMedia Elastic Social Manual] for configuration options.

Elastic Social content needs to be reindexed into Apache Solr. See the [CoreMedia Search Engine Manual], section "Reindexing Elastic Social indices" for necessary steps.

- Determining the current tenant for Studio and CAE applications is now based on `TenantLookupStrategies`. See below for changes in the default Blueprint behavior.

*Multi-Tenancy*

## CoreMedia LiveContext for IBM WebSphere Commerce Improvements

- The e-Commerce API was prepared to support multiple shop systems simultaneously with a single CoreMedia system. Such shop systems can even come from different manufacturers. In principle a concept of a commerce connection was introduced similar to the UAPI CAP connection that is used to connect to the CoreMedia content server. A commerce connection can be defined per site and it describes a certain shop connection endpoint. The connection details are vendor specific (an *IBM WebSphere Commerce Server* system has obviously other connection properties than a system from another vendor). From the connection you will get all vendor specific service implementations, like the `CatalogService`.
- The module and the package structure of the e-Commerce API were changed. A new introduced base module gathers various classes that can be reused to implement the API against another shop system vendor. The new package structure is more "service driven", that means there is a new package `pricing` where all pricing related service interfaces and classes are gathered together.
- All API service calls have no more context parameters (store context and user context). The commerce contexts will be initialized together with the connection and used for all service calls in that session (within a request).
- All API service calls that use external or technical identifier were removed. You will use the long version of the IDs instead consistently. To produce such an ID a `CommerceIdProvider` can be obtained from the connection.
- As for other document types it is possible to create External Pages with a special "Create Content" dialog within the favorite bar. Additionally it is added in menubars and context menus in the e-Commerce library if a category is

*New Version of the e-Commerce API*

*New Shortcuts for Creation of External Pages*

selected. The category link is then pre-filled with the currently selected shop category. The default location to store the new document is the `Navigation/Categories` folder of the site.

- Settings of the CoreMedia Content Connector running in the IBM WCS can now be loaded from a properties file (the path is specified in the web.xml file). Previously it was only possible to load these settings in the web.xml file directly. This approach is more flexible when using the same application archive for different systems (eg. for test, staging and production). The web.xml file can remain unchanged.

*Content Connector Settings are configurable via Properties File*

## CoreMedia Project Improvements

### CoreMedia Blueprint Improvements

- The view type property field is hidden when there are no applicable view types for the document that is being edited. This makes it easier to provide reusable document forms that adapt to the settings of the current site. This behavior has been enabled in the `ViewTypeSelectorForm` by setting the config option `hideForSingleChoice` of the `ViewTypePropertyField`.

*View Type Field*

- The previous solution of determining the tenant based on prefixes of the server URL is no longer recommended. Instead, the default strategy for the Blueprint relies on the context settings for Elastic Social. For each Site's root channel, the `tenant` property needs to be set. For more details, we refer to the section `Configuring Elastic Social` of the [CoreMedia Elastic Social Manual].

*Multi-Tenancy*

- When developing templates, developers start a local *Tomcat*. Up until now, templates would only be read from the workspace if no templates were uploaded to the *ContentServer*. Now, the CAE will use the Spring property `cae.use.local.resources` to determine whether to read templates from the workspace or (potentially) read them from the *ContentServer*.

*CAE template development*

A new customizer `addRepositoryTemplateLocationPattern` was added to `blueprint-views.xml` that can be enabled by setting `cae.use.local.resources` to `false`.

The `cae-preview-webapp` module will read templates from the workspace by default because `cae.use.local.resources` is set to `true`. Deployed webapps will read templates from the *ContentServer* by default because `cae.use.local.resources` is set to `false`.

### Promotion to Core API

- The Blueprint classes `ReferrerListPanel` and `ReferrerListPanelBase` have been moved into the package `com.coremedia.cms.edit`

*ReferrerListPanel*

`or.sdk.premular` of the Studio core module `editor-components`. They are public API now.

- The Blueprint class `SiteUtil` has been moved into the package `com.coremedia.cms.editor.sdk.util` of the Studio core module `editor-components`. It is public API now.

*SiteUtil*

## Deployment and Virtualization

- Cookbooks are now managed with *Berkshelf*. As a result, the cookbooks *apt*, *aws*, *build-essential*, *chef\_handler*, *java*, *mongodb*, *mysql*, *openssl*, *postgresql*, *sql\_server*, *ulimit*, *windows* and *yum* have been removed from the workspace. The versions are managed in the `boxes/chef/chef-repo/Berksfile`.

As a result of the above change it is now required to have *Berkshelf* and the *vagrant-berkshelf* plugin installed. To install Berkshelf it is recommended to install the latest *Chef Development Kit*. To install the *vagrant-berkshelf* plugin execute

```
vagrant plugin install vagrant-berkshelf
```

- Updated *Chef* client in *Vagrant* setup to 11.16.4.
- Please use at least *Vagrant* 1.6.5 and *VirtualBox* 4.3.18.
- New CentOS 6.6 *coremedia/base* box 1.15.0 in *Vagrant Cloud*
  - CentOS 6.6 including kernel 2.6.32-504.el6.x86\_64
  - openssl-1.0.1e-30.el6\_6.2
  - bash 4.1.2-29.el6
  - VirtualBox guest additions 4.3.18 (r96516)
  - VMware tools 9.8.4.39977 (build-2202052)
  - OpenJDK 1.7.0\_71

- The deployment properties `SOLR_MASTER_DATA_DIR` and `SOLR_SLAVE_DATA_DIR` have been removed. The actual index data files are no longer written to the directory configured with JVM system property `solr.data.dir` but to the Solr Home directory.

*Removed Deployment Properties*

## Known Issues

- The *Blueprint* packages `solr-master-tomcat` and `solr-slave-tomcat` are not correctly set up for Solr replication. Nothing gets replicated with the default configuration.

*Solr replication not working because of incorrect configuration*

The `solrconfig.xml` files in the config set directories `content`, `cae` and `elastic` in `<solr-home>/configsets` use the following variables in the configuration of the `ReplicationHandler` which are not correctly resolved: `${enable.master:false}`, `${enable.slave:false}` and `${solr.master.url:http://localhost/solr}`.

As workaround these properties can be specified as JVM system properties. For the Solr Master Tomcat use `-Denable.master=true -Denable.slave=false`. For the Solr Slave Tomcat use `-Denable.master=false -Denable.slave=true -Dsolr.master.url=http://<master-host>:<master-port>/solr` with `<master-host>` and `<master-port>` set to hostname and port of the Solr Master Tomcat. Alternatively you can just replace the mentioned `${...}` placeholders in all `solrconfig.xml` files.

### Closed JIRA Issues

No changes found in issue tracker

## 2.2.25 Release 7.5.21

This chapter contains all changes made in Release 7.5.21 of *CoreMedia Digital Experience Platform 8*.

Release 7.5.21 contains the following CoreMedia modules:

- CoreMedia Blueprint
- CoreMedia CMS
- CoreMedia Studio
- CoreMedia LiveContext for IBM WebSphere Commerce
- CoreMedia Elastic Social

In addition, *CoreMedia DXP 8* uses the following tooling:

Product	Key	Version
CoreMedia Application Maven Plugin	APPPLUGIN	2.7.9
CoreMedia Project Maven Extension	PROJEXT	1.0.5

Table 2.25. Tooling of CoreMedia DXP 8

## CoreMedia CMS Improvements

### Image Transformer Performance Improvements

- View lookups are now limited to Interface names only, with a few exceptions. See [????](#) for details.

*CAE view lookups for Interfaces only*

These configuration files were changed:

- `modules/cae/cae-base-component/src/main/resources/META-INF/coremedia/component-blueprint-cae.properties`
  - `modules/cae/cae-base-lib/src/main/resources/framework/spring/blueprint-views.xml`
  - `modules/extensions/es/es-cae/src/main/resources/META-INF/coremedia/es-cae-views.xml`
  - `modules/extensions/es-p13n/es-p13n-cae/src/main/resources/META-INF/coremedia/component-elastic-personalization-context.xml`
  - `modules/extensions/es/es-cae/src/main/resources/META-INF/coremedia/es-cae-views.xml`
- The image transformer used by the CAE and the CoreMedia Blueprint Studio has been optimized to render transformations of large images more efficiently.

One optimization was the introduction of a cache for images loaded into memory. This speeds up the transformation considerably if several variants of the same image are requested, as it is the case for image previews within Studio (where different variants of the source image are rendered), or on adaptive websites.

This cache is part of the `imageTransformerInputAdapter` bean. By default, a cache capacity of 100MB heap space is configured. See the Content Application Developer Manual for information about this bean.

### Closed JIRA Issues

No changes found in issue tracker

## 2.2.26 Release 7.5.20

This chapter contains all changes made in Release 7.5.20 of *CoreMedia Digital Experience Platform 8*.

Release 7.5.20 contains the following CoreMedia modules:

- CoreMedia Blueprint



- CoreMedia CMS
- CoreMedia Studio
- CoreMedia LiveContext for IBM WebSphere Commerce
- CoreMedia Elastic Social

In addition, *CoreMedia DXP 8* uses the following tooling:

Table 2.26. Tooling of CoreMedia DXP 8

Product	Key	Version
CoreMedia Application Maven Plugin	APPPLUGIN	2.7.9
CoreMedia Project Maven Extension	PROJEXT	1.0.5

## CoreMedia CMS Improvements

## CoreMedia Studio Improvements

## CoreMedia Elastic Social Improvements

## CoreMedia LiveContext for IBM WebSphere Commerce Improvements

- When browsing different stores on the same IBM WCS Commerce Instance and being logged in as user that is in the root organization (like all our demo users, arover, mweller, gsteven and sveith), the dynamic CMS generated fragments (e.g. for product reviews) now recognize a logout/login change on the other store. E.g. when changing login from arover to mweller in AuroraESite, the product review in Perfect Chef now correctly renders on behalf of mweller after next reload.
- The "Perfect Chef USA" page now contains the "Perfect Chef Anniversary Teaser (Anniversary Workspace)" teaser by default. This teaser has set the new flag "Only Show This Teaser If the Teaser Target Is Valid" on the metadata tab of the teaser Studio form. This causes the teaser to be invisible if the teaser target is not valid. In case of a External Page that points to a category only visible in a Workspace, the teaser is only shown if the correct IBM WebSphere Commerce workspace is selected in Studio, or the category is approved/published in IBM WebSphere Commerce.

*Session Synchronization*

*Demo Content for IBM WebSphere Commerce Workspaces Integration*

## CoreMedia Project Improvements

### CoreMedia Blueprint Improvements

#### Closed JIRA Issues

No changes found in issue tracker

## 2.2.27 Release 7.5.19

This chapter contains all changes made in Release 7.5.19 of *CoreMedia Digital Experience Platform 8*.

Release 7.5.19 contains the following CoreMedia modules:

- CoreMedia Blueprint
- CoreMedia CMS
- CoreMedia Studio
- CoreMedia LiveContext for IBM WebSphere Commerce
- CoreMedia Elastic Social

In addition, *CoreMedia DXP 8* uses the following tooling:

Table 2.27. Tooling of CoreMedia DXP 8

Product	Key	Version
CoreMedia Application Maven Plugin	APPPLUGIN	2.7.9
CoreMedia Project Maven Extension	PROJEXT	1.0.5

## CoreMedia CMS Improvements

- The *CAE Feeder* can now be configured to exclude blobs from indexing based on their MIME-type. The default behavior was not changed and blob values are sent to the search engine regardless of their type.

*CAE Feeder configuration of blob MIME-types*

Use the Spring properties `feeder.beanMapping.mimeType.includes` and/or `feeder.beanMapping.mimeType.excludes` to configure comma-separated lists of MIME-types to decide whether Blob values of configured ContentBean properties get indexed.

You may also configure MIME-types for only some ContentBean classes or properties by calling the newly introduced methods `setMimeTypeIncludes` and/or `setMimeTypeExcludes` of the classes `BeanMappingFeedablePop`

ulator, BeanFeedableMapping and BeanPropertyFeedableElement Mapping of package `com.coremedia.cap.feeder.bean`. See the API documentation for more details.

- Added configuration property `feeder.contentSelector.includeSubTypes` for the CAE Feeder to configure whether documents of sub types of the configured content types are indexed as well. The default value is to include sub types (`true`) which matches the behaviour of previous versions.

*CAE Feeder configuration of document types*

## CoreMedia Studio Improvements

### Validator Session Changes

- All server-side validators will now be executed with the rights of the connection session instead of the current user's session.

## CoreMedia Elastic Social Improvements

### CoreMedia LiveContext for IBM WebSphere Commerce Improvements

#### Changes

- The demo content now contains demo content for Perfect Chef Anniversary categories and content that only exist in separate IBM WebSphere Commerce workspace.
- The CoreMedia Adaptive Personalization (p13n) integration in LiveContext has been extracted from the `lc` extension and moved to `lc-p13n`. The extension consists of the two modules `lc-p13n-cae` and `lc-p13n-studio`.
- The Elastic Social (es) integration in LiveContext has been extracted from the `es` extension and moved to `lc-es` with different sub modules.
- The connection timeout and socket timeout are now configurable for the CoreMedia Fragment Connector running within the WCS. Default value for the connection timeout is 10 seconds. The default for the socket read timeout (the time for an expected CAE response) is 30 seconds. Both values can be set in the `web.xml` of the WCS application.

*Demo Content for IBM Commerce Workspaces*

*New Extension lc-p13n*

*New Extension lc-es*

*Connection and socket timeout for the CoreMedia Fragment Connector*

#### Known Issues

- When navigating to the Product Detail Page (PDP) of a product that only exists in an IBM WebSphere Commerce Workspace, the shop shows an error "Error 403: You are not authorised to access preview.". The workspace preview context is not correctly established and the SEO URL is not found in

*Navigating to workspace-only product in preview*

IBM WebSphere Commerce. A Problem Management Record (PMR) with IBM is still ongoing (PMR 15292,756,000). As a workaround you can navigate to any other shop page (e.g. PDP of a product that exists in the base schema) before navigating to the PDP of a workspace-only product. Then the preview context is correctly established and SEO links to workspace-only products will work.

- Using the add to cart feature of e.g. Product Teasers or Quick Info in Image Maps currently do not update the cart icon in the e-Commerce led scenario (e.g. in AuroraESite). Therefore, the default settings in the demo content sets "shopNow=false" in the local settings of the "LiveContext Fragments Root Page". In the content-led scenario (Perfect Chef) the add to cart works as expected and is enabled by default.

*AuroraESite - add to cart from augmented CMS fragments*

## CoreMedia Project Improvements

### CoreMedia Blueprint Improvements

#### Deployment and Virtualization

- UAPI HeapCacheSize and BlobCacheSize for the Studio are now configurable using `STUDIO_UAPI_HEAPCACHE_SIZE` and `STUDIO_UAPI_BLOB_CACHE_SIZE` respectively. Defaults are the same as those for the CAE (300MB / 10GB).
- Removed `SSLProtocol` and `SSLCipherSuite` directives from Apache virtual host configurations. This should be handled in the global Apache configuration for all virtual hosts.

## 2.2.28 Release 7.5.18

This chapter contains all changes made in Release 7.5.18 of *CoreMedia Digital Experience Platform 8*.

Release 7.5.18 contains the following CoreMedia modules:

- CoreMedia Blueprint
- CoreMedia CMS
- CoreMedia Studio
- CoreMedia LiveContext for IBM WebSphere Commerce
- CoreMedia Elastic Social

In addition, *CoreMedia DXP 8* uses the following tooling:

*Table 2.28. Tooling of CoreMedia DXP 8*

Product	Key	Version
CoreMedia Application Maven Plugin	APPPLUGIN	2.7.9
CoreMedia Project Maven Extension	PROJEXT	1.0.5

## CoreMedia CMS Improvements

### Changes

- **Destroy Intermediate Versions:** The destruction of intermediate versions during publications has been adapted to match the multi-site set up. Thus, it respects versions which are referred to from derived contents.

*Multi-Site Aware Version Cleanup*

As a consequence the flag to enable/disable the destruction of intermediate versions has been changed from false/true to off/dumb/strict for publisher properties as well as JMX configuration.

For JMX a new three-state property `DestroyIntermediateVersions` got introduced while the old property `DestroyIntVersions` is marked as deprecated. For migration purpose the old flags false/true are still supported and are mapped to false=off and true=strict. The dumb mode uses the old implementation which ignores any version references.

- **Clean Versions:** As for the destruction of intermediate versions also the command line tool `cleanversions` has been adapted to match the multi-site setup. Thus, the warning in the [Content Server Manual] not to use `cleanversions` in multi-site setup has been removed accordingly.

Unlike the version cleanup on publication (destruction of intermediate versions) `cleanversions` only takes current versioned references into account. Thus, reverting changes in derived contents might result in broken versioned links. Having a reasonable time scale in the `keep-days` option will reduce the possible impact of this destruction.

- The Site Manager supports some features which do not reliably work with 64 bit JVMs (e.g. MS Word based spell checking) . Therefore, it shows a warning popup when it is started with a 64 bit JVM. The warning can be suppressed by setting `editor.omit-java-vm-check=true` in the `editor.properties`.

*Site Manager JVM Warning*

- Apache Solr has been updated to version 4.10.1.

*Third-party Updates*

- The class `PreferencesUtil` provides two utility methods for reading and writing complex objects in the preferences struct: `getPreferencesJSON`

*Persistence format for preferences*

`Property` and `updatePreferencesJSONProperty`. These methods serialize JSON objects to a proper struct stored in the user preferences document.

The new methods are used for saved searches, open tabs, and dashboard widgets. Please make sure that states reported by your custom search filters, tab types, and widgets use only strings, integers, booleans, and arbitrarily nested arrays and objects of such values. Because these are the only types of objects that can be reliably serialized to JSON strings (the procedure used for state persistence so far), it is highly likely that no migration effort will be necessary.

## CoreMedia Studio Improvements

### Changes

- The page grid property field provided in *CoreMedia Blueprint* has been replaced by a new component in the base modules. The `pageGridPropertyField` provided by module `bpbase-pagegrid-studio-plugin` is a significantly more robust reimplementation of the old property field. You should remove the existing page grid property field from your project and use the new field instead.

*Page Layout*

The localization methods for layouts, placements, and view types have been modified. View types can now be localized in the file `BlueprintViewTypes.properties` instead of the file `Blueprint.properties`. A new resource bundle `BlueprintLayouts.properties` has also been added.

See the [CoreMedia LiveContext for IBM WebSphere Commerce Manual] for details about the usage of the placements property field and about localization and configuration options.

The `placements` property used to support two outdated data formats for the placements struct. In order to consolidate the persistent state, a migration tool has been added that converts all existing placements to the most recent format. To this end, the module `cms-tools-application` provides the tool `migrateplacements`, which can be run once during an update to the current CMS version. You can start the tool using the command `cm migrateplacements -u admin`, in which case the tool will convert all placement structs stored in the property `placements` of documents of type `CMChannel`. By adding the option `-t <type>` the tool can be applied to another document type instead.

- There is a new setting in the user preferences to disable element highlighting on mouse hover in the *Studio* preview.
- Certain animations (i.e. zooming images on mouse hover) have been disabled inside the embedded preview to avoid issues with element highlighting inside

*Preview Highlighting*

*Preview Animations*

the preview. A generic configuration mechanism has been introduced to add custom CSS and JavaScript to the previewed documents while displayed in the CoreMedia Studio. Please refer to the CAE developer manual for further details.

## CoreMedia Elastic Social Improvements

## CoreMedia LiveContext for IBM WebSphere Commerce Improvements

## CoreMedia Project Improvements

## CoreMedia Blueprint Improvements

## Closed JIRA Issues

Table 2.29. 7.5.18

Key	Type	Summary	Status
CMS-2220	Bug	Unable to set image-map's default target	Fixed
CMS-2208	Bug	Password Update does not work for special characters	Fixed
CMS-2204	Bug	Changing the children of an external page breaks navigation	Fixed
CMS-2111	Bug	Security Issue: cm schemaaccess dropAll prints DB password to console	Fixed
CMS-2082	Change	Update to Solr 4.10.1	Fixed
CMS-2081	Bug	PDE For Product Placeholder highlights invisible elements (here: quickinfo)	Fixed
CMS-2067	Bug	Error when cloning site not reported to user	Fixed
CMS-2063	Bug	Searching for *:* in the blueprint leads to "Unknown Error"	Fixed
CMS-2048	Bug	"Change Layout Variant"-button behaves oddly when there are no applicable layout variants	Fixed
CMS-2042 (36694)	Bug	-cut option in serverexport creates invalid links if cutoff==file-path-length	Fixed
CMS-2029	Change	Force user to change an expired password	Fixed
CMS-2019	Bug	WordAbbreviator#abbreviate() may throw *OutOfBoundsException	Fixed

Key	Type	Summary	Status
CMS-2016	Bug	Derived Content list shows state "invalid" when master is checked out	Fixed
CMS-1999	Bug	Freemarker: no way to check whether a rich-text text is blank	Fixed
CMS-1975	Bug	Derived Contents Field fails to display on missing permissions	Fixed
CMS-1969	Bug	Studio e-Commerce library catalog thumbnails broken	Fixed
CMS-1961	Bug	Add to cart does not work when the first product is added	Fixed
CMS-1954 (36575)	Bug	Inactive user stays in cache and makes login impossible	Fixed
CMS-1942	Bug	CleanVersions might break Translation Scenarios with invalid Master Versions	Fixed
CMS-1930	Bug	IBM Preview Token sometimes outdated and not renewed	Fixed
CMS-1925	Bug	Urls of Sitemap Generator do'nt have the same scheme	Fixed
CMS-1922	Bug	FragmentPreview for ProductTeasers not working when IBM Workspace selected	Fixed
CMS-1888	Bug	Cross Domain Calls for Dynamic Fragments Do Not Work in IE9	Fixed
CMS-1879	Bug	Reset Passwort Leads To Nowhere, Footer missing	Fixed
CMS-1840 (36497)	Bug	EXML XSD generator fails in directories under a symlink	Fixed
CMS-1765 (36556)	Bug	CMLocalizedImpl.getVariantsByLocale should return filtered results	Fixed
CMS-1703	Bug	PerfectChef not robust against old cookies	Cannot Reproduce
CMS-1517	Bug	Preview Error for invalid content in fragment preview	Cannot Reproduce
CMS-1455	Bug	LC2 Manual: The section on encrypting password does not work	Fixed
CMS-1454	Bug	cms-tools: bin/cm encryptpasswordproperty: If config parameters are not picked up (keystore location, keystore password file), the error message is not helpful	Fixed



Key	Type	Summary	Status
CMS-1423	Bug	Extra entry in PDE breadcrumb when navigating in preview	Fixed
CMS-1371	Bug	PageLayout drop down has wrong initial selection	Fixed
CMS-1348	Bug	Remove Hard-coded CM groupId from Workspace	Fixed
CMS-1219	Bug	Preferences/Tags Combobox sometimes missing (IE9)	Fixed
CMS-1189	Bug	Clicking "reload placements" on the right side of the side-by-side view reloads left side	Fixed
CMS-1134	Bug	PageGrid Editor doubles sections on "lock placement" changes	Fixed
CMS-1094	Bug	FreeMarker templates use client Locale for formatting	Fixed
CMS-1060	Bug	StackoverflowError in CodeResourcesImpl on cyclic css includes	Fixed
CMS-1049	Bug	Publication might break Translation Scenarios with invalid Master Versions	Fixed
CMS-942 (36676)	Bug	No article thumbnails rendered in ImageLinkListPropertyField in Studio sometimes	Fixed
CMS-858	Bug	Reload Placements may create placements multiple times	Fixed
CMS-831 (35392, 35718, 37085)	Bug	When using a global pagegrid navigation layout, content only appears after layout change	Fixed
CMS-709	Bug	Id Handling in Editor Preferences does not survive serverexport/serverimport	Fixed
CMS-487	Bug	bulkpublish -ub (i.e. unpublish) fails with NPE if no folder specified	Fixed
CMS-459	Feature	Display a warning when Site Manager is started in an unsupported 64Bit environment	Fixed
CMS-414	Bug	placementsPropertyField does not use configured propertyName	Fixed
CMS-333	Bug	Search paginator buttons are lost on all browsers but Firefox	Fixed

## 2.2.29 Release 7.5.17

This chapter contains all changes made in Release 7.5.17 of *CoreMedia Digital Experience Platform 8*.

Follow the [CoreMedia DXP 8 Help Center section](#) to receive release and product announcements automatically.

### Modules and Tooling

Release 7.5.17 contains the following CoreMedia modules:

- CoreMedia Blueprint
- CoreMedia CMS
- CoreMedia Studio
- CoreMedia Elastic Social

In addition, *CoreMedia DXP 8* uses the following tooling:

Table 2.30. Tooling of CoreMedia DXP 8

Product	Key	Version
CoreMedia Application Maven Plugin	APPPLUGIN	2.7.9
CoreMedia Project Maven Extension	PROJEXT	1.0.5

### Fixed Issues

## 2.2.30 Release 7.5.16

This chapter contains all changes made in Release 7.5.16 of *CoreMedia Digital Experience Platform 8*.

Release 7.5.16 contains the following CoreMedia modules:

- CoreMedia Blueprint
- CoreMedia CMS
- CoreMedia Studio
- CoreMedia LiveContext for IBM WebSphere Commerce
- CoreMedia Elastic Social

In addition, *CoreMedia DXP 8* uses the following tooling:

Product	Key	Version
CoreMedia Application Maven Plugin	APPPLUGIN	2.7.9
CoreMedia Project Maven Extension	PROJEXT	1.0.5

Table 2.31. Tooling of CoreMedia DXP 8

## CoreMedia CMS Improvements

### Changes

- The output adapter of the image transformer (Spring bean `imageTransformerOutputAdapter`) is configured to preserve image metadata by default. This is useful for images uploaded into the CMS within Studio.

*Image Metadata*

However, image metadata should generally be removed before an image is delivered by the CAE. Image metadata blows up the image size and may contain sensitive information which should not be accessible on public web sites.

Therefore, the `TransformedBlobHandler` within the CoreMedia Blueprint now tells the image transformer to remove the image metadata with the `removeMetadata (rm)` image operation. Please make sure that this operation is issued by your CAE handler for transformed blobs if you do not use or upgrade the `TransformedBlobHandler`.

- Apache Solr has been updated to version 4.10.0.

*Third-party Updates*

## CoreMedia Studio Improvements

## CoreMedia Elastic Social Improvements

## CoreMedia LiveContext for IBM WebSphere Commerce Improvements

- `searchTermExternalReferenceResolver.segmentPath` renamed to `livecontext.slp.segmentPath`

*Spring Bean Property `searchTermExternalReferenceResolver.segmentPath` Renamed*

## CoreMedia Project Improvements

### CoreMedia Blueprint Improvements

#### Enhancements

##### Deployment and Virtualization

- The default recipe of the coremedia cookbook will now set the process limit for the coremedia user. To configure the limit, a new attribute `coremedia.process_limit` has been added with a default value of 5000.

#### Changes

- jQuery has been updated to version 1.11.1.

*Thirdparty Updates*

### Closed JIRA Issues

Table 2.32. 7.5.16

Key	Type	Summary	Status
CMS-2039	Bug	AuroraESite search results for CMS Content contain mixed case site names and are broken	Fixed
CMS-1982	Bug	Edit user details - cannot change the password	Fixed
CMS-1977	Bug	PDPs contain broken fragments	Not a bug
CMS-1976	Bug	Product Teasers Layout is broken	Fixed
CMS-1972	Bug	Massive creation of new previewTokens in fragment scenario due to elapsing preview time	Fixed
CMS-1969	Bug	Studio e-Commerce library catalog thumbnails broken	Fixed
CMS-1961	Bug	Add to cart does not work when the first product is added	Fixed
CMS-1921	Bug	Product Prices not shown when rendering products from IBM Workspace	Fixed
CMS-1895	Change	Update to Solr 4.10.0	Fixed
CMS-1874	Bug	Image transformation fails for certain images with <code>preserveMetadata=true</code>	Fixed
CMS-1865	Bug	Unable To Register	Fixed

Key	Type	Summary	Status
CMS-1851 (36641)	Bug	File name ignored in Upload dialog	Fixed
CMS-1789	Bug	Settings of current External Page / LiveContextNavigation are ignored, parent settings are used	Fixed
CMS-1739	Bug	Empty Collection with viewtype unboxed breaks preview CAE	Fixed
CMS-1721	Bug	Removing Items From Cart Doesn't Work	Fixed
CMS-1657 (36406)	Bug	Ext.USE_NATIVE_JSON is evaluated too late and not used	Fixed
CMS-1648	Bug	Unescaped U+2028 character in JSON breaks Studio	Fixed
CMS-1576	Bug	Only One Item in Preview of Collections with Viewtype Unboxed	Fixed
CMS-1544	Bug	Preview not cleared when last review has been moderated	Fixed
CMS-1538	Feature	LC2: Studio - Catalog View: Allow sorting categories alphabetically	Fixed
CMS-968	Bug	Unable to Render Channels as Teaser Fragments	Fixed
CMS-861	Change	Focus input fields in richtext paste dialogs	Fixed
CMS-411	Bug	Imagemetadata is lost when using Content Write Interceptor to reduce image size	Fixed
CMS-315	Bug	When quoting comments the closing "quote" tag is removed	Fixed

## 2.2.31 Release 7.5.15

This chapter contains all changes made in Release 7.5.15 of *CoreMedia Digital Experience Platform 8*.

Release 7.5.15 contains the following CoreMedia modules:

- CoreMedia Blueprint
- CoreMedia CMS
- CoreMedia Studio
- CoreMedia LiveContext for IBM WebSphere Commerce

→ CoreMedia Elastic Social

In addition, *CoreMedia DXP 8* uses the following tooling:

Product	Key	Version
CoreMedia Application Maven Plugin	APPPLUGIN	2.7.9
CoreMedia Project Maven Extension	PROJEXT	1.0.5

Table 2.33. Tooling of CoreMedia DXP 8

## CoreMedia CMS Improvements

### Changes

→ The *Http Cache* component and the value cache of the *Persistent Cache* (aka *PersistentValueCache*) have been removed with this release.

*Removed Http Cache and Persistent Value Cache*

→ Removed deprecated class `com.coremedia.cap.persistentcache.ReleasingPersistentCacheKey`.

*API changes*

Removed packages `com.coremedia.cap.httpcache`, `com.coremedia.cap.httpcache.persistent` and `com.coremedia.cap.persistentcache.valuecache`.

→ Replaced `org.apache.commons.logging.Log` with `org.slf4j.Logger` in

*Replaced Apache Commons Logging with SLF4J in public API*

→ protected method `getLog` of `com.coremedia.objectservicer.web.links.AbstractLinkScheme`

→ protected method `getLogger` of `com.coremedia.cap.persistentcache.proactive.BaseReceiver`

→ protected method `getLog` of `com.coremedia.springframework.customizer.BeanCustomizer`

→ package-private method `setLog` of `com.coremedia.cap.common.pool.CapSessionPool`

→ public methods `getLog` and `setLog` of `com.coremedia.cap.common.pool.CapSessionPoolImpl`

→ protected field `log` and public method `setLog` of `com.coremedia.server.media.ChunkingBlobStore`

→ protected method `getLog` of `com.coremedia.watchdog.CodeConverter`

- public static field `log` of `com.coremedia.workflow.common.Common`
- protected static field `log` of `com.coremedia.cap.content.ContentHelper`
- package-private static field `log` of `com.coremedia.cap.content.ContentRepository`
- protected method `getLogger` of `com.coremedia.easyedit.taglib.ContextInfoTag`
- protected method `getLogger` of `com.coremedia.objectservlet.web.EntryController`
- protected field `log` of `hox.corem.server.media.FileStore`
- protected method `getLogger` of `com.coremedia.easyedit.taglib.HeadTag`
- protected field `log` of `hox.corem.server.media.LoggingMediaStoreSelector`
- protected method `getLogger` of `com.coremedia.easyedit.taglib.PbeTag`
- package-private field `log` of `com.coremedia.cap.workflow.plugin.PerformersPolicy`
- protected field `log` of `hox.corem.server.media.PostgreSQLBlobStore`
- protected method `getLog` of `com.coremedia.cap.persistent.cache.ProcessingCallbackBase`
- protected static field `log` of `com.coremedia.cap.content.publication.PublicationHelper`
- protected method `getLog` of `com.coremedia.objectservlet.view.RichtextToHtmlFilterFactory`
- package-private static field `log` of `com.coremedia.cap.user.UserRepository`
- public method `getLog` of `com.coremedia.workflow.WfClient`
- package-private field `LOG` of `com.coremedia.cap.workflow.WorkflowRepository`

In addition made protected methods `getOut` and `enableOutVerbose` deprecated in `com.coremedia.cmdline.AbstractUAPIClient`, use new methods `getLogger` and `enableVerboseLogging` instead.

- The property `sql.store.dbProperties` in CoreMedia component's SQL config files `sql.properties` is now optional and will be determined from database's metadata. This also affects the deployment properties of the Blueprint.

*SQL Configuration for Content Servers and Workflow Server: `sql.store.dbProperties` is now optional*

## CoreMedia Studio Improvements

## CoreMedia Elastic Social Improvements

### API Changes

- The `com.coremedia.elastic.social.impl.complaints.ComplaintService` now allows to add and remove complaints not only for a `com.coremedia.elastic.core.api.models.Model`, but to all target types supported by Elastic Social. The `lastComplaintDate` is only modified when the target is a `com.coremedia.elastic.core.api.models.Model`.

*Minor change for the interface `com.coremedia.elastic.social.impl.complaints.ComplaintService`*

## CoreMedia LiveContext for IBM WebSphere Commerce Improvements

- The prefix for search term external references has changed from "`cm-searchTerm:`" to "`cm-searchterm:`". The prefix must always be lower-case now.

*ExternalReferenceResolver changes*

The prefix for segment path external references has not changed but case-variations are not accepted any longer. The prefix "`cm-segmentpath:`" must always be lower-case now.

The external reference resolver for search terms has been changed to use the Solr search engine internally to provide better performance. It returns content whose `keywords` search engine field contains the given search term (or a variation in case). Furthermore, it does not search below the folder `Navigation/Fragments/Search Landing Pages` anymore but below the navigation segment path `<root segment>/livecontext-fragments-hidden-page`.

For more details on ExternalReferenceResolvers, see the [CoreMedia LiveContext for IBM WebSphere Commerce Manual], section "The CoreMedia Include Tag".



## CoreMedia Project Improvements

### CoreMedia Blueprint Improvements

- The property `sql.store.dbProperties` is now optional and will be determined from database metadata. This also affects the deployment properties of the Blueprint: The following properties in the files `preconfigure.properties` and `postconfigure.properties` in module packages are no longer required:

- `CMS_DB_PROPERTIES`

- `MLS_DB_PROPERTIES`

- `RLS_DB_PROPERTIES`

- `WFS_DB_PROPERTIES`.

The following properties in the file `default-deployment.properties` in module packages are no longer required:

- `configure.CMS_DB_PROPERTIES`

- `configure.MLS_DB_PROPERTIES`

- `configure.RLS_DB_PROPERTIES`

- `configure.WFS_DB_PROPERTIES`.

The following deployment token defined in file `postconfigure.properties` are no longer required:

- `@configure.CMS_DB_PROPERTIES@`

- `@configure.MLS_DB_PROPERTIES@`

- `@configure.RLS_DB_PROPERTIES@`

- `@configure.WFS_DB_PROPERTIES@`.

*SQL Configuration for Content servers and Workflowserver: `sql.store.dbProperties` is now optional*

### Known Issues

- CMS-1898: Schemaaccess Broken. Schemaaccess servertool still requires `sql.store.dbProperties` in file `sql.properties` despite the fact that this property is obsolete (see above). Reintroduce this property in the servertool's `sql.properties` file in order to make the schemaaccess servertool run. This issue is fixed in the next release.

*Known Issues*

## Closed JIRA Issues

Table 2.34. 7.5.15

Key	Type	Summary	Status
CMS-1834	Bug	Preview Token added to links even when I'm not in the test context	Fixed
CMS-1732	Change	Cache Search Landing Page Resolving	Fixed
CMS-1729	Task	Enhance Performance of SLP Lookup	Fixed
CMS-1728	Task	Document SearchTermExternalReferenceResolver	Fixed
CMS-1726	Bug	External Page: Wrong Icon	Fixed
CMS-1674	Bug	Wrong icon used for Pages	Fixed
CMS-1651	Bug	Search suggestions don't work in content-led scenario	Fixed
CMS-1538	Feature	LC2: Studio - Catalog View: Allow sorting categories alphabetically	Fixed
CMS-1526	Bug	Pagination For Perfect Chef Search Result Page	Fixed
CMS-1396	Bug	Search redirect from PC to WCS throws exception	Fixed
CMS-1293	Change	Remove necessity to configure database type	Fixed

### 2.2.32 Release 7.5.14

This chapter contains all changes made in Release 7.5.14 of *CoreMedia Digital Experience Platform 8*.

Release 7.5.14 contains the following CoreMedia modules:

- CoreMedia Blueprint
- CoreMedia CMS
- CoreMedia Studio
- CoreMedia LiveContext for IBM WebSphere Commerce
- CoreMedia Elastic Social

In addition, *CoreMedia DXP 8* uses the following tooling:

Table 2.35. Tooling of CoreMedia DXP 8

Product	Key	Version
CoreMedia Application Maven Plugin	APPPLUGIN	2.7.9
CoreMedia Project Maven Extension	PROJEXT	1.0.5

## CoreMedia CMS Improvements

### Enhancements

- Server Export can now report different warnings and fail if any of those warnings occur. The following new command line options are available:

`--lint (all|none|linkmissing|linkignored|translationstate) (default: linkignored)` Triggers warnings. The default is what the default was before. `linkmissing` might assist to detect when an export is incomplete regarding links. `translationstate` will report on invalid translation states especially those which cannot be rebuild in exactly the same state after serverimport.

`--fail-on-warning` Fails the export when one of the above warnings occurs.

`--fail-at-end` Collect all warnings and only fail at the end.

*Server Export*

### Changes

- Apache Solr has been updated to version 4.9.0.

*Third-party Updates*

## CoreMedia Studio Improvements

## CoreMedia Elastic Social Improvements

## CoreMedia LiveContext for IBM WebSphere Commerce Improvements

- IBM WebSphere Commerce can now receive fragments from the preview and the live CAE to enable editors to preview pages with fragments. Thereby the `web.xml` in the WebSphere Commerce must be updated. The context parameter `com.coremedia.fragmentConnector.fragmentBaseUrl` has to be removed and two context parameters have to be added:

*IBM WebSphere Commerce can receive fragments from different CAEs for different contexts*

```
com.coremedia.fragmentConnector.previewCaeHost
com.coremedia.fragmentConnector.liveCaeHost.
```

and

## CoreMedia Project Improvements

## CoreMedia Blueprint Improvements

## Closed JIRA Issues

Table 2.36. 7.5.14

Key	Type	Summary	Status
CMS-1785	Bug	e-Marketing Spot Is Offered For Download in Studio	Fixed
CMS-1759	Bug	p13n testpersona not used when embedding eMarketing Spot in commerce-led scenario	Fixed
CMS-1731	Bug	Products In German Lack Attributes	Fixed
CMS-1725	Bug	Cart Quantities Don't Match	Fixed
CMS-1718	Bug	Zoom Effect Overlaps Text	Fixed
CMS-1704	Bug	Broken Fragments must not break a WCS page	Fixed
CMS-1687	Change	QuickCreate Dialog should interpret "enter" as "OK"	Fixed
CMS-1540	Bug	Unable to preview Ajax fragments (Marketingspots) with preview URL	Cannot Reproduce
CMS-1532	Bug	Invalid HTML	Fixed
CMS-1522	Bug	Marketing E-Spots not rendered correctly	Fixed
CMS-1421	Bug	Product And Category Images Lack "Zoom" Effect	Fixed
CMS-1366	Bug	AJP Port conflict when starting Studio and CAE locally.	Fixed
CMS-1360	Bug	Content-Link Building in WCS Duplicates Segments	Cannot Reproduce
CMS-966	Bug	Rendering Breaks For Deleted Products	Fixed

### 2.2.33 Release 7.5.13

This chapter contains all changes made in Release 7.5.13 of *CoreMedia Digital Experience Platform 8*.

Release 7.5.13 contains the following CoreMedia modules:

- CoreMedia Blueprint
- CoreMedia CMS
- CoreMedia Studio
- CoreMedia LiveContext for IBM WebSphere Commerce
- CoreMedia Elastic Social

In addition, *CoreMedia DXP 8* uses the following tooling:

Table 2.37. Tooling of CoreMedia DXP 8

Product	Key	Version
CoreMedia Application Maven Plugin	APPPLUGIN	2.7.9
CoreMedia Project Maven Extension	PROJEXT	1.0.5

## CoreMedia CMS Improvements

## CoreMedia Studio Improvements

## CoreMedia Elastic Social Improvements

## CoreMedia LiveContext for IBM WebSphere Commerce Improvements

### Enhancements

- The class `com.coremedia.livecontext.fragment.resolver.SegmentPathResolver` was changed to not perform a possibly expensive content query anymore to find a `CMLinkable` by URI segment. Instead it uses a search engine query via the newly introduced `SegmentResolver` service. To this end, all `CMLinkable` documents need to be indexed by the *CAE Feeder*. See section "CAE Feeder and Solr configuration changed to index CMLinkable URL segments" below for more information on necessary *CAE Feeder* and Solr configuration changes.

*External Reference  
Segment Path Resolution*

## CoreMedia Project Improvements

### CoreMedia Blueprint Improvements

#### Enhancements

- Added a new extension point `caefeeder` for the *CAE Feeder* application for the *CoreMedia Project Maven Extension* mechanism. To this end, the Maven module `caefeeder-extension-dependencies` has been added in `modules/extension-config`.
- The *CAE Feeder* configuration property `feeder.contentSelector.contentTypeTypes` was changed to index all documents of type `CMLinkable` (including subtypes). In earlier releases only the following types were indexed by default: `CMArticle`, `CMAudio`, `CMDownload`, `CMGallery`, `CMPicture`, `CMTaxonomy` and `CMVideo`.

*CAE Feeder Extension Point*

*CAE Feeder and Solr configuration changed to index CMLinkable URL segments*

Furthermore, the *CAE Feeder* is now configured to set the newly introduced Apache Solr index fields `segment` and `contexts` to the URL segment and to the contexts of a `CMLinkable`, respectively. The new fields have been added to the Apache Solr configuration file `schema.xml` and to the enum `com.coremedia.blueprint.cae.search.SearchConstants.FIELDS`

These changes make it possible to query the search engine for a `CMLinkable` with given URL segment and context. This capability is now available as Spring bean `segmentResolver` implementing the new interface `com.coremedia.blueprint.cae.search.SegmentResolver`.

Note that the *CAE Feeder* needs to be started with an empty index and database to index all `CMLinkable` documents with the newly introduced index fields.

#### Deployment and Virtualization

- The installation of the CSS Importer has been moved from the `content_management_server` recipe to a new `css_importer` recipe in the `coremedia` cookbook. Include the `css_importer` recipe after the `content_management_server` recipe in any run list to restore the former behavior.

The default recipe of the `coremedia` cookbook will now set the file handle limit for the `coremedia` user. Therefore, the `ulimit` cookbook has been added and the `coremedia` cookbook now depends on the `ulimit` cookbook. To configure the limit, a new attribute `coremedia.filehandle_limit` has been added with a default value of 25000.

## Known Issues

- ➔ Removing items from cart does not work
- ➔ Displaying and refresh issues with cart in content-led scenarios
- ➔ Problems with sending of password reset emails

*Known Issues*

## Closed JIRA Issues

Table 2.38. 7.5.13

Key	Type	Summary	Status
CMS-1670	Bug	Substruct loses its properties when a sibling property is added or removed	Fixed
CMS-1662	Bug	Missing PDE icon for ExternalPage	Fixed
CMS-1624	Bug	Hidden in Navigation does not prevent opening a gray box	Fixed
CMS-1577	Bug	Collection/Query List: First Element of Tiles Layout Highlighted Viewtype is Broken in Fragment Preview	Fixed
CMS-1554	Bug	Studio erroneously reports concurrent editing	Fixed
CMS-1551	Feature	Add CoreMedia Project Maven Extension Point for CAE Feeder	Fixed
CMS-1279	Bug	LiveContextExternalChannel#getSite() claims to be @Nonnull, even though it isn't	Fixed
CMS-1176	Bug	Homepage eSpot not localized to German	Fixed
CMS-1118 (35814)	Bug	"Use Original Image" checkbox is cleared when changing image crops	Fixed
CMS-810	Bug	Image Editor - Crops are not updated on revert	Fixed

## 2.2.34 Release 7.5.12

This chapter contains all changes made in Release 7.5.12 of *CoreMedia Digital Experience Platform 8*.

Release 7.5.12 contains the following CoreMedia modules:

- ➔ CoreMedia Blueprint
- ➔ CoreMedia CMS

- CoreMedia Studio
- CoreMedia LiveContext for IBM WebSphere Commerce
- CoreMedia Elastic Social

In addition, *CoreMedia DXP 8* uses the following tooling:

Product	Key	Version
CoreMedia Application Maven Plugin	APPPLUGIN	2.7.9
CoreMedia Project Maven Extension	PROJEXT	1.0.5

Table 2.39. Tooling of CoreMedia DXP 8

## CoreMedia CMS Improvements

### Changes

- The *CAE Feeder* configuration property `applicationname` has changed from value `proactiveengine` to `caefeeder` (fixes bug CMS-1436). Because of this you must execute the following SQL statement before starting the *CAE Feeder* with a database that was created by an earlier version. No action is necessary when the *CAE Feeder* is started with an empty database.

*CAE Feeder database change*

```
UPDATE pcproperties
SET content = 'caefeeder'
WHERE property =
'com.coremedia.amaro.persistentcache.propertystore.PropertyVerifier-application';
```

- The type of some database columns or database sequences used by *Proactive Engine* and *CAE Feeder* applications has changed from `INT` to `BIGINT` for MySQL, IBM DB2 and Microsoft SQL Server databases. PostgreSQL and Oracle databases are not affected. Have a look at the Supported Environments manual for supported databases.

*Proactive Engine / CAE Feeder database change*

This change avoids future database errors with long running applications and high update frequency (fixes bug CMS-1505).

The change is automatically applied when the *Proactive Engine* or *CAE Feeder* application is started with an empty database. Existing databases continue to work with this release but we recommend to adapt the database definitions to avoid future problems. To this end, shut down the *Proactive Engine* or *CAE Feeder* application and execute the following SQL statements - depending on the type of database:

For MySQL:



```
ALTER TABLE ppckeys
CHANGE COLUMN validated validated BIGINT DEFAULT 0,
CHANGE COLUMN removed removed BIGINT DEFAULT 0,
CHANGE COLUMN lastmodified lastmodified BIGINT NOT NULL;

ALTER TABLE ppcevents
CHANGE COLUMN acknowledged acknowledged BIGINT DEFAULT 0;
```

For IBM DB2:

```
SELECT max(lastmodified)+1 FROM ppckeys;

DROP SEQUENCE s_ppckeys_lastmodified;

-- replace <next value> with the result of the first statement
CREATE SEQUENCE s_ppckeys_lastmodified AS BIGINT ORDER START
WITH <next value>;
```

For Microsoft SQL Server:

The columns `validated`, `removed`, `lastmodified` of table `ppckeys` and the column `acknowledged` of table `ppcevents` should be changed from data type `INT` to `BIGINT`. Sadly we cannot provide simple `ALTER TABLE` statements because column type changes are not possible with existing column constraints such as default values.

Alternatively you can either start with an empty database to create new tables with `BIGINT` columns or just keep the current database schema. You will not run into problems with the existing `INT` columns as long as the value of `select max(lastmodified) from ppckeys` is much smaller than 2147483647.

## CoreMedia Studio Improvements

- When starting a Publication or Translation Workflow, users can now chose whether the content items should be removed from "My Edited Content". This allows to use the same My Edited Content set for publication as well as translation. It also supports scenarios with an unpublished master site.

Content items are no longer automatically removed from "My Edited Content" when they reach the published state through other means.

- The deprecated class `com.coremedia.rest.cap.blob.BlobUploadService` has been removed. Use `HTML5 FormData` object on client side and Jersey's `FormDataParam` on server side instead.

*Remove from My Edited Contents*

*API changes*

## CoreMedia Elastic Social Improvements

### CoreMedia LiveContext for IBM WebSphere Commerce Improvements

#### Enhancements

- User Segments and Marketing Spots supporting Studio Event Push on invalidation. Please note to install the associated database trigger on your IBM WCS Installation. For details see the section Event based Cache Invalidation in the [Live Context Manual].
- Store Configuration can be configured in Spring or via settings configuration in Studio. Store Configuration via Spring for better support of multi environment deployment scenarios. For details see the section Configuration of an IBM WCS Shop in the [Live Context Manual].

*Studio Event Push for e-Commerce Objects*

*Store Configuration*

Tenant specific property replacement to replace placeholder tokens within your configured store urls etc. with values defined in the current StoreContext at runtime. For details see the section Configuration of an IBM WCS Shop in the [Live Context Manual].

## CoreMedia Project Improvements

### CoreMedia Blueprint Improvements

- The CAE PageHandler supports vanity and channel URLs that end with a dash and a numeric value such as `perfectchef/magazine-spring/spring-salads-2014` now. Before this change such trailing numbers were always interpreted as document IDs and requests were answered with "404 Not Found" if no CMLinkable with matching navigation segment path, segment and document ID was found. The PageHandler tries to resolve such URLs now in the following order:
  1. render the target of a matching vanity URL definition
  2. render the CMChannel page if the path equals the navigation segment path to that channel (i.e. the segment property of the channel ends with a dash and a number)
  3. render the page for the CMLinkable with matching navigation segment path, segment and numeric document ID

*PageHandler*

As part of this change, the method signatures `handleRequest` of class `com.coremedia.blueprint.cae.handlers.PageHandler` and `handleRequestInternal` of `com.coremedia.blueprint.cae.handlers.DefaultPageHandler` were changed and take an additional `int` parameter now.

This change fixes bug CMS-352 ("Numbers in page segments break CAE").

## Known Issues

- Uploading XLIFF files via *Create content / Upload files* fails. There is no workaround.
- Current release is limited to English edition of Perfect Chef only. There is no alternative language version of Perfect Chef available in WCS. Workaround is not yet available.
- The redirect that is executed after a successful registration is broken. To fix it manually, replace the redirect variable in line 17 of the template "Registration.continueCheckout.ftl" with the following URL: `https://your.web-sphere.commerce.domain/webapp/wcs/stores/servlet/OrderShippingBillingView?shipmentType=single&catalogId=10051&langId=-1&storeId=10851`. Make sure that you apply the correct store and catalog id.

*XLIFF Upload broken*

*Perfect Chef limited to English*

*Registration redirect broken in content-led scenario*

## Closed JIRA Issues

Table 2.40. 7.5.12

Key	Type	Summary	Status
CMS-1614	Bug	Sitemap depth setting ignored	Fixed
CMS-1607	Bug	Registration on shopping cart page leads to "Resource not Found"	Fixed
CMS-1603	Bug	Quick Reference Flow: Duplicate results when searching for "summer dresses" on the Aurora site	Fixed
CMS-1560	Bug	Blueprint workspace test failures with Java 7u65	Fixed
CMS-1553	Task	Update masonry	Fixed
CMS-1546	Bug	Media Site CMVideo template pollutes cae log with exceptions	Fixed
CMS-1543	Bug	Check fragment include for products	Fixed
CMS-1535 (36180)	Bug	CAE Feeder massive performance degradation due to configuration error for "proactiveengine(.senders).evaluators"	Fixed
CMS-1533	Bug	Commerce led: Linkable in externalRef is never rendered	Fixed
CMS-1530	Task	Move CoreMedia commerce pages and layout into separate folders	Fixed

Key	Type	Summary	Status
CMS-1527	Bug	Aurora search shows no CoreMedia results	Duplicate
CMS-1505 (36274)	Bug	CAE Feeder / Proactive Engine timestamp number exceeds range in database	Fixed
CMS-1502	Bug	Headline for finished (publication?) workflows is not formatted	Fixed
CMS-1500	Bug	ImageMap in 2column layout: Product info overlays are too large	Fixed
CMS-1497	Bug	LC2: Studio only shows some categories, I need all	Fixed
CMS-1496	Bug	Reduce viewtypes for MarketingSpots	Fixed
CMS-1491	Bug	Edit profile page broken	Fixed
CMS-1488	Bug	Product LinkList does not work for quick create dialog in Studio	Fixed
CMS-1487	Bug	SLP from commerce led scenario points to PC, not Aurora	Fixed
CMS-1480	Bug	Unable to change Image Map overlay theme	Fixed
CMS-1471	Feature	Make sending a registration mail configurable by property	Fixed
CMS-1460	Bug	Indexing Of Marketing Data Not Triggered Automatically	Fixed
CMS-1456	Change	ECommerce Service LoginServiceImpl must be enabled to handle encrypted service user pw	Fixed
CMS-1451	Bug	Related Content On Augmented PDP Appears Broken In Chrome	Fixed
CMS-1450	Bug	Wrong Aspect Ratio On Video-based Augmentation	Fixed
CMS-1444	Bug	Open WCS Management in Apps menu does not work	Fixed
CMS-1436 (36180)	Bug	CAE Feeder configuration error for "applicationname" causes migration error	Fixed
CMS-1424	Bug	Product Category Teaser's Image Margin Too Small	Fixed
CMS-1422	Bug	Social Network Links Link To Wrong Locale	Fixed
CMS-1410	Bug	User Items/Favorites Toolbar: Double escaping in Drag-Drop-Hints	Fixed

Key	Type	Summary	Status
CMS-1399	Bug	StoreLocators is rendered with wrong store id	Fixed
CMS-1370	Bug	SLP For Summer Dresses Lacks Image Map	Fixed
CMS-1369	Bug	Related Content Video is broken	Fixed
CMS-1367 (36122)	Bug	Media Blueprint: Flash Fallback of Mediaelement Videoplayer not working in IE 8 and IE 9	Fixed
CMS-1361	Bug	WCS Category Thumbnail URLs do not refer to the correct AssetStore	Fixed
CMS-1359	Bug	Link on product teaser in richtext does not link directly to PDP	Fixed
CMS-1295	Bug	Cannot access Search Field in "My Content Sets" (IE9, Chrome)	Fixed
CMS-1294	Bug	My Content Sets: Missing gray border (compared to other Control Room Elements)	Fixed
CMS-1283	Feature	Add Spinner for Images until image is loaded	Fixed
CMS-1268	Bug	Elastic Social Struct Settings enable/disable are ignored	Fixed
CMS-1246	Bug	Validator Tooltip for e-Marketing Spot exceeds Tooltip Box	Fixed
CMS-1243	Bug	Fix content for SLPs on Perfect Chef site	Fixed
CMS-1242	Bug	Logout link broken when session is already expired	Won't Fix
CMS-1241	Bug	'Forgot Password' link looks awkward	Fixed
CMS-1239	Bug	SLPs do not show the blue commerce preview info area	Won't Fix
CMS-1212	Bug	External Preview does not work	Fixed
CMS-1185	Bug	Images in Preview are too large	Fixed
CMS-1173	Bug	Product teaser link not rendered correctly when linking a product teaser into RichText	Duplicate
CMS-1163	Bug	Host configuration not documented	Fixed
CMS-1138	Bug	Nearly impossible to type into Persona String Property Fields	Fixed
CMS-1120	Bug	Resetting preview date (time travel) still shows last cached preview date	Fixed

Key	Type	Summary	Status
CMS-1119	Bug	Preview Time Travel only works reliably in single-user mode (race condition)	Fixed
CMS-1110	Bug	CoreMedia widget not enabled in eSites	Fixed
CMS-1097	Bug	Fix template according to fragment view-names	Fixed
CMS-1072	Bug	Cannot (or can hardly) edit URL segments at the beginning	Fixed
CMS-905	Bug	Order of image editor tabs does not match tabs of preview	Fixed
CMS-716 (34925)	Bug	Complete documentation for AbstractContentBean	Fixed
CMS-352 (35633)	Bug	Numbers in page segments break CAE	Fixed
CMS-95 (33727)	Change	JavaDoc of UrlBlob#isPersistentUrl is unclear	Fixed

## 2.2.35 Release 7.5.11

This chapter contains all changes made in Release 7.5.11 of *CoreMedia Digital Experience Platform 8*.

Release 7.5.11 contains the following CoreMedia modules:

- CoreMedia Blueprint
- CoreMedia CMS
- CoreMedia Studio
- CoreMedia LiveContext for IBM WebSphere Commerce
- CoreMedia Elastic Social

In addition, *CoreMedia DXP 8* uses the following tooling:

Product	Key	Version
CoreMedia Application Maven Plugin	APPPLUGIN	2.7.9
CoreMedia Project Maven Extension	PROJEXT	1.0.5

Table 2.41. Tooling of CoreMedia DXP 8

## CoreMedia Blueprint Improvements

### Fixes

#### LinkEmbedFilter

- The LinkEmbedFilter was only suitable for certain (and not documented in detail) preconditions concerning the elements of the outer and the inner HTML and thus produced invalid HTML in many cases. It has therefore undergone a major change to make it more flexible.

The appropriate behavior of the LinkEmbedFilter depends on the HTML snippet created by the view for the bean to be embedded. Since the LinkEmbedFilter is not aware of particular templates, it cannot automatically determine whether the snippet to be embedded will be a block element or a flow element. The hasBlockLevelView method reflects this information for the Blueprint's default templates. If you change the templates of the asRichTextEmbed view, you must also adjust this method accordingly.

#### Image Preview Setting

- A new IntProperty `maxPreviewImageWidth` is added to the `ResponsiveImageSettings`. It defines the max width of the images, displayed in the *CoreMedia Studio's* preview. The default value is 400px.

## CoreMedia CMS Improvements

### Enhancements

- In order to bundle information on content located in a site you can now retrieve a special view on the content from the SitesService: the `ContentSiteAspect`. This aspect can be queried for its master, its master's version and for example for its translation state.

*Introduce ContentSiteAspect*

Together with this change fallback strategies have been implemented to deal with content items which do not fulfill some requirements like providing master and master version information. Fallback strategies are to determine the master by its path or to determine the locale not only by a document property but as fallback also from the site indicator document.

### Changes

- Queries in the SitesService related to a content item in a site have now been moved to the newly introduced `ContentSiteAspect`. This includes:
  - `Site getSiteFor(Content)`

*SitesService: Moved content queries*

replaced in `ContentSiteAspect's Site getSite()`.

- `String getDerivedPathForSite(Content, Site)`  
replaced in `ContentSiteAspect`'s `String getAbsolutePathInSite(Site)`.
- `Content getDerivedContentForSite(String)`  
replaced in `ContentSiteAspect`'s `Content getDirectlyDerived(Site)`.
- `boolean isLocalizable(Content)`  
replaced in `ContentSiteAspect`'s `boolean isLocalizable()`.
- `Set<Content> getVariants(Content)`  
replaced in `ContentSiteAspect`'s `Set<Content> getVariants()`.
- `Map<Locale,Content> getVariantsByLocale(Content)`  
replaced in `ContentSiteAspect`'s `Map<Locale,Content> getVariantsByLocale()`.
- `Locale getLocale(Content)`  
replaced in `ContentSiteAspect`'s `Locale getLocale()`.
- `boolean isPartOf(Site,Content)`  
replaced in `ContentSiteAspect`'s `boolean isPartOf(Site)`.

- Some queries in the `SitesService` related to sites have been removed and must be retrieved from the `Site` object:
  - `Content getSiteIndicator(String)`
  - `Content getSiteRootDocument(String)`
  - `Content getSiteRootFolder(String)`

*SitesService: Removed site queries*

- Server Ex-/Import have been enhanced to rebuild the translation state and thus especially the referenced master version. A special version number "0" has been introduced which will result in derived contents displayed in CoreMedia Studio as being "not-up-to-date". Exporting content with verbose flag will output the actual translation state.

*Server Ex-/Import: Translation State*

*Background Information:* Server Ex-/Import do not export versions. Thus, it is not possible to restore a versioned link (represented by master link and master version) if the master has a new version meanwhile. Version "0" provides a best-effort solution in this case.

## CoreMedia Studio Improvements

- The Library can now be docked in the same place where the Control Room shows up, thus hiding the Control Room when docked. Vice versa the Control Room can now float in its own window just like the Library. To be precise

*Reworked docking behavior of Library*



Control Room and Library now have exactly the same behavior regarding docking / floating. Additionally a second dock area is available at the right side next to the Actions Toolbar. The size and position of both components are persisted and get restored on Studio startup.

- Corresponding with the Server Ex-/Import change CoreMedia Studio interprets Version "0" (and actually any destroyed version) as *not up-to-date*. Mind that only a global warning on outdated content can be reported as the actually changed properties cannot be determined.

*Translation State for Version "0"*

## CoreMedia Elastic Social Improvements

### Changes

- Added the property "es.profile.changes.mails.enabled" to define if mails are send when a user profile was changed during moderation in the Studio. Changed the behavior, that now no mails will be send if the profile of a blocked or ignored user is changed during moderation.

## CoreMedia LiveContext for IBM WebSphere Commerce Improvements

### CoreMedia Project Improvements

### CoreMedia Blueprint Improvements

#### Deployment and Virtualization

- A new listener `com.coremedia.tomcat.FailedContextShutdownServerListener` will be registered to all tomcat contexts. It is added to the `context.xml` to glue the webapps lifecycle with the lifecycle of the `server` component in order to provide a reliable status for the OS service handle. The listener shuts down a tomcat instance if any webapps context passes the lifecycle state `FAILED`.

As a result of the above listener *chef* will restart tomcat if a webapp fails and therefore can keep its idempotency promise.

A new listener `com.coremedia.tomcat.CleanupTmpOnStartupListener` will be registered to the `server` component. It is added in the `server.xml` of tomcat to clean up temporary files at startup time.

The module `coremedia-tomcat-orb` has been renamed to `coremedia-tomcat` and additionally contains now both new listeners.

**Changes for Document Type Model**

- The content types `CMSymbol`, `CMViewtype`, `CMSegment` and `CMUserProfile` are now `CMLocalized`. They were `CMObject` before. As a result the following changes have been applied:
  - The document types have the additional properties `master`, `masterVersion` and `locale`
  - The parent of `CMSymbol`, `CMViewtype`, `CMSegment` and `CMUserProfile` was changed to `abstractLocalized-blueprint-doctypes` in the `blueprint-contentbeans.xml`.
  - The contentbeans have been adapted.
  - The `CMSymbolForm`, `CMViewtypeForm`, `CMSegmentForm` and `CMPersonaForm` have been extended by the `MultiLanguageDocumentForm`.

*CMSymbol, CMViewtype, CMSegment and CMUserProfile inherit CMLocalized*

**Closed JIRA Issues**

Table 2.42. 7.5.11

Key	Type	Summary	Status
CMS-1498	Bug	PC search/cart link broken in automatic WCS deployment pipelines	Fixed
CMS-1489	Bug	No Studio i18n for placements "tab" and "main"	Fixed
CMS-1476	Bug	DND inside ContentSet removes content	Fixed
CMS-1472	Bug	DB2 Configuration is required during installation	Fixed
CMS-1467 (35864)	Bug	Remove Redundant Empty P-Tags From Markup	Fixed
CMS-1464	Bug	Studio: Failed IBM WCS Rest Service login prints password to log	Fixed
CMS-1462	Bug	RemoteBean does not fire on Loaded Event, ValueExpressions might not re-evaluate	Fixed
CMS-1459	Bug	Shopping Cart View Displays Weird Data	Fixed
CMS-1452	Bug	Products In Aurora Lack Attributes	Fixed
CMS-1439	Bug	ES Dynamic List for comments not working	Fixed
CMS-1430	Bug	Create new picture cropping component broken	Fixed
CMS-1420	Bug	WCS Category Links With Umlauts Cause "Generic Error"	Fixed

Key	Type	Summary	Status
CMS-1419	Bug	Product Links On German PC Site Lead To "Generic Error"	Fixed
CMS-1406	Bug	CoreMedia Content Widget Image is not transparent	Fixed
CMS-1404	Bug	Detail view for pending translation workflows empty	Fixed
CMS-1394	Bug	PC login does not support email, only login name	Fixed
CMS-1387	Bug	Search With Suggestions In Library in IE 9 unusable	Fixed
CMS-1368	Bug	P13n and Elastic Social License Warnings overlap each other	Fixed
CMS-1365	Bug	Change icon of placement extended tooltip	Fixed
CMS-1358	Bug	Wrong link for articles on a Perfect Chef Category Page	Fixed
CMS-1311	Bug	Layout of Reset Password page is broken	Fixed
CMS-1301	Bug	robots.txt is delivered as download	Fixed
CMS-1261	Bug	Wrong Product Image Urls	Fixed
CMS-1226	Bug	Closing docked library makes selected document tab inaccessible	Fixed
CMS-1208	Bug	getAvailabilityInfo returns null for ProductVariant	Fixed
CMS-1192	Bug	No option to create an "External Page" in navigation toolbar	Fixed
CMS-1177	Bug	Product Detail link on German Perfect Chef site broken	Fixed
CMS-1152	Bug	Special keys sometimes ignored in content type combo box	Fixed
CMS-1108 (35781 35879 36015)	Bug	Studio can not upload images with Umlauts	Fixed
CMS-1007	Bug	RelativeDateFilterFieldsetBase produces un-cacheable Solr filter query	Fixed
CMS-969	Bug	ESpot does not render as part of an external page	Fixed

Key	Type	Summary	Status
CMS-622 (34427)	Bug	No stacktrace for JavaScript errors inside EventUtil.invokeLater() blocks	Fixed

## 2.2.36 Release 7.5.10

This chapter contains all changes made in Release 7.5.10 of *CoreMedia Digital Experience Platform 8*.

Release 7.5.10 contains a number of software bug fixes relative to 7.5.9, relevant for production deployment. Unfortunately, it also has a number of known issues in the example content, which makes this release unsuitable for demonstration and experimentation purposes. Nevertheless, CoreMedia decided to make this release available to its customers so you can benefit from fixed bugs. Content issues will be addressed in forthcoming releases.



Release 7.5.10 contains the following CoreMedia modules:

- CoreMedia Blueprint
- CoreMedia CMS
- CoreMedia Studio
- CoreMedia LiveContext for IBM WebSphere Commerce
- CoreMedia Elastic Social

In addition, *CoreMedia DXP 8* uses the following tooling:

Product	Key	Version
CoreMedia Application Maven Plugin	APPPLUGIN	2.7.9
CoreMedia Project Maven Extension	PROJEXT	1.0.5

Table 2.43. Tooling of *CoreMedia DXP 8*

## CoreMedia CMS Improvements

### Changes

CoreMedia Studio, Workflow Server and User Changes web applications can now persist content sets and finished Studio workflows to IBM DB2. Refer to the docu-

*CoreMedia Collaboration Components support IBM DB2*

mentation for the necessary configuration: [CoreMedia Studio Developer Manual], [CoreMedia Operations Basics Manual] and [CoreMedia Workflow Manual].

If you use the RPM post-configuration approach for installation, make sure you add the tokens to the configuration files `cm7-cms-tomcat.properties`, `cm7-studio-tomcat.properties` and `cm7-wfs-tomcat.properties` below `/etc/coremedia:`

```
configure.CONTROL_ROOM_JDBC_DRIVER=com.ibm.db2.jcc.DB2Driver
configure.CONTROL_ROOM_JDBC_URL=<JDBC URL>
configure.CONTROL_ROOM_JDBC_USER=<USER NAME>
configure.CONTROL_ROOM_JDBC_PASSWORD=<PASSWORD>
```

Note that you must define these properties even if you do not use DB2 for persistence of content sets and finished workflows to make post-configuration work. You can use arbitrary values for `<JDBC URL>`, `<USER NAME>` and `<PASSWORD>` in that case.

## CoreMedia Studio Improvements

### Enhancements

- The Studio ActionScript API now allows to compute the referrers of a Content, in a dependency tracked and automatically invalidated fashion. Consult the `asdoc` of `com.coremedia.cap.content.Content#getReferrersWithDescriptor` and its variants for further details.

*Referrers*

## CoreMedia Elastic Social Improvements

### CoreMedia LiveContext for IBM WebSphere Commerce Improvements

- *IBM WCS* customer segments can be used in personalization rules to assemble personalized content. Existing customer segments will be automatically read from *IBM WCS* and proposed for selection.
- When using *IBM WCS* content on CMS pages or fragments, like e-Marketing Spots, the current user is also provided to the *IBM WCS*. Thus, its memberships to segments can taken into account by the *IBM WCS*.

*Personalization with Commerce Customer Segments*

In the other direction, if a content is requested from the CMS to fill a fragment on a *IBM WCS* page the information needed to personalize on base of customer segments is also sent to the CoreMedia CAE.

- Time based preview (time travel) is supported across the two systems. If a preview date is set in *CoreMedia Studio* the date is sent to the *IBM WCS* as an

*WCS Preview Support*

official *IBM WCS* preview token. So it will affect the data received from the *IBM WCS*.

- One or more *IBM WCS* customer segments can be used in test personas to simulate a specific user profile when requesting a personalized page in preview. The customer segments in test personas have the same effect as memberships of a real user. They are also sent as an official *IBM WCS* preview token to the *IBM WCS*
- *CoreMedia Digital Experience Platform 8* supports *IBM WCS 7 Feature Pack 7* and higher. With this release a limited support for *Feature Pack 6* is also guaranteed. All functions that are needed in the e-Commerce-led scenario do work. That means functionality like login and session synchronization is not supported with *FEP 6*.
- Currently there is one known restriction from that rule: all e-Commerce-led scenarios are supported for *FEP 6*; Segments are not read automatically from the *IBM WCS*. The list of known customer segments must be provided with an alternative approach (and have to be implemented in projects).

*WCS 7 Feature Pack 6 Support*

## CoreMedia Project Improvements

## CoreMedia Blueprint Improvements

## Closed JIRA Issues

Table 2.44. 7.5.10

Key	Type	Summary	Status
CMS-1796	Bug	CommerceCacheInvalidationListener sometimes does not wake up again after errors	Fixed
CMS-1390	Bug	Verbose aware Command Line Tools do not log verbose messages	Fixed
CMS-1384	Bug	SessionSynchronizer logs the guest user out	Fixed
CMS-1351	Bug	Unresponsive Browser when opening "Autumn Dishes Article" in Studio - Many Entries in Image Linklist	Fixed
CMS-1344	Bug	e-Marketing spots in Fragment cant be displayed	Fixed
CMS-1343	Bug	RSS Feeds are broken	Fixed
CMS-1342	Bug	Media on Live-CAE redirect to PerfectChef	Fixed
CMS-1337	Bug	Article Studio Preview fails	Fixed
CMS-1335 (36109)	Bug	Wrong commerce URLs for categories and products	Fixed

Key	Type	Summary	Status
CMS-1328	Bug	Repository Template Pattern not configured for site specific templates	Fixed
CMS-1327	Bug	Sitemap Generation broken	Fixed
CMS-1319	Bug	Links in dynamic fragments are rendered relative	Fixed
CMS-1315	Bug	FragmentCommerceContextInterceptor resolves wrong locale/wrong site	Fixed
CMS-1225	Change	Remove "/page" prefix from Handlers and Apache rules	Fixed
CMS-1107	Bug	Studio Device Slider does not work with landscape mode of PerfectChef	Won't Fix
CMS-1020	Feature	Add parameter to Themeporner to import without templates	Fixed
CMS-1000	Bug	Creating a youtube video results in 404	Fixed
CMS-998	Bug	Video preview in Studio has empty "Default View"	Fixed
CMS-989	Bug	Secure Cross-domain AJAX requests	Fixed
CMS-987	Bug	ChannelSegmentValidator: Ignores CAE-Escaping Mechanism in UriPathFormattingHelper	Won't Fix
CMS-934	Bug	Empty library window in Studio when docking twice	Fixed
CMS-924	Bug	Control Room & docked Library might break layout of Studio (size matters...)	Fixed
CMS-892	Bug	Unlocalized Document Type Chooser	Fixed
CMS-689	Bug	Login into perfect chef redirects to the registration activation page	Fixed
CMS-687	Bug	Library/CollectionView: pathInfoLabel/file-path-label is null in IE9	Fixed
CMS-401	Bug	External Library: New Content Dialog: Studio should open the newly created content object, even when the content object has been replaced during import	Fixed
CMS-399	Bug	Descriptor_de is not deleted when using CreateFromTemplate Dialog	Fixed
CMS-326	Bug	The "Activate Persona" Button is available even when the persona is already active	Fixed

## 2.2.37 Release 7.5.9

This chapter contains all changes made in Release 7.5.9 of *CoreMedia Digital Experience Platform 8*.

Release 7.5.9 contains the following CoreMedia modules:

- CoreMedia Blueprint
- CoreMedia CMS
- CoreMedia Studio
- CoreMedia LiveContext for IBM WebSphere Commerce
- CoreMedia Elastic Social

In addition, *CoreMedia DXP 8* uses the following tooling:

Product	Key	Version
CoreMedia Application Maven Plugin	APPPLUGIN	2.7.6
CoreMedia Project Maven Extension	PROJEXT	1.0.5

Table 2.45. Tooling of CoreMedia DXP 8

## CoreMedia CMS Improvements

### Changes

- The MongoDB Java driver has been updated to version 2.12.2.
- Elasticsearch has been updated to version 1.2.1.
- Apache Commons DBCP has been updated to version 2.0.1, which is the correct version for Java 7 applications.
- Special handling of the `masterVersion` property has been added to preserve if a document was up-to-date with its master during export. For details please consult the section about `serverimport` and `serverexport` in the [Live Context Manual].

This change only applies to exported content with the new version of `serverexport`. Old content export data will not be affected.

- All changes to content by a translation workflow are performed by a robot user now. The name of the robot user can be configured in the site model.

*Third-party Updates*

*ServerImport and ServerExport*

*Translation Workflow Robot*



Typically, a new user has to be created for this purpose. For details see the section on groups and rights administration in the [Live Context Manual].

To this end, the translation workflow has been changed and must be uploaded again after restarting the updated *Workflow Server*.

- Deriving a site is now performed in a workflow by the translation workflow robot. The process definition can be found in the module `wfs-tools-application`.

*Derive Site Workflow*

To this end, the new derive-site workflow has to be uploaded after restarting the updated *Workflow Server*.

- The CAE uses `org.springframework.web.servlet.mvc.method.annotation.RequestMappingHandlerMapping` to map URIs to handler methods annotated with `@RequestMapping`. By default, `RequestMappingHandlerMapping` deletes all content after a semicolon from `@PathVariable` able.

*Enable MatrixVariables for CAE handlers*

`RequestMappingHandlerMapping` is now configured to pass values after a semicolon to handler methods.

## CoreMedia Studio Improvements

- Before processing request, the *Preview CAE* preview webapp will first ensure that all outdated cache entries have been evicted. For details see the JavaDoc of the class `IdRedirectHandlerBase`.

*Preview Synchronization*

- The button to open the Library directly moved from the Favorites Bar to the Favorites Header Toolbar and shares the behavior of the Control Room button to toggle the library open and close.

*Toggle Library*

**Migration:** Components placed in the favorites bar relative to the library button need to change their reference point. The following example will change the appearance of the component from the library button to the top of the favorites bar - directly below the favorites toolbar header (which is where the library button is now).

```
<ui:after>
  <component
    itemId="{favoritesToolbar.LIBRARY_BUTTON_ITEM_ID}"/>
</ui:after>
```

*Example 2.1. Add After Library (before)*

```
<ui:after>
  <component
    itemId="{favoritesToolbar.FAVORITES_TOOLBAR_HEADER_ITEM_ID}"/>
</ui:after>
```

*Example 2.2. Add After Library (after)*

- The toggle buttons in the Favorites Bar header (Show dashboard, Show library, Show control room) have keyboard shortcuts (F2, F3, F4) which are configured in `Shortcut.properties`. To change the shortcut keys, you can override these properties as follows:
 

```
<editor:copyResourceBundle
Properties          destination="{Shortcut_properties}"
source="{YourShortcut_properties}"/>    where YourShort
cut_properties is a new properties file containing the changed keys.
```

## CoreMedia Elastic Social Improvements

### CoreMedia LiveContext for IBM WebSphere Commerce Improvements

### CoreMedia Project Improvements

### CoreMedia Blueprint Improvements

#### Deployment and Virtualization

- Updated `coremedia-application-maven-plugin` to 2.7.9, fixing issues for Webstart deployments
- Added deployment token `LIVECONTEXT_WCS_REST_SEARCH_URL` to define URL for *WebSphere Commerce* search server.
- under Java 1.7\_u51. This includes:
  - Adding the `Application-Name` to the `MANIFEST.MF`
  - Adding the ability to create a `DeploymentRuleSet.jar`.

Updated *Tomcat* to 7.0.54.

Added new configuration tokens for Blueprint sub domain segments: `MEDIA_SEGMENT`, `PREVIEW_MEDIA_SEGMENT`, `STUDIO_MEDIA_SEGMENT`, `HELIOS_SEGMENT`, `PREVIEW_HELIOS_SEGMENT`, `STUDIO_HELIOS_SEGMENT`, `PREVIEW_SHOP_HELIOS_SEGMENT`, `SHOP_HELIOS_SEGMENT`.

Added new properties in `application.properties` for mail server configuration and corresponding configuration tokens: `elastic.social.mail.protocol` (`ELASTIC_MAIL_PROTOCOL`, defaults to `smtp`), `elastic.social.mail.username` (`ELASTIC_MAIL_USERNAME`, empty by default) and `elastic.social.mail.password` (`ELASTIC_MAIL_PASSWORD`, empty by default).

- The *Blueprint* standard deployment used composed domain prefixes like `studio.helios` or `shop.preview.helios`. For internal reasons we replaced such prefixes with hyphen separated prefixes like `studio-helios` or `shop-preview-helios`. (Codepointer: `blueprint/packages/src/main/filters/preconfigure.properties`)

**Force scheme for links**

- The scheme (e.g. *http*, *https*, *ftp*) for absolute links can now be enforced on a per-link basis by passing two (cm-)parameters: `absolute: true` and `scheme: <scheme-name>`.

Freemarker example: `<a href="\${cm.getLink(self, {"absolute": true, "scheme": "https"})}"/>`

**Changes for Document Type Model**

- The content type `CMsite` is now `CMLocalized`. It was `CMObject` before. As a result the following changes have been applied:
  - The `CMsite` document type has the additional property `masterVersion`
  - The parent of `CMsite` was changed to `abstractLocalized-blueprint-doctypes` in the `blueprint-contentbeans.xml`.
  - `CMsite` contentbean has been adapted. Due to this change the property `locale` is now of type `Locale`. It used to be `String`.
  - The `CMsiteForm` has been modified. The fields `locale` and `master` are now rendered by the `MultiLanguageDocumentForm`.
- The content type `CMFolderProperties` is now `CMLocalized`. It was `CMObject` before. As a result the following changes have been applied:
  - The `CMFolderProperties` document type has the additional properties `masterVersion` and `locale`
  - The parent of `CMFolderProperties` was changed to `abstractLocalized-blueprint-doctypes` in the `blueprint-contentbeans.xml`.
  - `CMFolderProperties` contentbean has been adapted.
  - The `CMFolderPropertiesForm` has been extended by the `MultiLanguageDocumentForm`.
- The content type `CMLocalized` used to have the unused property editor `editorialState`. Therefore, several changes have been applied:
  - Removed the property from the content type `CMLocalized` in `blueprint-doctypes.xml`
  - Removed the unused `DefaultEditorialState.xml`
  - Removed the property editor `editorialState` from Site Manager's editor.xml.

*CMsite inherits CMLocalized*

*CMFolderProperties inherits CMLocalized*

*Remove the obsolete property editorialState*

## Closed JIRA Issues

Table 2.46. 7.5.9

Key	Type	Summary	Status
CMS-1196	Bug	Nested @media queries doesn't work on some browsers	Fixed
CMS-1188	Bug	CMChannel validators are not configured for CMExternalChannel	Fixed
CMS-1172	Bug	DateTime Context Source does not work	Fixed
CMS-1158	Bug	Broken preview layout due to absolute CSS and JS links	Fixed
CMS-1148	Bug	Cookiedomain for rewritten WCS cookies not configurable	Fixed
CMS-1147	Feature	Enable @MatrixVariable for CAE Handlers	Fixed
CMS-1089	Bug	PBE for ImageMap broken	Fixed
CMS-1086	Bug	AAS: Navigation not working in Studio preview	Fixed
CMS-1077	Bug	Placeholders For German Website Missing	Fixed
CMS-1041	Bug	Time-Travel Data sometimes affects multiple Studio tabs and browser windows	Fixed
CMS-1034 (35656)	Bug	ContentBlobHandlerBase does not work with replication servers	Fixed
CMS-991 (35907)	Bug	Richtext Internal Link Target: Empty Text layout broken ("Click and drag a content..")	Fixed
CMS-955	Bug	Layout Variants broken for Desktop View	Cannot Reproduce
CMS-946	Bug	Broken Link on Product Teaser	Cannot Reproduce
CMS-920	Bug	e-Marketing Spot name overflows border	Fixed
CMS-917	Bug	White padding below hero slideshow preview	Cannot Reproduce
CMS-916	Bug	Default View Fragment does not make sense for product teaser	Fixed
CMS-914	Bug	Thumbnails of Product catalog in Library distorted	Fixed
CMS-850 (35141)	Bug	Page outside of the navigation shows null in Placements	Fixed
CMS-720	Bug	Studio Library does not filter 'Home' folder as expected	Fixed

Key	Type	Summary	Status
CMS-692 (34790)	Bug	Default configuration for ElasticSearch unicast configuration does not work and documentation needs enhancement	Fixed
CMS-551	Bug	TimeTravel ignores Timezone	Fixed
CMS-428	Bug	Personalized User Segment: Validation of explicit interest broken	Fixed
CMS-350	Bug	visibleChildren may not be cached static	Fixed

## 2.2.38 Release 7.5.8

This chapter contains all changes made in Release 7.5.8 of *CoreMedia Digital Experience Platform 8*.

Release 7.5.8 contains the following CoreMedia modules:

- CoreMedia Blueprint
- CoreMedia CMS
- CoreMedia Studio
- CoreMedia LiveContext for IBM WebSphere Commerce
- CoreMedia Elastic Social

In addition, *CoreMedia DXP 8* uses the following tooling:

Product	Key	Version
CoreMedia Application Maven Plugin	APPPLUGIN	2.7.6
CoreMedia Project Maven Extension	PROJEXT	1.0.5

Table 2.47. Tooling of CoreMedia DXP 8

## CoreMedia CMS Improvements

### Changes

- Apache Solr has been updated to version 4.8.0. The Apache Solr project recommends to use Java 7 update version u55 or later. Earlier versions of Oracle Java 7 and OpenJDK 7 have some bugs that may lead to problems with Lucene and Solr.

*Third-party Updates*

- Elasticsearch has been updated to version 1.1.1.
- The MongoDB Java driver has been updated to version 2.12.0.
- SLF4J has been updated to version 1.7.6.
- Removed field `format` of *Site Manager* API class `hox.corem.edit` or `or.proxy.CalendarModel`. You can use new `SimpleDateFormat(CalendarModel.DATE_FORMAT)` instead.

*API changes*

## CoreMedia Studio Improvements

### API Changes

- The signature of the method `CollectionViewManager#openSearchForType()` was changed from

*CollectionViewManager*

```
function openSearchForType(type:String, view:String = null)
    :void;
```

to

```
function openSearchForType(type:String, view:String = null,
    baseFolder:Content = null):void;
```

For detailed information please consult the ASDoc of [com.core-media.cms.editor.sdk.collectionview.CollectionViewManager](#)

- The `FilterState` has been deleted. Use `SearchFilterState` instead.

*Search Filter*

## CoreMedia Elastic Social Improvements

## CoreMedia LiveContext for IBM WebSphere Commerce Improvements

## CoreMedia Project Improvements

- Updated the `coremedia-application-maven-plugin` to 2.7.6.
- Changed the type of the `chef_runlist` variable from array to string in order to make it replaceable with the `nugrant` plugin. This will be changed back to array, when `nugrant` plugin 2.0.0 is released and allows merge strategies for user values.

*Maven Setup*

*Vagrant Setup*

- A new recipe to create sitemap cronjobs on a delivery node has been added to replace the removal of the RPM cronjob installation. Add `recipe[coremedia::sitemaps]` to your chef run list to activate the cronjobs. The configuration of the sites has been added to the delivery role.

*Chef and Deployment Setup*

As a result the token `configure.BLUEPRINT_SITEMAP_ENABLED` has been removed.

## CoreMedia Blueprint Improvements

### Closed JIRA Issues

Table 2.48. 7.5.8

Key	Type	Summary	Status
CMS-1032	Bug	Adding to blacklist does not always work	Fixed
CMS-1022	Bug	Studio search suggestions do not work for multiple terms	Fixed
CMS-1021	Bug	CacheInvalidation call errors flood WCS log during shutdown/startup	Fixed
CMS-746	Bug	WCS Rest Connector not robust for multiple logins on WCS Backend	Won't Fix

## 2.2.39 Release 7.5.7

This chapter contains all changes made in Release 7.5.7 of *CoreMedia Digital Experience Platform 8*.

Release 7.5.7 contains the following CoreMedia modules:

- CoreMedia Blueprint
- CoreMedia CMS
- CoreMedia Studio
- CoreMedia LiveContext for IBM WebSphere Commerce
- CoreMedia Elastic Social

In addition, *CoreMedia DXP 8* uses the following tooling:

Table 2.49. Tooling of CoreMedia DXP 8

Product	Key	Version
CoreMedia Application Maven Plugin	APPPLUGIN	2.7.5
CoreMedia Project Maven Extension	PROJEXT	1.0.5

## CoreMedia CMS Improvements

### Changes

- Apache Solr has been updated to version 4.7.2.
- The TenantFilter Servlet Filter previously extracted a "tenant hint" (e.g. "media") from the host name of the request (e.g. media.mysite.com) and matched this against a map from hints to tenant names (e.g. "media" -> "tenant name") within the Spring configuration.

*Third-party Updates*

This behavior has been changed in order to support the new CoreMedia Blueprint multi-site features. The Elastic Social tenant is now read from the Site configuration, where the Site for a request is determined from the request URL path (e.g. "/blueprint/servlet/perfectchef/en/us" -> Site PerfectChef, en/us locale). New tenants for new sites can now be added without redeployment of any CAE and without adding DNS entries for sub-domains.

The filter operates only on dynamic, non-cacheable fragment requests, e.g. those with the "/dynamic/\*" prefix. All other requests might be cached by a CDN, they should not depend on a particular Elastic Social user.

## CoreMedia LiveContext for IBM WebSphere Commerce Improvements

- There is a new CMS document type e-Marketing Spot that can be used to represent an *IBM WCS* e-Marketing Spot within a content area. The e-Marketing Spot data will be requested from the *IBM WCS* and rendered by the CoreMedia CAE. In *CoreMedia Studio* within the Library Catalog Mode it is possible to choose an *IBM WCS* e-Marketing Spot and assign it to the CMS document.
- CMS content can be made available and searchable through the *IBM WCS* search. The *IBM WCS* crawling mechanism can include a specialized side map generated by the CMS to fill the *IBM WCS* search index.
- There is a service in *CoreMedia DXP 8* that can be used to request search term proposals to render a search field with auto-suggestion on CMS side. This function is integrated into the default *CoreMedia DXP 8* Search. The ac-

*Support of IBM WCS Marketing Spots*

*Search CMS content in IBM WCS*



tual search is will be performed by the *IBM WCS*. It will be forwarded to the *IBM WCS* to render the result page.

## Closed JIRA Issues

Table 2.50. 7.5.7

Key	Type	Summary	Status
-----	------	---------	--------

## 2.2.40 Release 7.5.6

This chapter contains all changes made in Release 7.5.6 of *CoreMedia Digital Experience Platform 8*.

Release 7.5.6 contains the following CoreMedia modules:

- CoreMedia Blueprint
- CoreMedia CMS
- CoreMedia Studio
- CoreMedia LiveContext for IBM WebSphere Commerce
- CoreMedia Elastic Social

In addition, *CoreMedia DXP 8* uses the following tooling:

Table 2.51. Tooling of CoreMedia DXP 8

Product	Key	Version
CoreMedia Application Maven Plugin	APPPLUGIN	2.7.5
CoreMedia Project Maven Extension	PROJEXT	1.0.5

## CoreMedia CMS Improvements

### Changes

- Apache Solr has been updated to version 4.7.1. As part of this change the configuration files in the Solr home directory have changed. The log framework for Apache Solr has changed from JDK logging to Apache Log4J.

*Third-party Updates*

## CoreMedia Elastic Social Improvements

### Changes

- Elasticsearch has been updated to version 1.1.0.
- MongoDB server has been updated to version 2.6.0.

*Third-party Updates*

## CoreMedia Blueprint Improvements

### Deployment and Virtualization

- Removed the attributes `ELASTIC_SEARCH_NETWORK_HOST` for deployment and `elasticSearch.network.host`, which was previously defined in the `application.properties`.

## Closed JIRA Issues

Table 2.52. 7.5.6

Key	Type	Summary	Status
CMS-588 (34297)	Bug	ServerImport fails to import blob properties with XML content and remote DTD	Fixed

## 2.2.41 Release 7.5.5

This chapter contains all changes made in Release 7.5.5 of *CoreMedia Digital Experience Platform 8*.

Release 7.5.5 contains the following CoreMedia modules:

- CoreMedia Blueprint
- CoreMedia CMS
- CoreMedia Studio
- CoreMedia LiveContext for IBM WebSphere Commerce
- CoreMedia Elastic Social

In addition, *CoreMedia DXP 8* uses the following tooling:

Table 2.53. Tooling of *CoreMedia DXP 8*

Product	Key	Version
CoreMedia Application Maven Plugin	APPPLUGIN	2.7.4
CoreMedia Project Maven Extension	PROJEXT	1.0.5

## CoreMedia CMS Improvements

### Changes

- The configuration property `feeder.tika.enable` has been removed from *Content Feeder* and *CAE Feeder*. Apache Tika is always used in the Feeder applications. The option to extract text from blob values in the Apache Solr search engine has been removed.

Both *Content Feeder* and *CAE Feeder* now support the extraction of additional metadata properties from blob values by using Apache Tika. For details, read the description of the newly introduced configuration properties `feeder.tika.appendMetadata` and `feeder.tika.copyMetadata` in the [CoreMedia Search Manual].

- The *Content Feeder* and *CAE Feeder* log a warning if text extraction from binaries takes very long using Apache Tika. They also skip binaries if text extraction takes extremely long.

You can configure this behaviour with the properties `feeder.tika.warn.milliseconds` and `feeder.tika.timeout.milliseconds`. See the appendix of the [CoreMedia Search Manual] for a description and default values of these properties.

- The deprecated methods `registerTargets(CommandManager)` and `unregisterTargets(CommandManager)` have been removed from class `com.coremedia.editor.toolkit.CommandManager`.

*Search Engine Text Extraction*

*API Changes*

### Closed JIRA Issues

Key	Type	Summary	Status
CMS-1238 (35697 36105)	Bug	Blueprint replicator.properties incomplete	Fixed
CMS-829 (33301)	Bug	Memory leak if property editors unregister targets they have registered	Fixed

*Table 2.54. 7.5.5*

Key	Type	Summary	Status
CMS-823 (35290)	Bug	Unified API leaks memory when connection fails	Fixed
CMS-817	Bug	cm cleanrecyclebin parses dates in wrong timezone	Fixed
CMS-339 (31436)	Change	Enhance logging of CAE Feeder to better detect failures in tika	Fixed

## 2.2.42 Release 7.5.4

This chapter contains all changes made in Release 7.5.4 of *CoreMedia Digital Experience Platform 8*.

Release 7.5.4 contains the following CoreMedia modules:

- CoreMedia Blueprint
- CoreMedia CMS
- CoreMedia Studio
- CoreMedia LiveContext for IBM WebSphere Commerce
- CoreMedia Elastic Social

In addition, *CoreMedia DXP 8* uses the following tooling:

Product	Key	Version
CoreMedia Application Maven Plugin	APPPLUGIN	2.7.4
CoreMedia Project Maven Extension	PROJEXT	1.0.5

Table 2.55. Tooling of CoreMedia DXP 8

## CoreMedia CMS Improvements

### Changes

- The administrative command line tools uniformly use the timezone as configured in the file `capclient.properties` now. Previously the tools mistakenly used the default JVM timezone for parsing the command line, but the configured timezone during normal operation. In particular, this affects the behavior of the tool `cm cleanrecyclebin` for which start and end time may be specified. It may also affect custom tools.

Command Line Tools

## Closed JIRA Issues

Table 2.56. 7.5.4

Key	Type	Summary	Status
CMS-611 (34403)	Bug	Creation date is not replicated correctly when initial version is destroyed	Fixed

## 2.2.43 Release 7.5.3

This chapter contains all changes made in Release 7.5.3 of *CoreMedia Digital Experience Platform 8*.

Release 7.5.3 contains the following CoreMedia modules:

- CoreMedia Blueprint
- CoreMedia Blueprint Base
- CoreMedia CMS
- CoreMedia Studio
- CoreMedia LiveContext for IBM WebSphere Commerce
- CoreMedia Elastic Social

In addition, *CoreMedia DXP 8* uses the following tooling:

Table 2.57. Tooling of CoreMedia DXP 8

Product	Key	Version
CoreMedia Application Maven Plugin	APPPLUGIN	2.7.4
CoreMedia Project Maven Extension	PROJEXT	1.0.5

## CoreMedia CMS Improvements

### Changes

- Apache Tika has been updated to version 1.5.
- The static field `com.coremedia.cmdline.AbstractUAPIClient.options` has been removed. As before, the `Options` object is passed to the methods `fillInOptions(Options)`, which is responsible for extending the set of options.

*Third-party Updates*

*API Changes*

- The persistence format of the *CoreMedia Studio Control Room* has been changed and already persisted instances are lost. You need to remove the MongoDB collection `lists` in the `blueprint_internal_models` database (assuming "blueprint" is your project name) when you update from an older 7.5 release.
- Temporarily dropped support for PBE- and Metadata-taglib. Due to the focus on FreeMarker templates and a required metadata syntax change, support for the aforementioned tag libraries has been dropped.

*JSP Taglibs*

## CoreMedia Studio Improvements

### Changes

- The `PreviewPanel` does not provide the context variable `CURRENT_PREVIEW_SELECTION_VARIABLE_NAME` anymore. Use the more generic `CURRENT_PREVIEW_METADATA_SELECTION_VARIABLE_NAME` instead.
- The `PreviewPanel` does now provide the context variable `CURRENT_PREVIEW_CONTENT_VARIABLE_NAME` holding the currently previewed `Content` object.

*Preview Panel*

### Enhancements

- Locking mechanism introduced for content items of running 2-Step-Publication workflows.

*Publication Workflow*

## CoreMedia Blueprint Base Improvements

- Introducing the new `SettingsService`, which can be used for both applications, the CoreMedia Studio and the CAE, by using `SettingsFinder` that are able to fetch settings from various types of target beans, be it `Content`, `ContentBeans` or even any third-party types.

## CoreMedia Blueprint Improvements

- The complete code now only uses one way for reading settings: The new `SettingsService` introduced within the CoreMedia Blueprint Base Modules. This service may now be used for the CAE as well as for the CoreMedia Studio by configuring different `SettingsFinder`. See the CoreMedia LiveContext for IBM WebSphere Commerce Manual for details on how to use that service for your own projects. The following classes could be removed from the Blueprint:
  - The `HasSettings` interface and its implementing classes `AbstractSettings` and `SettingsImpl`

➔ The `ContentSettingsService`

## Closed JIRA Issues

Table 2.58. 7.5.3

Key	Type	Summary	Status
-----	------	---------	--------

## 2.2.44 Release 7.5.2

This chapter contains all changes made in Release 7.5.2 of *CoreMedia Digital Experience Platform 8*.

Release 7.5.2 contains the following CoreMedia modules:

- ➔ CoreMedia Blueprint
- ➔ CoreMedia CMS
- ➔ CoreMedia Studio
- ➔ CoreMedia LiveContext for IBM WebSphere Commerce
- ➔ CoreMedia Elastic Social

In addition, *CoreMedia DXP 8* uses the following tooling:

Table 2.59. Tooling of CoreMedia DXP 8

Product	Key	Version
CoreMedia Application Maven Plugin	APPPLUGIN	2.7.4
CoreMedia Project Maven Extension	PROJEXT	1.0.5

## CoreMedia Studio Improvements

### Enhancements

- ➔ The *Workflow Server* can be accessed from *CoreMedia Studio* by means of the ActionScript API through the newly added `WorkflowRepository`. See the [CoreMedia Studio Developer Manual] and the ASDoc of the *Studio API* for details.

*Workflow API*

## CoreMedia Elastic Social Improvements

- The configuration of the MongoDB now must use the Mongo Client URI, which was the preferred way anyway. See <http://docs.mongodb.org/manual/reference/connection-string/> for further information. The following previously available configuration options have been removed:

*Elastic API*

- `mongodb.serverAddresses`

- `mongodb.writeConcern`

- `mongodb.userName`

- `mongodb.password`

The default value for the Mongo Client URI is `mongodb://localhost:27017`.

## CoreMedia Blueprint Improvements

### Single-Sign-On between CMS and Commerce

- A Session will be managed for cms and commerce to simply handover from one system to another.

### API changes

- Renamed class `com.coremedia.blueprint.cae.web.taglib.ResponseImageFunctions` to `ImageFunctions` and added new method `uncroppedImageLink(CMPicture, ServletRequest, ServletResponse)`.
- Deprecated class `com.coremedia.blueprint.cae.web.taglib.ImgLinkTag`. Not used in freemarker.

*Changed API elements*

### Deployment and Virtualization

- Added an attribute `coremedia.probedog.timeout` to the `coremedia` cookbook which allows to modify the timeout for all `probedog` runs. The default value is 300 as before.

Replaced the custom ElasticSearch cookbook by the ElasticSearch community cookbook.

Added an attribute `coremedia.role.elasticsearch` to the `coremedia` cookbook which is used to search for node running ElasticSearch in conjunction with the `elasticsearch.cluster.name` attribute. In previous releases, the nodes have been computed by searching for run lists containing the `elasticsearch` recipe.



Added an recipe `elasticsearch` to the `coremedia` cookbook which wraps the default recipe of the `elasticsearch` cookbook and installs all necessary prerequisites.

Added an attribute `coremedia.serverimport.extra_options` to pass additional options to `serverimport`.

## Closed JIRA Issues

Table 2.60. 7.5.2

Key	Type	Summary	Status
CMS-776 (35180)	Bug	Doc says that JSP templates work from Content Repository, but they don't	Fixed
CMS-753	Change	ViewType should be overridable in template	Fixed
CMS-711 (34909)	Bug	Responsive slider broken in IE9	Fixed
CMS-685	Bug	Image Crops disappear after menu-based updates	Fixed
CMS-632 (34504, 35437)	Bug	Check DB locks before updating DB-scheme when migrating	Fixed
CMS-574 (35007)	Bug	CSS and JS are not cached by Browser	Fixed

## 2.2.45 Release 7.5.1

This chapter contains all changes made in Release 7.5.1 of *CoreMedia Digital Experience Platform 8*.

Release 7.5.1 contains the following CoreMedia modules:

- CoreMedia Blueprint
- CoreMedia CMS
- CoreMedia Studio
- CoreMedia Elastic Social

In addition, *CoreMedia LiveContext 2.0 for IBM WebSphere Commerce* uses the following tooling:

Table 2.61. Tooling of CoreMedia LiveContext 2.0 for IBM WebSphere Commerce

Product	Key	Version
CoreMedia Application Maven Plugin	APPPLUGIN	2.7.4
CoreMedia Project Maven Extension	PROJEXT	1.0.5

## CoreMedia CMS Improvements

### Predefined publication workflows for Studio

- You can now use the "Simple Publication" and "Two Step Publication" predefined publication workflows in *Studio*. To this end, the workflow definitions must be uploaded to the *Workflow Server* using the `cm upload` tool. Depending on whether you use *Studio* or *Site Manager* different workflow definitions files need to be uploaded. For *Studio* make sure to upload the workflows `studio-simple-publication.xml` and `studio-two-step-publication.xml`.

*Predefined publication workflows for Studio*

### Auto-accepted Workflow User Tasks

- You can now set the optional attribute `autoAccepted="true"` for `UserTask` elements in the XML definition file of a workflow. If set to `true`, an offered `UserTask` will be automatically accepted if it was assigned to a single user with the existing `ForceUser` workflow action.

*Auto-accepted Workflow User Tasks*

Note that `EntryActions` of automatically accepted user tasks are executed internally by the *Workflow Server*. This also applies to remote actions which will be executed by user `workflow`. See section "Remote Actions That Are Not Remote" of the [Unified API Developer Manual] for information how to execute such actions in the name of other users.

Note that the *Site Manager* and custom workflow clients that still use the old Workflow API always accepted tasks with forced assignment automatically - independently of the `autoAccepted` attribute. You can use the new attribute to also accept forced user tasks automatically when using Unified API based workflow clients such as *Studio*.

### API changes

- The `writeOn` and `transform` methods of `com.coremedia.xml Markup` now take a `List<? extends XMLFilter>` instead of a raw `List` parameter.

*Changed API elements*

- The method `transform(Templates, Map)` of `com.coremedia.xml.Markup` now takes a `Map<String, ?>` instead of a raw `Map` parameter.
- The methods `setAcceptMethods` and `setRejectMethods` of class `com.coremedia.cap.httppcache.MethodRequestPredicate` now take a `List<String>` instead of a raw `List` parameter.
- Method `com.coremedia.cap.httppcache.CompositeRequestPredicate.getRequestPredicates` now returns a `List<RequestPredicate>` instead of a raw `List`.
- Method `equalsLinklistProperty` of interface `com.coremedia.publisher.importer.DifferencingTransformer.Differencer` now takes a `List<? extends Content>` and a `List<String>` instead of two raw `List` parameters.
- Package `com.coremedia.publisher.importer`: Methods `process` and `processSource` of class `TargetXmlImporter` and the constructors of `TargetXmlImporter.Context` and `XmlImportEvent` now take a `Map<String, Integer>` instead of a raw `Map` parameter.
- Removed deprecated methods of `com.coremedia.cap.content.query.QueryService` which took a separate `limit` parameter:
  - `poseContentQuery(String, int)`
  - `poseContentQuery(String, Object[], int)`
  - `poseVersionQuery(String, int)`
  - `poseVersionQuery(String, Object[], int)`
- Removed deprecated `com.coremedia.cap.common.infos.CapLicenseInfo` constructor which took the unused parameter `workflowCustomizable`
- Removed deprecated method `com.coremedia.cap.common.infos.CapLicenseInfo#isWorkflowCustomizable`.
- Removed deprecated constant `PUBLICATON_CANCELLED` of `com.coremedia.cap.errorcodes.CapErrorCodes`.
- Removed unused constant `CANNOT_DELEGATE_NON_REMOTE_TRANSACTIONS` of `com.coremedia.workflow.errorcodes.WfErrorCodes`.
- Removed deprecated interface `com.coremedia.workflow.WfErrorCodes`.
- Removed deprecated method `com.coremedia.cache.Cache.cacheFor(long)`.

*Removed API elements*

- Removed deprecated methods `com.coremedia.objectserver.web.taglib.IncludeSupport.getView` and `com.coremedia.objectserver.web.taglib.IncludeSupport.getTheSelf` without replacement.
- Removed deprecated method `com.coremedia.objectserver.web.links.UriComponentsHelper.appendPathSegments`. Use `org.springframework.web.util.UriComponentsBuilder#pathSegment` instead.
- Removed deprecated method `com.coremedia.cae.testing.RequestHandler.handle`. Use `com.coremedia.cae.testing.RequestHandler.invokeHandler` instead.
- Removed deprecated method `com.coremedia.objectserver.dataviews.AbstractDataViewFactory.getLog`. Use `com.coremedia.objectserver.dataviews.AbstractDataViewFactory.getLogger` instead.

Removed deprecated method `com.coremedia.objectserver.view.ResourceViewRepository.getBasePath`. Use `com.coremedia.objectserver.view.ResourceViewRepository.getTemplateBaseLocations` instead.

Removed deprecated method `com.coremedia.objectserver.view.ResourceViewRepository.setBasePath`. Use `com.coremedia.objectserver.view.ResourceViewRepository.setTemplateBaseLocation` instead.

- Removed deprecated class `com.coremedia.objectserver.view.ModelAwareViewDispatcher`. Use `com.coremedia.objectserver.view.RenderNodeDecorator` instead.
- Removed deprecated class `com.coremedia.objectserver.view.resolver.RenderNodeDecoratorProvider`. Use `com.coremedia.objectserver.view.RenderNodeDecoratorProvider` instead.
- Removed deprecated class `com.coremedia.objectserver.web.binding.IdContentBeanConverter`. Use `com.coremedia.objectserver.web.binding.GenericIdToContentBeanConverter` instead.
- Removed deprecated class `com.coremedia.objectserver.web.BeanPropertyEditor`. Use `com.coremedia.id.IdProviderPropertyEditor` instead.
- Removed, replaced by new view lookup / repository services introduced in CMS7.0:

`view-legacy-services.xml`.

```
com.coremedia.objectserver.view.RepositoryViewDispatcher
Manager

com.coremedia.objectserver.view.RepositoryViewDispatcher

com.coremedia.objectserver.view.SimpleViewRepository

com.coremedia.objectserver.web.BeanViewResolver
```

## CoreMedia Studio Improvements

### CoreMedia Elastic Social Improvements

- Only comments for the selected active site of a user will be included in the moderation list.
- A new Property `application.url` exist to allow to define a url for redirect from facebook and twitter.
- Test helper classes `EmbeddedMongo` and `EmbeddedElasticSearchClient` below package `com.coremedia.testing.elastic.core` (provided by artifact `core-test`) were moved to `core-mongodb` and `core-elastic-search` test jars respectively.

*Changes to the Studio Plugin*

*Modularization*

### CoreMedia Project Improvements

### CoreMedia Blueprint Improvements

#### Deployment and Virtualization

- Updated *Tomcat* to 7.0.50.

### Closed JIRA Issues

Table 2.62. 7.5.1

Key	Type	Summary	Status
CMS-671	Bug	Search terms including stop words do not yield expected results	Fixed
CMS-667	Bug	Re-Indexing the search index for users fails	Fixed

## 2.2.46 Release 7.5.0

This chapter contains all changes made in Release 7.5.0 of *CoreMedia Digital Experience Platform 8*.

Release 7.5.0 contains the following CoreMedia modules:

- CoreMedia Blueprint
- CoreMedia CMS
- CoreMedia Studio
- CoreMedia Elastic Social

In addition, *CoreMedia LiveContext 2.0 for IBM WebSphere Commerce* uses the following tooling:

Table 2.63. Tooling of CoreMedia LiveContext 2.0 for IBM WebSphere Commerce

Product	Key	Version
CoreMedia Application Maven Plugin	APPPLUGIN	2.7.4
CoreMedia Project Maven Extension	PROJEXT	1.0.5

## CoreMedia CMS

### New Features

*CoreMedia CMS* comes with the following new features.

#### e-Commerce API

A new e-Commerce API allows access to the IBM WCS catalog. A `CatalogService` can be used to access the catalog to create catalog beans (like `Product`, `Category` etc.). It gives you a similar infrastructure as it exists for content (and `ContentBeans`).

#### e-Commerce API

- With the `CatalogService` you can access the catalog in many ways: traverse the category tree, products by category, various product and category searches.
- Beside products and categories also product variants are included. Product variants form a concrete available catalog entity (stock keeping unit), e.g. a dress in a certain color and size.
- A `CatalogBeanFactory` is able to create `CatalogBeans` whose implementation is defined via Spring.
- `ContextProvider` helper classes can retrieve the currently applicable `CatalogContext` (the shop configuration that comprises information like the shop name, the shop id, the locale and the currency).

- Additional IBM-specific helper classes, like `CatalogHelper` and the concrete `CatalogIdScheme` exist and facilitate the handling of IBM-specific ids and contexts.
- Known restrictions:
  - Currently there is no caching of catalog beans (the information is requested from the catalog with every new request).
  - There is no user session established between the CAE and the catalog (thus only data can be used that is readable for everyone, like list prices and product description).

### Fragment Connector for Including CAE Fragments in Third-party Systems

Using the `FragmentConnector` you can enrich your web pages with fragments rendered by the CAE. The fragment connector is delivered as Java library and must be deployed into the system, that needs to include CAE fragments. A JSP tag library containing the `IncludeTag` can be used in JSP environments to call the fragment connector.

*Fragment Connector*

In order to enable Ajax request from within a cae fragment, the CoreMedia Blueprint comes with a `CrossDomainEnabler`, that handles those requests, that would otherwise break the Same-Origin-Policy. That way you do not need a proxy in front of the CAE and the third-party system.

### Enhancements

#### Added additional configuration properties for editor webstart webapp

*Added additional configuration properties for editor webstart webapp*

- The following configuration properties were added to provide more flexibility for the configuration of the editor webstart webapp. These properties are used in the Site Manager configuration files as well as in the Apache configuration. This allows you to configure the webstart webapp in a way that it can be used from outside your local network. The Apache web server will be configured to forward requests for Site Manager configuration and IOR to the appropriate CoreMedia components without publishing internal server names.
  - `SITE_MANAGER_HOST_NAME`: The full host name referencing the editor webstart webapp
  - `SITE_MANAGER_HTTP_PORT`: The HTTP port of the editor webstart webapp
  - `SITE_MANAGER_CMS_HOST`: The host name of the content management server used by the Site Manager started by webstart
  - `SITE_MANAGER_CMS_HTTP_PORT`: The HTTP port of the content management server used by the Site Manager started by webstart

- `SITE_MANAGER_WFS_HOST`: The host name of the workflow server used by the Site Manager started by webstart
- `SITE_MANAGER_WFS_HTTP_PORT`: The HTTP port of the workflow server used by the Site Manager started by webstart

#### Added additional configuration properties for editor webstart webapp

*Added additional configuration properties for editor webstart web application*

- Added the following configuration properties to be able to use SSL communication with CORBA for the Content Management Server and the Workflow Server:
  - `configure.CMS_ORB_SOCKET_FACTORY`: Used to configure property `com.sun.CORBA.legacy.connection.ORBSocketFactoryClass`
  - `configure.CMS_ORB_LISTEN_SOCKET`: Used to configure property `com.sun.CORBA.transport.ORBListenSocket`
  - `configure.CMS_ORB_SSL_KEYSTORE`: Used to configure property `com.coremedia.corba.SSLServerSocketFactory.keystore`
  - `configure.CMS_ORB_SSL_PASSPHRASE`: Used to configure property `com.coremedia.corba.SSLServerSocketFactory.passphrase`
  - `configure.WFS_ORB_SOCKET_FACTORY`: Used to configure property `com.sun.CORBA.legacy.connection.ORBSocketFactoryClass`
  - `configure.WFS_ORB_LISTEN_SOCKET`: Used to configure property `com.sun.CORBA.transport.ORBListenSocket`
  - `configure.WFS_ORB_SSL_KEYSTORE`: Used to configure property `com.coremedia.corba.SSLServerSocketFactory.keystore`
  - `configure.WFS_ORB_SSL_PASSPHRASE`: Used to configure property `com.coremedia.corba.SSLServerSocketFactory.passphrase`

These properties will be used in Tomcat's `setenv. (sh|bat)` scripts. Please refer to `default-deployment.properties` for default values. Further information about CORBA using SSL can be found in *CoreMedia Operations Basics* manual.

#### Command Line Tools

- The BeanShell (`cm bsh`) interpreter has been replaced by a GroovyShell (`cm groovysh`) interpreter. *groovysh*
- The maximum heap size for the *bulkpublish* command line tool has been increased from 192MB to 256MB. *bulkpublish*
- `cap.server.documentTypes.xmlSchema.enable` now defaults to `true`.



- The event sequence numbers, which are one part of the event timestamps, have been converted from 32 bit numbers to 64 bit numbers. This removes the risk that the sequence number might roll over into negative numbers.

*Event Sequence Numbers Extended to 64 bit*

During the first start of a *Content Server* with version 7.5 or later of *CoreMedia CMS*, the persistent change log will be converted automatically.

With the exception of Oracle, all databases will need to rewrite the table `ChangeLog` and/or the associated index at that time. Please check the size of the table `ChangeLog` in all of your *Content Server* schemas before upgrading. Make sure to configure enough disk space for the database during the update, because twice the previous size of the table might be required for the migration.

Testing the migration beforehand on a copy of the *Content Management Server* database will give you a good estimation of the running time of the upgrade. If the operation turns out too slow, you can reduce the size of the table as described in the *Content Server Manual* in the section "Truncate the ChangeLog".

## Weak Links

- Link properties in document type definitions can be labeled as weak. Target documents that are linked via a weak link property will not automatically be published together with the linking document.

*Weak Links*

At Unified API level non existing link targets are represented by a destroyed content object. During content bean creation the `ContentBeanFactory` converts these destroyed contents to `null` and filters them from created content bean lists.

Use weak links with caution! The introduction of weak links to a document type model results in numerous pitfalls:

- Weak links can cause dead links in the live environment
- Unified API client code has to cope with destroyed contents
- Content bean code has to cope with `null` values and filtered lists of content beans.

## Configuration Changes

- The class of the Spring bean `PropertyField` to configure feeding of document properties in the *Content Feeder* has changed from `hox.corem.server.PropertyField` to `com.coremedia.cms.feeder.content.PropertyField`.
- The following *Content Feeder* configuration properties have been removed:

*Content Feeder*

- `feeder.updateGroups.inBackground`
- `feeder.updateGroups.scheduler.referenceTime`
- `feeder.updateGroups.scheduler.initialDelay`
- `feeder.updateGroups.scheduler.period`
- `feeder.updateGroups.scheduler.periodUnit`

The *Content Feeder* updates documents in the background after rights rules have changed. It's not necessary to configure a time when these changes should be processed.

- Each Blueprint site can have only one single shop configuration. Configure the following content settings in your root page (see *Local Settings* tab) within a struct property named `livecontext.store.config`:
    - `store.name`, `store.id`, `currency` in content settings.
    - The `Locale` is determined by the root page "Language" (see *Language* tab). That means that all integrated catalog entities use the same language as all other content in the site).
- e-Commerce API*

## Removals

- The deprecated Content Rules framework has been removed. *Content Rules*
- The *Content Feeder* can no longer run embedded in the *Content Server*. It can be started only as a standalone web application. *Embedded Content Feeder*

## API changes

- Removed fields of interface `com.coremedia.cap.feeder.FeedableElement`: *Removed API elements*
  - `FEEDERSTATE_INVALID_GROUPS`
  - `FEEDERSTATE_REMOVE`
- Removed fields of interface `com.coremedia.cap.feeder.index.Indexer`:
  - `PARAMETER_SUPPORTS_MIXED_BATCHES`
  - `DEFAULT_SUPPORTS_MIXED_BATCHES`
  - `PARAMETER_SUPPORTS_REPEATED_REMOVE`
  - `DEFAULT_SUPPORTS_REPEATED_REMOVE`

- Removed methods of class `com.coremedia.cap.feeder.index.IndexerBase`:
  - `supportsMixedBatches`
  - `supportsRepeatedRemove`

## CoreMedia Studio Improvements

### New Features

- The *CoreMedia Studio* provides assistance for setting the locales of documents and sites and keeping them consistent. To this end a list of available locales is maintained in the content repository. The path to the content and property keeping this list is configurable via studio properties. The locale of a document can then be selected by an editor using a new combo box property field.

*Available Locales*

See the Studio Developer Manual for details.

### Enhancements

- Whenever content changes, the state of the client-side remote beans is updated automatically. To this end, *CoreMedia Studio* polls the server for invalidation events. This means that objects of the content API may change spontaneously without a call of `invalidate()` method.

*Automatic Invalidation*

- The multi-site document model can be configured on the server side now. To this end, a bean of type `SiteModel` is deployed in the Studio web application context. It is no longer necessary (or possible) to configure source language document resolver functions using the editor context.

*Multi-Site Management*

See the Studio Developer Manual for details.

- The `MultiSiteUtil` from *CoreMedia Blueprint* has been removed. Use `editorContent.getSiteService()` instead. Methods to format site specific paths are placed in `com.coremedia.cms.editor.sdk.util.PathFormatter`.

*Blueprint MultiSiteUtil Removal*

See the Studio Developer Manual for details.

- The library is extended by a mode to browse the e-Commerce catalog. Categories and products can be accessed and assigned to various places within your content. A e-Commerce Product Teaser can link to a product from the catalog. The product link field (in e-Commerce Product Teaser documents) can be filled by drag and drop from the library in catalog mode. The same applies to categories that can be used as navigation entries.

*e-Commerce Catalog Integration*

- In addition to the e-Commerce catalog integration you can directly access the IBM WebSphere Commerce Management Center from CoreMedia Studio. A double click on a product (e.g. in the catalog mode of the library) opens the product in a window within CoreMedia Studio. All product properties can thus be edited directly. Known restriction: Currently there is no Single Sign On implemented. You have to login to the Management Center with you IBM WCS login credentials.

*IBM Management Center Integration*

## CoreMedia Elastic Social Improvements

### Enhancements

- New modules `core-search` and `core-users` are extracted from `core-impl` so that component scanning with base package `com.coremedia.elastic.core.impl` is self-contained and no longer implicitly depends on `core-elasticsearch`. This change only affects applications that build on *Elastic Core* and do not depend on `social-impl` which already transitively depends on the new artifacts.
- MongoDB Models now have an implicit version property to allow concurrent model changes to be detected. In addition to `Model#save` there is now `Model#saveAtomically` which prevents overriding of concurrent changes.

*Modularization*

*MongoDB Model Versions*

## CoreMedia Project Improvements

### Changes

- Upgraded Spring 3.1.2.RELEASE to 3.2.5.RELEASE

*Third-Party Software*

## CoreMedia Blueprint Improvements

### Changes

- Because of LiveContexts 2.0 horizontal hybrid approach, where both systems, the CAE as well as IBM WebSphere Commerce, handle end user requests, we had to customize the default name for the session cookie from `JSESSIONID` to `CM_SESSIONID`. Moreover, in order to support arbitrary reverse proxies which might not be capable of re-writing cookies (e.g. Varnish), the session cookie path has been set to the root path ("/").

*Session Cookie Name*

This was done within the central `blueprint/packages/tomcat/tomcat-config/src/main/common/conf/context.xml` for all tomcat packages and, for local development, within the `tomcat-context.xml` files of the `cae-`, `cap-editor-`, `cap-httpcache-`, `editor-webapp-`, `editor-webapp-watf-itest-`, `es-studio-component-`, `livecontext-connector-impl-` and the `studio-webapp-module`.

- The chooser for the preferred site has moved from the preferences dialog to the user menu. Now it is easier accessible. *Preferred Site Chooser*
- Now the initial folder, which will be selected after open the library, will be the root folder of the chosen preferred site. If no preferred site is chosen, the initial folder is still the root folder. *Initial Folder in Library*
- The `Length` attribute of all `StringProperties` representing a locale has been increased from 32 to 64. *Document Type Model*

**Fixes**

- The latest Java 7 release (7u45) promotes only Web Start properties prefixed with "javaws." or "jnlp." For more details see comment in `editor.jnlp.vm`. We adjusted all properties accordingly. *Adjusted JNLP template*

**Removals**

- Removed Omniture integration. *ALX connectors*

**Closed JIRA Issues**

*Table 2.64. 7.5.0*

Key	Type	Summary	Status
CMS-189 (32661)	Bug	spring.ftl macros do not work in FreeMarker templates	Fixed

## 3. Support

### Online Support

*Support, Newsgroups*

Use our Online Support to submit a support ticket, track your submitted tickets or receive access to our forums. You can access our Online Support at:

<http://support.coremedia.com>

### Access to online services

Partners and Support customers will need to register an account with CoreMedia in order to access the Online Support. Just send us an email and we will send you your login details:

[support@coremedia.com](mailto:support@coremedia.com)

If you have any other questions or comments, please contact:

CoreMedia AG

Ludwig-Erhard-Straße 18

20459 Hamburg

Phone: +49 .40 .32 55 87 .777 Fax: .999

[www.coremedia.com](http://www.coremedia.com)

Our Support employees are available to take your support call weekdays between 9 a.m. and 6 p.m.

Our manuals are continuously reviewed and revised in order to reflect new developments and insights gained from the day-to-day use of CoreMedia systems.

*Documentation*

If you have comments or questions about our manuals,

→ please email your inquiry to [documentation@coremedia.com](mailto:documentation@coremedia.com)

→ or fax it to 040-325587 999.

Please provide all necessary information in your support request to ensure that our Support team can efficiently help you with your issue.

CoreMedia systems are distributed systems that have a rather complex structure. This includes databases, hardware, operating systems, drivers, virtual machines, class libraries, customized code etc. in many different combinations. That's why CoreMedia needs detailed information about the environment for a support case. In order to track down your problem, provide the following information:

*Support request*

- Which CoreMedia component(s) did the problem occur with (incl. release number)?
- Which database is in use (version, drivers)?
- Which operating system(s) is/are in use?
- Which Java environment is in use?
- Which customizations have been implemented?
- a full description of the problem (as detailed as possible)
- Can the error be reproduced? If yes, give a description please.
- How are the security settings (firewall)?

In addition, log files are the most valuable source of information.

To put it in a nutshell, CoreMedia needs:

*Support checklist*

1. a person in charge (ideally, the CoreMedia system administrator)
2. extensive and sufficient system specifications
3. detailed error description
4. log files for the affected component(s)
5. if required, system files

An essential feature for the CoreMedia system administration is the output log of Java processes and CoreMedia components. They're often the only source of information for error tracking and solving. All protocolling services should run at the highest log level that is possible in the system context. For a fast breakdown, you should be logging at debug level. The location where component log output is written is specified in its `< appName>-logback.xml` file.

*Log files*

### **Which Log File?**

Mostly at least two CoreMedia components are involved in errors. In most cases, the *Content Server* log files in `coremedia.log` files together with the log file from the client. If you are able locate the problem exactly, solving the problem becomes much easier.

### **Where do I Find the Log Files?**

By default, log files can be found in the CoreMedia component's installation directory in `/var/logs` or for web applications in the `logs/` directory of the servlet container. See the "Logging" chapter of the *Operations Basics Manual* for details.

Table 3.1. Log files check list

Component	Problem	Log files
CoreMedia Studio	general	CoreMedia-Studio.log coremedia.log
CoreMedia Editor	general	editor.log coremedia.log workflowserver.log capclient.properties
	check-in/check-out	editor.log coremedia.log workflowserver.log capclient.properties
	publication or preview	coremedia.log (Content Management Server) coremedia.log (Master Live Server) workflowserver.log capclient.properties
	import	importer.log coremedia.log capclient.properties
	workflow	editor.log workflow.log coremedia.log capclient.properties
	spell check	editor.log MS Office version details coremedia.log



Component	Problem	Log files
	licenses	coremedia.log (Content Management Server) coremedia.log (Master Live Server)
Server and client	communication errors	editor.log coremedia.log (Content Management Server) coremedia.log (Master Live Server) *.jpic files
	preview not running	coremedia.log (content server) preview.log
	website not running	coremedia.log (Content Management Server) coremedia.log (Master Live Server) coremedia.log (Replication Live Server) Blueprint.log capclient.properties license.zip
Server	not starting	coremedia.log (Content Management Server) coremedia.log (Master Live Server) coremedia.log (Replication Live Server) capclient.properties license.zip