



# FirstSpirit™

*Unlock Your Content*

## Release Notes

### FirstSpirit™ 2022.5

<b>Status</b>	<b>RELEASED</b>
Department	FS-Core
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e-Spirit

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## 1 Administration

### 1.1 Update of internally used software

As of the current release, the following internally used software for FirstSpirit Content Experience Tools (CXT) has been updated:

- **Spring Boot**  
Update to version 2.6.6

### 1.2 Logging: Log4j-Update to Version 2.x

! Modules must not ship their own “log4j” implementation, otherwise this will cause severe problems running FirstSpirit.

FirstSpirit uses “Apache Log4j” as the logging framework. Last, but not least, for optimal protection from security gaps in integrated third-party software (keyword: “Log4Shell”), FirstSpirit-Logging has now been updated with the latest release to the current version of “Log4j 2” (Version 2.17.2).

Because asynchronous loggers are used, version line 2.x is significantly faster than the previously used “Log4j 1” version and offers an extended scope of functions.

In spite of the implementation differences between “Log4j 1” and “Log4j 2”, migration measures to be taken by FirstSpirit users are generally not required (e.g., with respect to the configuration) when the standard logging functions of FirstSpirit are used because the Log4j 1.2 Bridge is used (<https://logging.apache.org/log4j/2.x/manual/migration.html#Log4j1.2Bridge>): With this, the use of the current API can continue; however, method calls are mainly sent to the new API.

With respect to error logging, the update to “Log4j 2” may cause a changed log level in some cases.

It is recommended not to use “Log4j” directly but to use the logging classes provided by FirstSpirit instead.

Important: In a future release, the support for “Log4j 1” will be discontinued permanently. The bridge will then be removed and all applications of “Log4j 1” must be converted to the requirements of “Log4j 2” by the customer.



**Important:** With the update to “Log4j 2”, known standard applications and default configurations of “Log4j ” were taken into consideration during implementation and quality assurance. In case of specific application cases that have not yet been taken into consideration, contact [e-Spirit Technical Support](#).

For more information on logging via “Apache Log4j” in FirstSpirit, see <https://docs.e-spirit.com/odfs/edocs/admi/firstspirit-ser/configuration-f/logging-configu/index.html>.

## 1.3 Modules and extensions for FirstSpirit 2022.5

The following modules and extensions are compatible with FirstSpirit 2022.5:

Module name/File name	Version number	Compatibility
<b>FirstSpirit Update Archive</b> fs-update- [version].tar.gz	3.0.0	-
<b>FirstSpirit Install Archiv</b> fs-install- [version].tar.gz	3.0.0	-
<b>FirstSpirit Launcher</b> FSLauncher.exe	1.0.43	as of FirstSpirit 2018-08
<b>FirstSpirit Launcher JRE module</b> fs-launcher-jre- [version].fsm	1.19	as of FirstSpirit 2020-11
<b>FirstSpirit SAML Login module</b> fs-saml-login- [version].fsm	1.3	as of FirstSpirit 2019-02
<b>FSDevTools</b> fs-cli-[version].tar.gz fs-cli-[version].zip	4.0.0	as of FirstSpirit 2021-07
<b>FirstSpirit Module Gradle Plugin</b> firstspirit-module- gradle-plugin- [version].jar	3.0.3	as of FirstSpirit 2019-06

## 1.4 Update of fs-cli

“fs-cli” (FSDevTools) uses as of version **4.0.0**



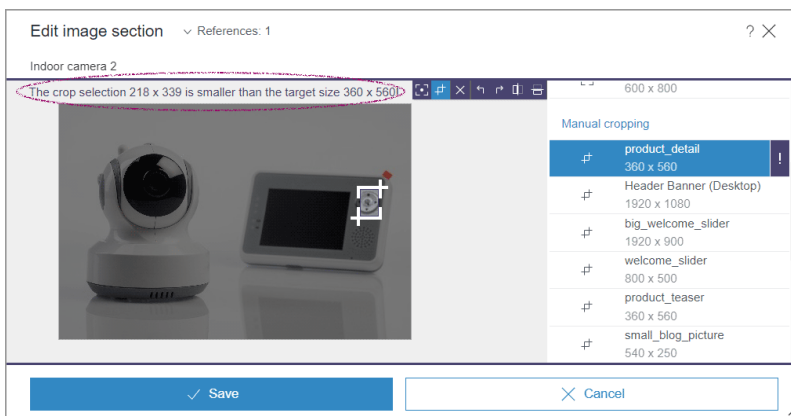
- “Log4j” in version 2.17.2 and
- “SLF4J” in version 1.7.36

In addition to the corresponding *jar* file, current *fs-cli.cmd* or *fs-cli.sh* files must also be used in the *lib* directory. The supplied *log4j2.xml* file from the *conf* directory must also be used.

## 2 ContentCreator

### 2.1 Image cropping: The selected crop selection is too small

When manually cropping images in the FirstSpirit ContentCreator, a corresponding text is now displayed if the crop selection is too small. In addition to the target size of the respective resolution, the text also contains the pixel dimensions of the selected section:



### 2.2 Element Status Provider: display of the state of referenced elements

The `WorkflowGroup` (Package `de.espirit.firstspirit.workflow`, FirstSpirit Developer API) package has been extended with the optional `hasReleaseStateDetection` method. Additionally, the corresponding `WebeditElementStatusProviderPlugin.Factory` was extended with another `create` method with an additional `detectReleaseState` parameter. The behavior for the already existing method remains unchanged.

Normally, the overall state of a page is determined via the `getReleaseState` method in `WebeditElementStatusProviderPlugin`. Depending on the plugin, this can also include



referenced objects of the page. The `WorkflowGroup` that belongs to the contextual page is thereby displayed in the identified overall state.

In special scenarios, such as when more than one `WorkflowGroup` is used, it may be desirable to show certain groups without the detected overall state. The optional `detectReleaseState` parameter ensures that the state of the group is detected automatically on the basis of the referenced objects.

For more information, see

- <https://docs.e-spirit.com/odfs/plugin-developmen/contentcreator/interactive-fea/element-status/code-example/index.html>
- <https://docs.e-spirit.com/odfs/dev/de/espirit/firstspirit/workflow/WebeditElementStatusProviderPlugin.html>
- <https://docs.e-spirit.com/odfs/dev/de/espirit/firstspirit/workflow/WebeditElementStatusProviderPlugin.Factory.html>

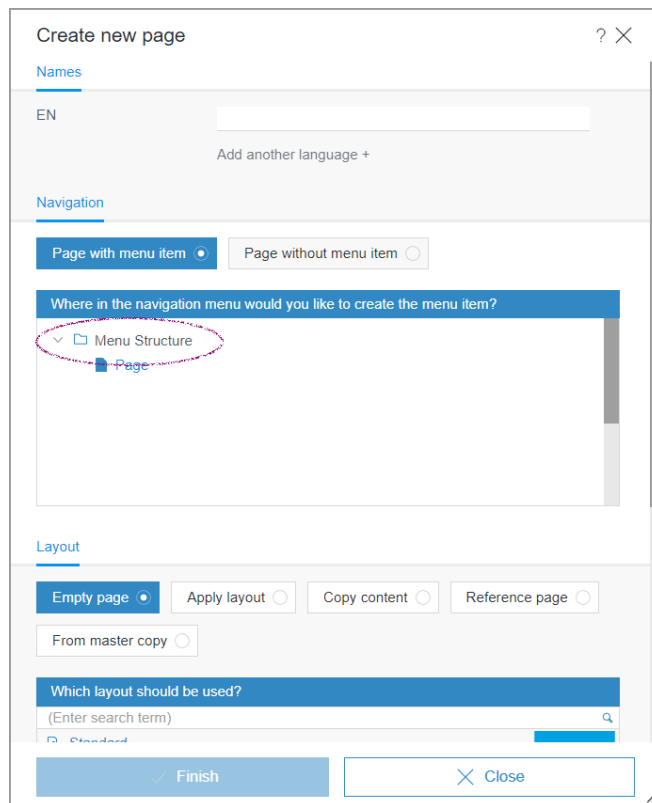
## 2.3 Create new pages

In projects that do not yet contain pages, the first pages can now also be created with the FirstSpirit ContentCreator.

For this purpose, the “Create new page” dialog (Menu “New - Create new page”) has been extended with the menu item (Root node) “Menu Structure”:





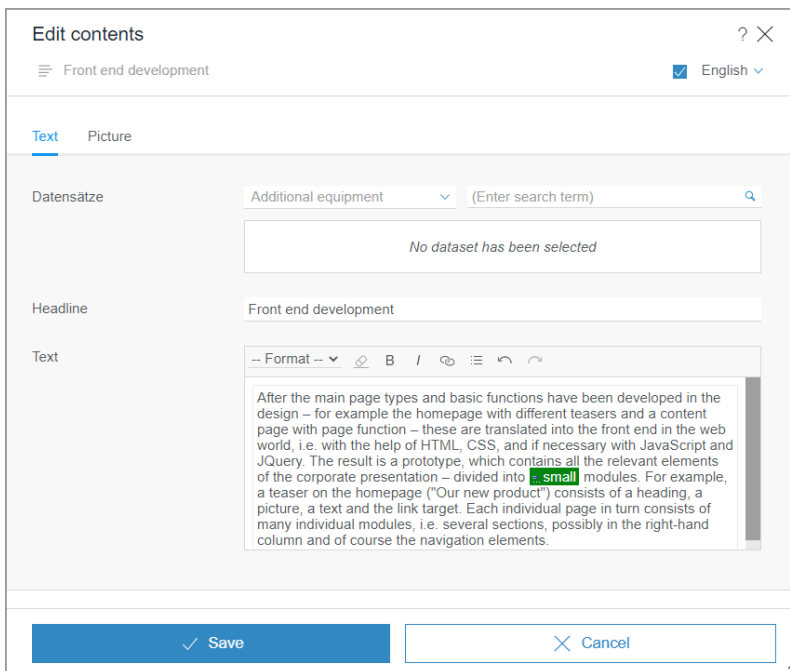


## 2.4 Improvement of drag-and-drop mechanisms

The FirstSpirit ContentCreator allows intuitive operation using drag-and-drop in many different places. With the latest release, some mechanisms were improved, e.g.,

- Invalid drop targets are grayed out.
- A successful drop in CMS\_INPUT\_DOM is now temporarily visualized with green background color:





### 3 FirstSpirit Content Experience Tools (CXT)

#### 3.1 Latest module versions

FirstSpirit 2022.5 supports the following module versions for “FirstSpirit Content Experience Tools”.

Module / file name	Version number
FirstSpirit CXT Plattform	2.5.5
platform-[version].fsm	
FirstSpirit CXT DAP Bridge	1.44.5
dataservice-[version].fsm	
FirstSpirit CXT FragmentCreator	3.4.9
fragment-creator-[version].fsm	
FirstSpirit Fragment DAP	1.40.10
fragmentdap-[version].fsm	
FirstSpirit Media DAP	1.31.5*
mediadap-[version].fsm	
FirstSpirit PageRef DAP	1.9.5
pagerefdap-[version].fsm	
FirstSpirit Markdown Editor	1.29.4*



markdown-editor-[version].fsm	
FirstSpirit Tagging Editor	1.29.4
tagging-editor-[version].fsm	
FirstSpirit CXT FragmentCreator - CaaS	1.31.5
Integration	
caas-integration-[version].fsm	

\* These modules require FirstSpirit 2020-03 or higher from this version.

## 4 Deprecations

For e-Spirit, an important goal in software development is to avoid introducing incompatibilities and migration expenditures related to updating from one FirstSpirit release to the next as much as possible or to compensate for these within the software. FirstSpirit updates should generally be deployable with little effort or able to be carried out in a fully automated fashion.

However - not least in order to ensure maintainability and to future-proof the software - e-Spirit cannot fully avoid replacing existing functionality with new mechanisms. In the future, functionality that will be removed from the software will be listed in this section, including the date at which time the functionality will be removed.

Functionality	Deprecated as of	Will be removed/ Was removed as of
Input component CMS_INPUT_CONTENTAREALIST	5.2R3	
Input component CMS_INPUT_CONTENTLIST	5.2R3	
Input component CMS_INPUT_FILE	5.2R3	
Input component CMS_INPUT_LINKLIST	5.2R3	
Input component CMS_INPUT_OBJECTCHOOSER	5.2R3	
Input component CMS_INPUT_PAGEREF	5.2R3	
Input component CMS_INPUT_PICTURE	5.2R3	
Input component CMS_INPUT_TABLIST	5.2R3	
FirstSpirit Developer API: de.espirit.firstspirit.agency.GroupsAgent	5.2R15	



Functionality	Deprecated as of	Will be removed/ Was removed as of
FirstSpirit Access API: delete (de.espirit.firstspirit.access.AccessUtil)	5.2R18	
FirstSpirit Access API: release (de.espirit.firstspirit.access.AccessUtil)	2018-06	
FirstSpirit Developer API: getLastLoginAsDate (de.espirit.firstspirit.agency.UserStatisticsAgent)	2018-07	
FirstSpirit Developer API: remainingDurationOfCurrentStageInMillis (de.espirit.firstspirit.server.MaintenanceModelInfo)	2018-07	
FirstSpirit Developer API: getStartingTimeOfStageAsDate (de.espirit.firstspirit.server.MaintenanceModelInfo)	2018-07	
FirstSpirit Access API: getSelectedWebserverConfiguration (de.espirit.firstspirit.access.serverConfiguration)	2018-10	
FirstSpirit Access API: setSelectedWebserverConfiguration (de.espirit.firstspirit.access.serverConfiguration)	2018-10	
FirstSpirit Access API: getSelectedWebServer (de.espirit.firstspirit.access.project.Project)	2018-10	
FirstSpirit Access API: setSelectedWebServer (de.espirit.firstspirit.access.project.Project)	2018-10	
FirstSpirit Developer API: getLostAndFoundStoreNodes(); (de.espirit.firstspirit.feature.FeatureInstallResult)	2018-10	
FirstSpirit Developer API: getDeletedStoreNodes(); (de.espirit.firstspirit.feature.FeatureInstallResult)	2018-10	
FirstSpirit Access API: de.espirit.firstspirit.access.store.Previewable	2019-01	
WebSphere Application Server support for FirstSpirit	2019-05	



Functionality	Deprecated as of	Will be removed/ Was removed as of
Control files for Windows and Linux operating systems (old)	2020-08	
Database layer for Oracle Database 11g/12c	2020-12	
FirstSpirit Developer API: redirectTemplateLogToDefaultLog() (Interface RenderingAgent.Renderer)	2021-05	
Support for Log4j 1	2022-05	

## 5 Overview

ID	Description	Categories
CORE-5002	<p>With the latest release, FirstSpirit-Logging now uses the current version string of the logging framework “Apache Log4j” :“Log4j 2”.</p> <p>Support for “Log4j 1” will be discontinued with a future release.</p> <p>Further information can be found in chapter “Administration: Logging: Log4j-Update to Version 2.x”.</p>	Developer, FirstSpirit Administrator, Integrated software, Monitoring
CORE-13597	<p>An error has been eliminated, which, in very rare cases, could cause an incomplete release of a subscribed parts tree when using auto-release with FirstSpirit Corporate Content.</p> <p>This applies to nodes that can be released. If the release is not possible due to errors (e.g., validation), it will not be executed and noted in the Corporate Content logging accordingly.</p>	Corporate Content, Developer, Editor, FirstSpirit Administrator, Workflow
CORE-14049	<p>FirstSpirit Server are no longer supported in the “Legacy mode”. The most recent release has removed all Legacy implementations and their applications.</p> <p><u>Note:</u> These changes do not affect the functionality of (Legacy) modules.</p>	Developer, FirstSpirit Administrator, Module development, Modules



ID	Description	Categories
CORE-14075	An error has been eliminated that, in very rare cases, could result in <code>java.lang.IllegalStateException: Circular service dependency detected: when starting a service.</code>	FirstSpirit Administrator, Monitoring
CORE-14216	Project components that have been removed from a project are now no longer included in project exports.	FirstSpirit Administrator, Project export / import
CORE-14275	If the “Jetty Web Server” was configured without port indication, but the corresponding service is started at the server start anyway, a <code>JettyServiceException</code> was previously logged as <code>ERROR</code> . Now, only a <code>WARN</code> with an informational error text is issued in this case.	FirstSpirit Administrator, Web server
CORE-14277	Specific icons are now displayed for a faster identification for additional file types: Audio: <i>wma, mid, m4a, mka, flac, ogg, opus, mp2, aac</i> , Video: <i>mkv, webm</i> , Archive: <i>7z</i> .	ContentCreator, Editor, Media, Media Store, SiteArchitect
CORE-14279	An error has been fixed, which, in very rare cases could cause that datasets (“Entities”) were created in duplicate at the target with transport via FirstSpirit ContentTransport or ExternalSync.	Content Store, Content Transport, Database, Developer, External synchronization, FirstSpirit Administrator
CORE-14281	<p>The Element Status Provider can now return <code>WorkflowGroups</code> with a visualized status that is automatically determined based on the referenced objects.</p> <p>Further information can be found in chapter “ContentCreator: Element Status Provider: display of the state of referenced elements”.</p>	ContentCreator, Developer, FirstSpirit API, Workflow
CORE-14284	For the duration of the establishment of a DAP (DataAccessPlugin) session, the correct values are now logged in the log (only for analytic purposes in log level <code>TRACE</code> ), e.g., <code>TRACE 30.03.2022 16:21:53.817 (de.espirit.firstspirit.client.plugin.dataaccess.DDataAccessPlugin(cloudinary-integration/Cloudinary DAP) - 101150705 - DAS#createSession took '33ms.</code>	FirstSpirit Administrator, Monitoring



ID	Description	Categories
CORE-14299	In the CSV files containing statistics information that can be downloaded via FirstSpirit ServerMonitoring, finished actions with a start time prior to the time of the server start are now no longer displayed.	FirstSpirit Administrator, Monitoring, ServerMonitoring
CORE-14320	FirstSpirit now checks the use of the web components of the installed modules at startup and whenever the <i>fs-server.conf</i> file (i.e. the server configuration) is changed. Invalid references (e.g. in manually deleted web applications) are cleaned up in the process.	FirstSpirit Administrator, Module development, Modules
CORE-14329	Media handling was improved so that temporary files are no longer used in case of the respective accesses.	FirstSpirit Administrator, Media, Monitoring, Performance
CORE-14337	FirstSpirit Content Experience Tools: Latest module versions  Further information can be found in chapter “FirstSpirit Content Experience Tools (CXT): Latest module versions”.	Developer, FirstSpirit Administrator, FirstSpirit Content Experience Tools (CXT), FragmentCreator, Modules
CORE-14367	Modules and extensions for FirstSpirit 2022.5.  Further information can be found in chapter “Administration: Modules and extensions for FirstSpirit 2022.5”.	Developer, FSDevTools, FirstSpirit Administrator, Launcher, Modules
CXT-2394	An error has been fixed that, in rare cases, could lead to the change not being saved when editing section references in the ContentCreator.	ContentCreator, Editor
CXT-2452	Logging has been adjusted when setting or removing bookmarks. For timing reasons, incorrect messages of the type <code>Refreshing report 'Bookmarks' failed, identifier is unknown.</code> could occur before.	Bookmarks, ContentCreator, Editor
CXT-2508	With the latest release, some drag-and-drop mechanisms were improved in the FirstSpirit ContentCreator.  Further information can be found in chapter “ContentCreator: Improvement of drag-and-drop mechanisms”.	ContentCreator, Editor



ID	Description	Categories
CXT-2547	If available, bookmarks on pages or in sections now displays the corresponding page reference instead of the page so that it is now also possible to synchronize the navigation bar accordingly.	Bookmarks, ContentCreator, Editor, Navigation view, Reports
CXT-2569	Cropping of very large images and/or various resolutions in the FirstSpirit ContentCreator was improved so that a 504 error/ Gateway Timeout can no longer occur.	ContentCreator, Editor, Media, Media Store
CXT-2571	<p>In projects that do not yet contain pages, the first pages can now also be created with the FirstSpirit ContentCreator.</p> <p>Further information can be found in chapter “ContentCreator: Create new pages”.</p>	ContentCreator, Editor
CXT-2585	In the FirstSpirit ContentCreator, changes in image maps (CMS_INPUT_IMAGE_MAP) are now correctly recognized again. The “Save” button was temporarily disabled with changes.	ContentCreator, Editor
CXT-2588	<p>When manually cropping images in the FirstSpirit ContentCreator, a corresponding text is now displayed if the crop selection is too small.</p> <p>Further information can be found in chapter “ContentCreator: Image cropping: The selected crop selection is too small”.</p>	ContentCreator, Editor, Media
CXT-2591	<p>Update of internally used software</p> <p>Further information can be found in chapter “Administration: Update of internally used software”.</p>	FirstSpirit Content Experience Tools (CXT), Integrated software
DEVEX-537	<p>The libraries used by “fs-cli” (FSDevTools) for “Log4j” and “SLF4J” have been updated.</p> <p>Further information can be found in chapter “Administration: Update of fs-cli”.</p>	Developer, FSDevTools, FirstSpirit Administrator, Integrated software
DEVEX-539	With the current release, “fs-cli” calls (FSDevTools) ending with a double quote (") can be made again.	Developer, FSDevTools





## 6 Categories

### 6.1 Workflow

ID	Description
CORE-13597	An error has been eliminated, which, in very rare cases, could cause an incomplete release of a subscribed parts tree when using auto-release with FirstSpirit Corporate Content. This applies to nodes that can be released. If the release is not possible due to errors (e.g., validation), it will not be executed and noted in the Corporate Content logging accordingly.
CORE-14281	The Element Status Provider can now return <code>workflowGroups</code> with a visualized status that is automatically determined based on the referenced objects.  Further information can be found in chapter “ContentCreator: Element Status Provider: display of the state of referenced elements”.

### 6.2 Content Transport

ID	Description
CORE-14279	An error has been fixed, which, in very rare cases could cause that datasets (“Entities”) were created in duplicate at the target with transport via FirstSpirit ContentTransport or ExternalSync.

### 6.3 ContentCreator

ID	Description
CORE-14277	Specific icons are now displayed for a faster identification for additional file types: Audio: <i>wma, mid, m4a, mka, flac, ogg, opus, mp2, aac</i> , Video: <i>mkv, webm</i> , Archive: <i>7z</i> .
CORE-14281	The Element Status Provider can now return <code>workflowGroups</code> with a visualized status that is automatically determined based on the referenced objects.  Further information can be found in chapter “ContentCreator: Element Status Provider: display of the state of referenced elements”.
CXT-2394	An error has been fixed that, in rare cases, could lead to the change not being saved when editing section references in the ContentCreator.



ID	Description
CXT-2452	Logging has been adjusted when setting or removing bookmarks. For timing reasons, incorrect messages of the type Refreshing report 'Bookmarks' failed, identifier is unknown. could occur before.
CXT-2508	<p>With the latest release, some drag-and-drop mechanisms were improved in the FirstSpirit ContentCreator.</p> <p>Further information can be found in chapter “ContentCreator: Improvement of drag-and-drop mechanisms”.</p>
CXT-2547	If available, bookmarks on pages or in sections now displays the corresponding page reference instead of the page so that it is now also possible to synchronize the navigation bar accordingly.
CXT-2569	Cropping of very large images and/or various resolutions in the FirstSpirit ContentCreator was improved so that a 504 error/Gateway Timeout can no longer occur.
CXT-2571	<p>In projects that do not yet contain pages, the first pages can now also be created with the FirstSpirit ContentCreator.</p> <p>Further information can be found in chapter “ContentCreator: Create new pages”.</p>
CXT-2585	In the FirstSpirit ContentCreator, changes in image maps (CMS_INPUT_IMAGE_MAP) are now correctly recognized again. The “Save” button was temporarily disabled with changes.
CXT-2588	<p>When manually cropping images in the FirstSpirit ContentCreator, a corresponding text is now displayed if the crop selection is too small.</p> <p>Further information can be found in chapter “ContentCreator: Image cropping: The selected crop selection is too small”.</p>

## 6.4 Corporate Content

ID	Description
CORE-13597	<p>An error has been eliminated, which, in very rare cases, could cause an incomplete release of a subscribed parts tree when using auto-release with FirstSpirit Corporate Content. This applies to nodes that can be released. If the release is not possible due to errors (e.g., validation), it will not be executed and noted in the Corporate Content logging accordingly.</p>



## 6.5 Database

ID	Description
CORE-14279	An error has been fixed, which, in very rare cases could cause that datasets (“Entities”) were created in duplicate at the target with transport via FirstSpirit ContentTransport or ExternalSync.

## 6.6 Content Store

ID	Description
CORE-14279	An error has been fixed, which, in very rare cases could cause that datasets (“Entities”) were created in duplicate at the target with transport via FirstSpirit ContentTransport or ExternalSync.

## 6.7 Developer

ID	Description
CORE-5002	<p>With the latest release, FirstSpirit-Logging now uses the current version string of the logging framework “Apache Log4j” :“Log4j 2”.</p> <p>Support for “Log4j 1” will be discontinued with a future release.</p> <p>Further information can be found in chapter “Administration: Logging: Log4j-Update to Version 2.x”.</p>
CORE-13597	<p>An error has been eliminated, which, in very rare cases, could cause an incomplete release of a subscribed parts tree when using auto-release with FirstSpirit Corporate Content. This applies to nodes that can be released. If the release is not possible due to errors (e.g., validation), it will not be executed and noted in the Corporate Content logging accordingly.</p>
CORE-14049	<p>FirstSpirit Server are no longer supported in the “Legacy mode”. The most recent release has removed all Legacy implementations and their applications.</p> <p><u>Note:</u> These changes do not affect the functionality of (Legacy) modules.</p>
CORE-14279	An error has been fixed, which, in very rare cases could cause that datasets (“Entities”) were created in duplicate at the target with transport via FirstSpirit ContentTransport or ExternalSync.



ID	Description
CORE-14281	<p>The Element Status Provider can now return <code>WorkflowGroups</code> with a visualized status that is automatically determined based on the referenced objects.</p> <p>Further information can be found in chapter “ContentCreator: Element Status Provider: display of the state of referenced elements”.</p>
CORE-14337	<p>FirstSpirit Content Experience Tools: Latest module versions</p> <p>Further information can be found in chapter “FirstSpirit Content Experience Tools (CXT): Latest module versions”.</p>
CORE-14367	<p>Modules and extensions for FirstSpirit 2022.5.</p> <p>Further information can be found in chapter “Administration: Modules and extensions for FirstSpirit 2022.5”.</p>
DEVEX-537	<p>The libraries used by “fs-cli” (FSDevTools) for “Log4j” and “SLF4J” have been updated.</p> <p>Further information can be found in chapter “Administration: Update of fs-cli”.</p>
DEVEX-539	<p>With the current release, “fs-cli” calls (FSDevTools) ending with a double quote (") can be made again.</p>

## 6.8 External synchronization

ID	Description
CORE-14279	<p>An error has been fixed, which, in very rare cases could cause that datasets (“Entities”) were created in duplicate at the target with transport via FirstSpirit ContentTransport or ExternalSync.</p>

## 6.9 FirstSpirit Content Experience Tools (CXT)

ID	Description
CORE-14337	<p>FirstSpirit Content Experience Tools: Latest module versions</p> <p>Further information can be found in chapter “FirstSpirit Content Experience Tools (CXT): Latest module versions”.</p>



ID	Description
CXT-2591	Update of internally used software  Further information can be found in chapter “Administration: Update of internally used software”.

## 6.10 FirstSpirit Administrator

ID	Description
CORE-5002	With the latest release, FirstSpirit-Logging now uses the current version string of the logging framework “Apache Log4j” :“Log4j 2”.  Support for “Log4j 1” will be discontinued with a future release.  Further information can be found in chapter “Administration: Logging: Log4j-Update to Version 2.x”.
CORE-13597	An error has been eliminated, which, in very rare cases, could cause an incomplete release of a subscribed parts tree when using auto-release with FirstSpirit Corporate Content. This applies to nodes that can be released. If the release is not possible due to errors (e.g., validation), it will not be executed and noted in the Corporate Content logging accordingly.
CORE-14049	FirstSpirit Server are no longer supported in the “Legacy mode”. The most recent release has removed all Legacy implementations and their applications.  <u>Note:</u> These changes do not affect the functionality of (Legacy) modules.
CORE-14075	An error has been eliminated that, in very rare cases, could result in <code>java.lang.IllegalStateException: Circular service dependency detected:</code> when starting a service.
CORE-14216	Project components that have been removed from a project are now no longer included in project exports.
CORE-14275	If the “Jetty Web Server” was configured without port indication, but the corresponding service is started at the server start anyway, a <code>JettyServiceException</code> was previously logged as <code>ERROR</code> . Now, only a <code>WARN</code> with an informational error text is issued in this case.
CORE-14279	An error has been fixed, which, in very rare cases could cause that datasets (“Entities”) were created in duplicate at the target with transport via FirstSpirit ContentTransport or ExternalSync.



ID	Description
CORE-14284	For the duration of the establishment of a DAP (DataAccessPlugin) session, the correct values are now logged in the log (only for analytic purposes in log level TRACE), e.g., TRACE 30.03.2022 16:21:53.817 (de.espirit.firstspirit.client.plugin.dataaccess.DataAccessSessions): DataAccessPlugin(cloudinary-integration/Cloudinary DAP) - 101150705 - DAS#createSession took '33ms.
CORE-14299	In the CSV files containing statistics information that can be downloaded via FirstSpirit ServerMonitoring, finished actions with a start time prior to the time of the server start are now no longer displayed.
CORE-14320	FirstSpirit now checks the use of the web components of the installed modules at startup and whenever the <i>fs-server.conf</i> file (i.e. the server configuration) is changed. Invalid references (e.g. in manually deleted web applications) are cleaned up in the process.
CORE-14329	Media handling was improved so that temporary files are no longer used in case of the respective accesses.
CORE-14337	FirstSpirit Content Experience Tools: Latest module versions  Further information can be found in chapter “FirstSpirit Content Experience Tools (CXT): Latest module versions”.
CORE-14367	Modules and extensions for FirstSpirit 2022.5.  Further information can be found in chapter “Administration: Modules and extensions for FirstSpirit 2022.5”.
DEVEX-537	The libraries used by “fs-cli” (FSDevTools) for “Log4j” and “SLF4J” have been updated.  Further information can be found in chapter “Administration: Update of fs-cli”.

## 6.11 FirstSpirit API

ID	Description
CORE-14281	The Element Status Provider can now return <code>workflowGroups</code> with a visualized status that is automatically determined based on the referenced objects.



ID	Description
	Further information can be found in chapter “ContentCreator: Element Status Provider: display of the state of referenced elements”.

## 6.12 FragmentCreator

ID	Description
CORE-14337	FirstSpirit Content Experience Tools: Latest module versions  Further information can be found in chapter “FirstSpirit Content Experience Tools (CXT): Latest module versions”.

## 6.13 FSDevTools

ID	Description
CORE-14367	Modules and extensions for FirstSpirit 2022.5.  Further information can be found in chapter “Administration: Modules and extensions for FirstSpirit 2022.5”.
DEVEX-537	The libraries used by “fs-cli” (FSDevTools) for “Log4j” and “SLF4J” have been updated.  Further information can be found in chapter “Administration: Update of fs-cli”.
DEVEX-539	With the current release, “fs-cli” calls (FSDevTools) ending with a double quote (") can be made again.

## 6.14 Integrated software

ID	Description
CORE-5002	With the latest release, FirstSpirit-Logging now uses the current version string of the logging framework “Apache Log4j” :“Log4j 2”.  Support for “Log4j 1” will be discontinued with a future release.



ID	Description
	Further information can be found in chapter “Administration: Logging: Log4j-Update to Version 2.x”.
CXT-2591	Update of internally used software  Further information can be found in chapter “Administration: Update of internally used software”.
DEVEX-537	The libraries used by “fs-cli” (FSDevTools) for “Log4j” and “SLF4J” have been updated.  Further information can be found in chapter “Administration: Update of fs-cli”.

## 6.15 Launcher

ID	Description
CORE-14367	Modules and extensions for FirstSpirit 2022.5.  Further information can be found in chapter “Administration: Modules and extensions for FirstSpirit 2022.5”.

## 6.16 Bookmarks

ID	Description
CXT-2452	Logging has been adjusted when setting or removing bookmarks. For timing reasons, incorrect messages of the type <code>Refreshing report 'Bookmarks' failed, identifier is unknown.</code> could occur before.
CXT-2547	If available, bookmarks on pages or in sections now displays the corresponding page reference instead of the page so that it is now also possible to synchronize the navigation bar accordingly.

## 6.17 Media

ID	Description
CORE-14277	Specific icons are now displayed for a faster identification for additional file types: Audio: <i>wma, mid, m4a, mka, flac, ogg, opus, mp2, aac</i> , Video: <i>mkv, webm</i> , Archive: <i>7z</i> .





ID	Description
CORE-14329	Media handling was improved so that temporary files are no longer used in case of the respective accesses.
CXT-2569	Cropping of very large images and/or various resolutions in the FirstSpirit ContentCreator was improved so that a 504 error/Gateway Timeout can no longer occur.
CXT-2588	When manually cropping images in the FirstSpirit ContentCreator, a corresponding text is now displayed if the crop selection is too small.  Further information can be found in chapter “ContentCreator: Image cropping: The selected crop selection is too small”.

## 6.18 Media Store

ID	Description
CORE-14277	Specific icons are now displayed for a faster identification for additional file types: Audio: <i>wma, mid, m4a, mka, flac, ogg, opus, mp2, aac</i> , Video: <i>mkv, webm</i> , Archive: <i>7z</i> .
CXT-2569	Cropping of very large images and/or various resolutions in the FirstSpirit ContentCreator was improved so that a 504 error/Gateway Timeout can no longer occur.

## 6.19 Module development

ID	Description
CORE-14049	FirstSpirit Server are no longer supported in the “Legacy mode”. The most recent release has removed all Legacy implementations and their applications.  <u>Note:</u> These changes do not affect the functionality of (Legacy) modules.
CORE-14320	FirstSpirit now checks the use of the web components of the installed modules at startup and whenever the <i>fs-server.conf</i> file (i.e. the server configuration) is changed. Invalid references (e.g. in manually deleted web applications) are cleaned up in the process.



## 6.20 Modules

ID	Description
CORE-14049	<p>FirstSpirit Server are no longer supported in the “Legacy mode”. The most recent release has removed all Legacy implementations and their applications.</p> <p><u>Note:</u> These changes do not affect the functionality of (Legacy) modules.</p>
CORE-14320	<p>FirstSpirit now checks the use of the web components of the installed modules at startup and whenever the <i>fs-server.conf</i> file (i.e. the server configuration) is changed. Invalid references (e.g. in manually deleted web applications) are cleaned up in the process.</p>
CORE-14337	<p>FirstSpirit Content Experience Tools: Latest module versions</p> <p>Further information can be found in chapter “FirstSpirit Content Experience Tools (CXT): Latest module versions”.</p>
CORE-14367	<p>Modules and extensions for FirstSpirit 2022.5.</p> <p>Further information can be found in chapter “Administration: Modules and extensions for FirstSpirit 2022.5”.</p>

## 6.21 Monitoring

ID	Description
CORE-5002	<p>With the latest release, FirstSpirit-Logging now uses the current version string of the logging framework “Apache Log4j” :“Log4j 2”.</p> <p>Support for “Log4j 1” will be discontinued with a future release.</p> <p>Further information can be found in chapter “Administration: Logging: Log4j-Update to Version 2.x”.</p>
CORE-14075	<p>An error has been eliminated that, in very rare cases, could result in <code>java.lang.IllegalStateException: Circular service dependency detected:</code> when starting a service.</p>
CORE-14284	<p>For the duration of the establishment of a DAP (DataAccessPlugin) session, the correct values are now logged in the log (only for analytic</p>



ID	Description
	purposes in log level TRACE), e.g., TRACE 30.03.2022 16:21:53.817 (de.espirit.firstspirit.client.plugin.dataaccess.DataAccessSessions): DataAccessPlugin(cloudinary-integration/Cloudinary DAP) - 101150705 - DAS#createSession took '33ms.
CORE-14299	In the CSV files containing statistics information that can be downloaded via FirstSpirit ServerMonitoring, finished actions with a start time prior to the time of the server start are now no longer displayed.
CORE-14329	Media handling was improved so that temporary files are no longer used in case of the respective accesses.

## 6.22 Navigation view

ID	Description
CXT-2547	If available, bookmarks on pages or in sections now displays the corresponding page reference instead of the page so that it is now also possible to synchronize the navigation bar accordingly.

## 6.23 Performance

ID	Description
CORE-14329	Media handling was improved so that temporary files are no longer used in case of the respective accesses.

## 6.24 Project export / import

ID	Description
CORE-14216	Project components that have been removed from a project are now no longer included in project exports.



## 6.25 Editor

ID	Description
CORE-13597	<p>An error has been eliminated, which, in very rare cases, could cause an incomplete release of a subscribed parts tree when using auto-release with FirstSpirit Corporate Content.</p> <p>This applies to nodes that can be released. If the release is not possible due to errors (e.g., validation), it will not be executed and noted in the Corporate Content logging accordingly.</p>
CORE-14277	<p>Specific icons are now displayed for a faster identification for additional file types: Audio: <i>wma, mid, m4a, mka, flac, ogg, opus, mp2, aac</i>, Video: <i>mkv, webm</i>, Archive: <i>7z</i>.</p>
CXT-2394	<p>An error has been fixed that, in rare cases, could lead to the change not being saved when editing section references in the ContentCreator.</p>
CXT-2452	<p>Logging has been adjusted when setting or removing bookmarks. For timing reasons, incorrect messages of the type <code>Refreshing report 'Bookmarks' failed, identifier is unknown.</code> could occur before.</p>
CXT-2508	<p>With the latest release, some drag-and-drop mechanisms were improved in the FirstSpirit ContentCreator.</p> <p>Further information can be found in chapter “ContentCreator: Improvement of drag-and-drop mechanisms”.</p>
CXT-2547	<p>If available, bookmarks on pages or in sections now displays the corresponding page reference instead of the page so that it is now also possible to synchronize the navigation bar accordingly.</p>
CXT-2569	<p>Cropping of very large images and/or various resolutions in the FirstSpirit ContentCreator was improved so that a 504 error/Gateway Timeout can no longer occur.</p>
CXT-2571	<p>In projects that do not yet contain pages, the first pages can now also be created with the FirstSpirit ContentCreator.</p> <p>Further information can be found in chapter “ContentCreator: Create new pages”.</p>
CXT-2585	<p>In the FirstSpirit ContentCreator, changes in image maps (<code>CMS_INPUT_IMAGEMAP</code>) are now correctly recognized again. The “Save” button was temporarily disabled with changes.</p>
CXT-2588	<p>When manually cropping images in the FirstSpirit ContentCreator, a corresponding text is now displayed if the crop selection is too small.</p> <p>Further information can be found in chapter “ContentCreator: Image cropping: The selected crop selection is too small”.</p>



## 6.26 Reports

ID	Description
CXT-2547	If available, bookmarks on pages or in sections now displays the corresponding page reference instead of the page so that it is now also possible to synchronize the navigation bar accordingly.

## 6.27 ServerMonitoring

ID	Description
CORE-14299	In the CSV files containing statistics information that can be downloaded via FirstSpirit ServerMonitoring, finished actions with a start time prior to the time of the server start are now no longer displayed.

## 6.28 SiteArchitect

ID	Description
CORE-14277	Specific icons are now displayed for a faster identification for additional file types: Audio: <i>wma, mid, m4a, mka, flac, ogg, opus, mp2, aac</i> , Video: <i>mkv, webm</i> , Archive: <i>7z</i> .

## 6.29 Web server

ID	Description
CORE-14275	If the “Jetty Web Server” was configured without port indication, but the corresponding service is started at the server start anyway, a <code>JettyServiceException</code> was previously logged as <code>ERROR</code> . Now, only a <code>WARN</code> with an informational error text is issued in this case.

