



FirstSpirit™

Unlock Your Content

Release Notes

FirstSpirit™ 2019-05

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Table of contents

1	Administration.....	5
1.1	News concerning Java support.....	5
1.2	Support for WebSphere Application Server will be discontinued in the future.....	7
2	General.....	7
2.1	IDs in FirstSpirit Release Notes: New prefix "CXT".....	7
2.2	Support of performance analyses on preview pages.....	7
3	FirstSpirit Content Experience Tools (CXT).....	8
3.1	Latest module versions.....	8
3.2	Modification of the paths of the fragment entities in FirstSpirit Content as a Service (CaaS).....	9
3.3	Multi-tab and multi-frame capability.....	10
3.4	Optimization of authentication.....	10
3.5	Optimization of the standard workflows.....	11
3.6	Visualizing references.....	11
4	SiteArchitect.....	12
4.1	JSON: Optimized output format.....	12
5	SiteArchitect / ServerManager.....	13
5.1	Module FirstSpirit Launcher JRE: New in the standard scope of delivery and java version update.....	13
6	System.....	14



- 6.1 Update of internally used software..... 14
- 6.2 New JDKs for use with the FirstSpirit Server..... 14
- 6.3 Wrapper configuration: The parameters -XX:SurvivorRatio=1 and -XX:
+NeverTenure should no longer be used from Java 9 onward..... 15
- 7 Deprecations.....16**
- 8 Overview..... 18**
- 9 Categories.....21**
- 9.1 Workflow..... 21
- 9.2 ContentCreator..... 22
- 9.3 Input Components..... 22
- 9.4 Developer..... 22
- 9.5 FirstSpirit Content as a Service (CaaS).....23
- 9.6 FirstSpirit Content Experience Tools (CXT).....23
- 9.7 FirstSpirit Jetty Web Server..... 24
- 9.8 FirstSpirit Administrator..... 24
- 9.9 FragmentCreator..... 25
- 9.10 Generation..... 25
- 9.11 Integrated software.....26
- 9.12 Isolated mode (BETA).....26
- 9.13 Java..... 26
- 9.14 Support for JSON.....27



9.15	Launcher.....	27
9.16	Module development.....	27
9.17	Modules.....	28
9.18	Performance.....	28
9.19	Editor.....	29
9.20	Remote access.....	29
9.21	Server Administrator.....	29
9.22	ServerManager.....	30
9.23	SiteArchitect.....	30
9.24	Template Store.....	31
9.25	Template Development.....	31
9.26	Preview.....	31
9.27	Web server.....	32
9.28	Webstart.....	32



1 Administration

1.1 News concerning Java support

In the FirstSpirit 2018-07 release notes we outlined our plan of becoming more independent from Oracle as a provider of Java versions.

FirstSpirit 2019-05 marks a big step towards achieving that goal: except for one version no Oracle Java will be used for the FirstSpirit Launcher anymore.

In order to facilitate the choice for customers, partners, and internal tests, we chose the OpenJDK distributor "AdoptOpenJDK", which offers several advantages over other offers:

- Binary packages for
 - macOS
 - Linux
 - Windows
- Releases shortly after the Oracle releases
- Java Runtime Environment (JRE) variants also available for versions greater Java 8
- Supported by notable companies: Azul Systems, GoDaddy, IBM, Microsoft Azure
- the complete infrastructure for package creation can be reviewed on GitHub
- (until now) moderate/few modifications only

Starting with FirstSpirit 2019-05 the reference for the FirstSpirit server as well as for the FirstSpirit desktop applications is OpenJDK 11, preferably as provided by AdoptOpenJDK. To be able to use Java 11 with the FirstSpirit desktop applications you need the FirstSpirit Launcher (see *FirstSpirit Manual for Administrators*, "FirstSpirit start page / Areas of the start page / FirstSpirit Launcher"). The Launcher has to be installed for the users, manually or automated. Additionally use of the Launcher has to be activated for all users in the connection settings. This activation can be automated by utilizing an LDAP group and the parameter "externalLauncherGroup" in the server configuration file "fs-server.conf".



Users, who already installed the FirstSpirit Launcher before FirstSpirit 2019-05 will automatically be using AdoptOpenJDK 11.0.3 for starting the **FirstSpirit desktop applications**. Normally the change from Oracle Java 8u181 to AdoptOpenJDK 11.0.3 should have no repercussions: The extended EAP period led to complete compatibility of Java 11 with FirstSpirit. Problems with the upgrade from Java 8 to 11 are therefore not to be expected in the core product. Should integration scenarios or other reasons still require the use of Oracle Java 8u181, this is also easily possible, by using the module “FirstSpirit Launcher JRE”. This has to be installed, and configured to use the desired Java version. Refer to the documentation “FirstSpirit Launcher JRE” unter *FirstSpirit Online Documentation*, “Documentation / For administrators”.

! On the **server side** a switch from Java 8 to OpenJDK 11 should be tested extensively on a test system, especiall when using third-party components and individual customer extensions! Background: Java 8 and Java 11 in parts differ significantly, possibly rendering existing libaried and implementations incompatible with Java 11. In such cases updating the respective libraries can help, if updates exist. When changing from Java 8 to OpenJDK 11 we recommend switching the server to Isolated Mode at same time, in order to avoid having to test modules and implementations twice. For this see *FirstSpirit Developer Manual for components (German only)*, “Isolated mode”.

! When using Java 8 you should consider that e-Spirit will soon no longer support this Java version. Thus you should plan a timely shift to OpenJDK 11!

Our current plan is for e-Spirit to always support OpenJDK's current Java release, as well as the latest LTS version (Long Term Support). Currently this would be version 11 and 12. For Oracle Java only the latest LTS version (Java 11) is supported. Oracle Java support might be dropped completely in the near future. As an exception from this rule e-Spirit on an interim basis continues to support Oracle Java and OpenJDK version 8. This support will (as mentioned before) soon be dropped, though.

With the end of Java 8 support, as announced before, support for the Windows installer will also be terminated. We advise our customers to use the new installation method via the installer archive. See “FirstSpirit 2018-11 Release Notes”.

You can find further information on these changes in the following chapters.



1.2 Support for WebSphere Application Server will be discontinued in the future

FirstSpirit is operated successfully by customers and partners with a wide range of different third-party components (operating systems, JDKs, servlet engines, application servers, databases). The high number of supported third-party components, short release cycles, as well as the many combination and configuration possibilities of third-party components lead to a very high test complexity.

In order to maintain our high software quality standards, we have to manage complexity and therefore focus on the third-party components that are used successfully by our customers and cover the majority of the market. Going forward, we intend to support the following application servers:

- Apache HTTP Server
- Apache Tomcat
- Microsoft Internet Information Server

The yet supported WebSphere Application Server will be discontinued in the future.

For a complete list of supported application servers see [Technical requirements and recommendations \(Documentation for administrators\)](#).

2 General

2.1 IDs in FirstSpirit Release Notes: New prefix "CXT"

For better clarity of the release notes, the prefix *CXT* was introduced in the "ID" column of the tables contained in the release notes with FirstSpirit 2019-03 for features and bug fixes relating to "FirstSpirit Content Experience Tools". Release Notes entries relating to the core product will continue to receive the *CORE* prefix.

2.2 Support of performance analyses on preview pages

To analyze performance problems in connection with the preview, it is now possible to get a summary of the duration of the single accesses.

To call the performance analysis, the parameter



```
/showLog=profile
```

must be added to the preview URL.

Log for [preview of node 113993, project 113425, language 'DE', release=false](#)

remote calls

name	total time	count	min	max	average
de.espirit.firstspirit.manager.StoreManager.getSubTree	32	44	0	3	0.72
de.espirit.firstspirit.manager.StoreManager.getElement	17	16	0	5	1.06
de.espirit.firstspirit.manager.MediaManager.getPictureMetaData	15	12	0	4	1.25
de.espirit.firstspirit.manager.ContentManager.executeQuery	12	1	12	12	12.0
de.espirit.firstspirit.manager.ContentManager.fetchByKeys	10	1	10	10	10.0
RepositoryManager.getNearestContentString	7	12	0	2	0.58
de.espirit.firstspirit.manager.ReferenceManager.getIncomingReferences	3	1	3	3	3.0
WebServerManager.getContextName	1	1	1	1	1.0
TemplateManager.getConversionTable	0	1	0	0	0.0

total duration = 214ms
remote duration = 97ms

template calls

name	total time	count	min	max	average
Template 'Homepage' (id=113439)	206	1	206	206	206.0
Template 'Text / Bild (Homepage-Teaser)' (id=113441)	30	3	7	14	10.0
Template 'Pressemitteilungen-Teaser' (id=113458)	27	1	27	27	27.0
Template 'Allgemeine Kopfzeile' (id=113440)	26	1	26	26	26.0
Link Template 'globallinksinternal' (id=115899)	17	4	1	7	4.25
Template 'Text / Bild (Marginal-Teaser)' (id=113442)	13	4	2	5	3.25
Template 'Tag-Cloud' (id=113446)	6	1	6	6	6.0
Format Template 'search' (id=113599)	5	1	5	5	5.0
Link Template 'tagcloudlinkinternal' (id=115893)	4	9	0	2	0.44
Format Template 'hometeaser' (id=113819)	2	7	0	2	0.28
Link Template 'textlinkinternal' (id=115891)	2	1	2	2	2.0
Format Template 'tooltip' (id=115411)	2	10	0	1	0.2
Template 'Projekteinstellungen' (id=113438)	1	1	1	1	1.0
Template 'Sprachabhängige Bezeichnung' (id=113448)	1	13	0	1	0.07
Format Template 'teaserboxtext' (id=114013)	0	6	0	0	0.0
Format Template 'p' (id=113524)	0	2	0	0	0.0

Display of the performance analysis for a preview page

3 FirstSpirit Content Experience Tools (CXT)

3.1 Latest module versions

FirstSpirit 2019-05 supports the following module versionen for “FirstSpirit Content Experience Tools”:

Module / file name	Version number
FirstSpirit DAP Bridge	1.15
dataservice-[version].fsm	
FirstSpirit FragmentCreator	1.18
fragment-creator-[version].fsm	
FirstSpirit Fragment DAP	1.12



fragmentdap-[version].fsm	
FirstSpirit Media DAP	1.10
mediadap-[version].fsm	
FirstSpirit Markdown	1.10
markdown-editor-[version].fsm	
FirstSpirit Tagging Editor	1.10
tagging-editor-[version].fsm	
FirstSpirit FragmentCreator - Caas Integration	1.6
caas-integration-[version].fsm	

3.2 Modification of the paths of the fragment entities in FirstSpirit Content as a Service (CaaS)

Via the “CaaS Integration” module, the contents of a fragment project can be published via FirstSpirit Content as a Service (CaaS).

With the current release, the paths of the fragment entities in FirstSpirit CaaS have changed. For stability reasons, the path is no longer based on the display name, but on the UID of the corresponding page template. (Each page template represents a fragment type (“Category”, FirstSpirit CaaS: “Collection”).)

Previously, the path of a fragment was formed as follows:

```
/${project_name}/${template_name}/${fragment_uid}
```

Now the path is formed as follows:

```
/${project_name}/${template_uid}/${fragment_uid}
```

In existing installations, the content will be deployed to a different location than before with the current release. Content from previous deployments is **not** automatically deleted by deploying with the current release. To avoid inconsistencies, this “old” content should be deleted manually. In third-party systems (“Apps”) that utilize content stored in FirstSpirit CaaS, the access must be adapted accordingly to the new syntax of the paths, and the content should then be deployed again in FirstSpirit CaaS.



3.3 Multi-tab and multi-frame capability

In the current release, the FragmentCreator and the MicroApps it provides have been prepared for multi-tab and multi-frame capability: The editing of multiple projects in different browser tabs is now generally possible.

To do this, the URL now has to be extended to include the following parameters:

```
clientsession=_new&projectselect=true
```

Example:

```
http://myserver:8080/fragments/?language=de&clientsession=_new&projectselect=true
```

If a new browser tab is opened, currently, the same project as in the existing tab is initially selected. If the URL is extended to include the parameters specified above, the tab in question starts its own session and the project selection option is displayed. Different projects can then be displayed and edited in different tabs. Refreshing the browser tab (**F5**) refreshes the desired project and no longer switches to a different project.

Background: Tabs with the same `clientsession` parameter have the same settings and therefore also the same project ID. Tabs without a `clientsession` parameter or with the parameter `clientsession=0` also share the same setting. This setting is one of the client's default settings.

The “Edit fragment” and “Create fragment” MicroApps provided by the FragmentCreator (also see Documentation for “FirstSpirit Content Experience Tools (CXT)”, “Installation / Modules / Installing modules / Fragment DAP”) automatically receive their own settings which only apply within the MicroApp frame and only for one call. Certain settings, such as the preferred variants for fragment display, are saved for each project rather than for each tab session.

Control by means of URL parameters is to serve as a temporary workaround only and will in future be incorporated into the graphical interface.

3.4 Optimization of authentication

In the current release, session handling for FirstSpirit CXT has been improved. Previously, authentication would fail and issue a 401 error in certain cases if a refresh token was used.



In this context, two new, optional parameters have been introduced in the `web.xml` file of the “FragmentCreator” module:

- `accessTokenValiditySeconds`
Defines the validity period of an OAuth access token (in seconds).
Default value: 3600 (1 hour)
- `refreshTokenValiditySeconds`
Defines the validity period of an OAuth refresh token (in seconds).
Default value: 43200 (12 hours)

For more information, see Documentation for “FirstSpirit Content Experience Tools (CXT)”, chapter “Installation / Modules / Installing modules / FragmentCreator”.

3.5 Optimization of the standard workflows

Workflows are used in FragmentCreator for releasing and deleting content (fragments and variants). In the current release, the functionality of the standard workflows has been optimized:

- Standard workflow “Request release” (reference name “request_release”): If the workflow is started on a variant, the complete parent chain is now also released so that the respective fragment is released too.
- Standard workflow “Request deletion” (reference name “delete_fragment_wf”): Fragments (represented by folders in the “Content” area) are now also deleted if an associated variant no longer exists. In addition, the folder that contains the content of the corresponding fragment type (“category”) is released (“root folder”).

The updated standard workflows are part of the master/blueprint project.

3.6 Visualizing references

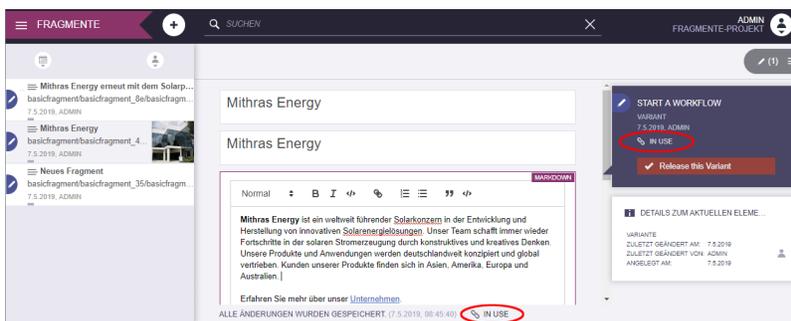
Dependencies between objects in FirstSpirit (or with objects outside FirstSpirit) are also designated as “references”.

In order to prevent inconsistencies, these references are tested before objects in a FirstSpirit project are deleted, for example. In addition, “dependent releases” can also be implemented via the references.



“FirstSpirit Content Experience Tools” (CXT) enable other fragments to be referenced with the aid of the “FirstSpirit Fragment DAP” module (`fragmentdap-[version].fsm`).

In the current release, FragmentCreator visualizes if a fragment has a reference to another fragment, specifically with the text “In use”, e.g.,



When a variant is deleted, a dialog box indicate that references to other fragments exist. If the variant is deleted or released despite the existence of references, the fragment being referenced should be tested with respect to the change.

4 SiteArchitect

4.1 JSON: Optimized output format

FirstSpirit offers JSON validation to support template development. See also *FirstSpirit Manual for Administrators*, “FirstSpirit ServerManager / JSON Support”.

The output format has been optimized as of the current release: If there is no explicit configuration, JSON is now output in the most compact form possible (without line breaks and indentations).

The behavior can be influenced using the parameter

```
#global.json.PrettyPrinting
```

A “readable” format can be obtained by calling

```
$CMS_SET(#global.json.PrettyPrinting, true)$
```



in the template on the JSON output tab.

Tip: If you check JSON frequently in the preview, you can use `$CMS_SET(#global.json.PrettyPrinting, #global.preview)$` to define the output format to be readable in the preview and space-saving during generation.

5 SiteArchitect / ServerManager

5.1 Module FirstSpirit Launcher JRE: New in the standard scope of delivery and java version update

The FirstSpirit desktop apps (FirstSpirit SiteArchitect and ServerManager) are started and updated (rolled out) via the **FirstSpirit Launcher**.

The “**FirstSpirit Launcher JRE**” module enables customers and partners to easily switch between different Java versions for the operation of Java-based applications. The desired Java version can be selected server-wide for Microsoft Windows and macOS separately.

For documentation on the “FirstSpirit Launcher JRE” module see “FirstSpirit Launcher JRE” under *FirstSpirit Online Documentation*, [Documentation / For administrators](#).

The included Java versions have been updated with the current release: In addition to the version delivered with the FirstSpirit Launcher, AdoptOpenJDK 11.0.3 (“Default”), the following Java variants are currently available:

- AdoptOpenJDK 12.0.1
- Oracle Java 8u181 (Outdated)

As of FirstSpirit 2019-05, the module is included in the FirstSpirit standard scope of delivery.

The module can be downloaded from <http://www.e-spirit.de/download/firstspirit/>. A valid login can be requested from Technical Support (<https://help.e-spirit.com>).

The module can be updated (manually or automatically) **using the FirstSpirit update service**. Updating to the latest version of FirstSpirit also updates all modules (that can be obtained via the update service):



- For documentation on updating modules manually, see: [Updates](#) (Documentation for Administrators)
- For documentation on updating modules automatically, see: [Automatic update via the update service](#) (Documentation for Administrators)

6 System

6.1 Update of internally used software

With the current FirstSpirit release, the following, internally used software has been updated:

- **ASM** (Library for analyzing and modifying Java bytecode)
Update from version 7.0 to 7.1
- **Java** (included in FirstSpirit Launcher)
Update from Oracle Java 8u181 to AdoptOpenJDK 11.0.3

6.2 New JDKs for use with the FirstSpirit Server

From the latest release of FirstSpirit, the **recommended Java version (reference)** for use with the FirstSpirit Server is changing to:

- **OpenJDK 11** (in the current version) (previously: Oracle JDK 8u181)

In addition, **OpenJDK 12** has been included in the list of **compatible JDKs**.

Discontinuation of Java 8: Support for Java 8 will cease in the future.

e-Spirit supports the following from the latest release of FirstSpirit:

- For OpenJDK: the current, released Java version as well as the latest LTS (long-term support) variant.
- For Oracle Java: only the latest LTS variant.

This applies to both the FirstSpirit Server and the FirstSpirit desktop applications.



A complete list of the supported Java versions for the FirstSpirit Server can be found in [Technical requirements and recommendations \(Documentation for administrators\)](#).



Note on the transition from Java 8 to Java 11: Before operating Java 11 on a production system, compatibility of all integrated modules and implementations with Java 11 must be tested on a test system.

The configuration of the Tanuki Java Service Wrapper should also be tested: The parameters `-XX:SurvivorRatio=1` and `-XX:+NeverTenure` should no longer be used (see the following chapter).

The use of the OpenJDK distribution AdoptOpenJDK is recommended (HotSpot JVM): AdoptOpenJDK provides up-to-date OpenJDK binaries for various platforms (including macOS, Linux, Windows) for download. For information on AdoptOpenJDK, see <https://adoptopenjdk.net>

Why OpenJDK? To reduce dependency on Oracle's Java development and also so that longer-term plans can be made for the benefit of our customers, e-Spirit will increase its focus on the use of OpenJDK. We plan to test the latest OpenJDK versions regularly for use with FirstSpirit, release them, and also designate them as reference versions.

6.3 Wrapper configuration: The parameters `-XX:SurvivorRatio=1` and `-XX:+NeverTenure` should no longer be used from Java 9 onward

The Tanuki Java Service Wrapper envelops the FirstSpirit Java virtual machine (VM). The Java VM can be started and terminated using the wrapper. The start parameters of the Java VM are configured using a corresponding configuration file for the wrapper (`fs-wrapper.conf` or `fs-wrapper-isolated.conf`).

The parameters `-XX:SurvivorRatio=1` and `-XX:+NeverTenure` should no longer be used from Java 9 onward, as they have negative effects on the system's overall performance.

Provided a current version of the Tanuki Java Service Wrapper (3.5.36 or later) is used, the parameters can be configured as follows:



```

wrapper.java.additional.#=-XX:SurvivorRatio=1
wrapper.java.additional.#.java_version.max=8
wrapper.java.additional.#=-XX:+NeverTenure
wrapper.java.additional.#.java_version.max=8
    
```

This transfer of parameters to the Java VM subject to the (Java) version ensures that the parameters are used for Java version 8 and ignored from Java version 9 onward.

This configuration is defined accordingly for all servers which are installed from the latest version of FirstSpirit. Existing installations should be adapted manually.

7 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 FS_LIST	5.2R3	
FirstSpirit Developer API: de.espirit.firstspirit.agency.GroupsAgent	5.2R15	
FirstSpirit Access API: delete (de.espirit.firstspirit.access.AccessUtil)	5.2R18	
Windows installation program	2018-06	
FirstSpirit Access API: release (de.espirit.firstspirit.access.AccessUtil)	2018-06	



Functionality	Deprecated as of	Will be removed/ Was removed as of
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	
Java 8 support for FirstSpirit	2019-05	
WebSphere Application Server support for FirstSpirit	2019-05	



8 Overview

ID	Description	Categories
CORE-551	An error could occur when editing links in the input component CMS_INPUT_DOMTABLE.	SiteArchitect
CORE-6010	When adding elements from a report to the FS_INDEX input component using drag-and-drop, compatibility detection has been optimized.	ContentCreator, Editor, FirstSpirit Content Experience Tools (CXT)
CORE-10279	The format of the JSON output has been optimized as of the current release. Further information can be found in chapter "SiteArchitect: JSON: Optimized output format".	Developer, Support for JSON, Template Development
CORE-10361	Improved display of the current status in the task list for parallel use of workflows.	SiteArchitect
CORE-10411 CORE-5785	New prefix CXT in the column "ID" of the release notes Further information can be found in chapter "General: IDs in FirstSpirit Release Notes: New prefix "CXT"".	FirstSpirit Content Experience Tools (CXT)
CORE-10438	The display of forms in the Template Store was optimized for the use with Java 11.	Developer, Input Components, Java, SiteArchitect, Template Development, Template Store
CORE-10442	Support of performance analyses on preview pages via preview URL parameter <code>/showLog=profile</code> Further information can be found in chapter "General: Support of performance analyses on preview pages".	Developer, FirstSpirit Administrator, Performance, Preview, Template Development
CORE-10453	Improved behavior with large amounts of data in the project.	ContentCreator
CORE-10466	In the current FirstSpirit release, updated internally used software. Further information can be found in chapter "System: Update of internally used software".	Integrated software



ID	Description	Categories
CORE-10537	Editing tables in the input component CMS_INPUT_DOM has been optimized.	ContentCreator
CORE-10582	If there are problems with the accessibility of the database, the error message of the database driver is now passed on.	Server Administrator
CORE-10638	<p>The parameters <code>-XX:SurvivorRatio=1</code> and <code>-XX:+NeverTenure</code> should no longer be used from Java 9 onward, as they have negative effects on the system's overall performance.</p> <p>Further information can be found in chapter "System: Wrapper configuration: The parameters <code>-XX:SurvivorRatio=1</code> and <code>-XX:+NeverTenure</code> should no longer be used from Java 9 onward".</p>	Java, Performance, Server Administrator
CORE-10680	Modifications made to a scheme were not taken into account in the preview in very rare cases.	FirstSpirit Administrator
CORE-10690	<p>From the latest release of FirstSpirit, the recommended Java version (reference) for use with the FirstSpirit Server is changing to OpenJDK 11 (in the current version) (previously: Oracle JDK 8u181). In addition, OpenJDK 12 has been included in the list of compatible JDKs. Support for Java 8 will cease in the future.</p> <p>Further information can be found in chapter "System: New JDKs for use with the FirstSpirit Server".</p>	Java, Module development, Server Administrator
CORE-10711	<p>The module "FirstSpirit Launcher JRE" is now included in the FirstSpirit standard scope of delivery. With the current release, the Java versions included have also been updated.</p> <p>Further information can be found in chapter "SiteArchitect / ServerManager: Module FirstSpirit Launcher JRE: New in the standard scope of delivery and java version update".</p>	Launcher
CORE-10717	Compatibility of FirstSpirit web applications with the Servlet API 3.0 has been restored.	Server Administrator, Web server



ID	Description	Categories
CORE-10742	<p>Support for WebSphere Application Server for use with FirstSpirit will be discontinued in the future.</p> <p>Further information can be found in chapter “Administration: Support for WebSphere Application Server will be discontinued in the future”.</p>	Server Administrator, Web server
CORE-10755	<p>New Java Reference and Strategy</p> <p>Further information can be found in chapter “Administration: News concerning Java support”.</p>	FirstSpirit Administrator, Integrated software, Isolated mode (BETA), Java, Launcher, ServerManager, SiteArchitect, Webstart
CXT-323	<p>The paths of the fragment entities in FirstSpirit Content as a Service (CaaS) have changed.</p> <p>Further information can be found in chapter “FirstSpirit Content Experience Tools (CXT): Modification of the paths of the fragment entities in FirstSpirit Content as a Service (CaaS)”.</p>	Developer, FirstSpirit Content Experience Tools (CXT), FirstSpirit Content as a Service (CaaS)
CXT-356	<p>In the current release, FragmentCreator visualizes if a fragment has a reference to another fragment.</p> <p>Further information can be found in chapter “FirstSpirit Content Experience Tools (CXT): Visualizing references”.</p>	Editor, FirstSpirit Content Experience Tools (CXT), Remote access
CXT-529	<p>When generating referenced fragments, the current status and not the released status were erroneously taken into account.</p>	FirstSpirit Content Experience Tools (CXT), FragmentCreator, Generation
CXT-557	<p>Improvement of the multi-tab and multi-frame capability</p> <p>Further information can be found in chapter “FirstSpirit Content Experience Tools (CXT): Multi-tab and multi-frame capability”.</p>	Editor, FirstSpirit Content Experience Tools (CXT)
CXT-561 CORE-9022	<p>Optimization of the standard workflows</p> <p>Further information can be found in chapter “FirstSpirit Content Experience Tools (CXT): Optimization of the standard workflows”.</p>	Editor, FirstSpirit Content Experience Tools (CXT), Workflow



ID	Description	Categories
CXT-582	The storage behavior when changing a fragment in the MicroApp widget has been optimized.	FragmentCreator
CXT-586	Optimization of authentication and new, optional parameters for the <code>web.xml</code> file of the “FragmentCreator” module. Further information can be found in chapter “FirstSpirit Content Experience Tools (CXT): Optimization of authentication”.	FirstSpirit Administrator, FirstSpirit Content Experience Tools (CXT), Modules
CXT-616	Work with the Quill Markdown Editor has been improved. The “Quill” integration is currently in the EAP status (“Early Access Program”).	FragmentCreator
CXT-644	When deploying several Spring boot applications simultaneously, a malfunction could occur.	FirstSpirit Content Experience Tools (CXT)
CXT-650	Using FirstSpirit Jetty Web Server may have resulted in a malfunction when referencing fragments or media.	FirstSpirit Content Experience Tools (CXT), FirstSpirit Jetty Web Server, FragmentCreator
CXT-659	FirstSpirit Content Experience Tools: Latest module versions Further information can be found in chapter “FirstSpirit Content Experience Tools (CXT): Latest module versions”.	FirstSpirit Administrator, FirstSpirit Content Experience Tools (CXT), Modules

9 Categories

9.1 Workflow

ID	Description
CXT-561	Optimization of the standard workflows
CORE-9022	Further information can be found in chapter “FirstSpirit Content Experience Tools (CXT): Optimization of the standard workflows”.



9.2 ContentCreator

ID	Description
CORE-6010	When adding elements from a report to the FS_INDEX input component using drag-and-drop, compatibility detection has been optimized.
CORE-10453	Improved behavior with large amounts of data in the project.
CORE-10537	Editing tables in the input component CMS_INPUT_DOM has been optimized.

9.3 Input Components

ID	Description
CORE-10438	The display of forms in the Template Store was optimized for the use with Java 11.

9.4 Developer

ID	Description
CORE-10279	The format of the JSON output has been optimized as of the current release. Further information can be found in chapter “SiteArchitect: JSON: Optimized output format”.
CORE-10438	The display of forms in the Template Store was optimized for the use with Java 11.
CORE-10442	Support of performance analyses on preview pages via preview URL parameter / <code>showLog=profile</code> Further information can be found in chapter “General: Support of performance analyses on preview pages”.
CXT-323	The paths of the fragment entities in FirstSpirit Content as a Service (CaaS) have changed. Further information can be found in chapter “FirstSpirit Content Experience Tools (CXT): Modification of the paths of the fragment entities in FirstSpirit Content as a Service (CaaS)”.



9.5 FirstSpirit Content as a Service (CaaS)

ID	Description
CXT-323	The paths of the fragment entities in FirstSpirit Content as a Service (CaaS) have changed. Further information can be found in chapter “FirstSpirit Content Experience Tools (CXT): Modification of the paths of the fragment entities in FirstSpirit Content as a Service (CaaS)”.

9.6 FirstSpirit Content Experience Tools (CXT)

ID	Description
CORE-6010	When adding elements from a report to the FS_INDEX input component using drag-and-drop, compatibility detection has been optimized.
CORE-10411 CORE-5785	New prefix <i>CXT</i> in the column “ID” of the release notes Further information can be found in chapter “General: IDs in FirstSpirit Release Notes: New prefix “CXT””.
CXT-323	The paths of the fragment entities in FirstSpirit Content as a Service (CaaS) have changed. Further information can be found in chapter “FirstSpirit Content Experience Tools (CXT): Modification of the paths of the fragment entities in FirstSpirit Content as a Service (CaaS)”.
CXT-356	In the current release, FragmentCreator visualizes if a fragment has a reference to another fragment. Further information can be found in chapter “FirstSpirit Content Experience Tools (CXT): Visualizing references”.
CXT-529	When generating referenced fragments, the current status and not the released status were erroneously taken into account.
CXT-557	Improvement of the multi-tab and multi-frame capability Further information can be found in chapter “FirstSpirit Content Experience Tools (CXT): Multi-tab and multi-frame capability”.
CXT-561 CORE-9022	Optimization of the standard workflows



ID	Description
	Further information can be found in chapter “FirstSpirit Content Experience Tools (CXT): Optimization of the standard workflows”.
CXT-586	Optimization of authentication and new, optional parameters for the <code>web.xml</code> file of the “FragmentCreator” module. Further information can be found in chapter “FirstSpirit Content Experience Tools (CXT): Optimization of authentication”.
CXT-644	When deploying several Spring boot applications simultaneously, a malfunction could occur.
CXT-650	Using FirstSpirit Jetty Web Server may have resulted in a malfunction when referencing fragments or media.
CXT-659	FirstSpirit Content Experience Tools: Latest module versions Further information can be found in chapter “FirstSpirit Content Experience Tools (CXT): Latest module versions”.

9.7 FirstSpirit Jetty Web Server

ID	Description
CXT-650	Using FirstSpirit Jetty Web Server may have resulted in a malfunction when referencing fragments or media.

9.8 FirstSpirit Administrator

ID	Description
CORE-10442	Support of performance analyses on preview pages via preview URL parameter <code>/showLog=profile</code> Further information can be found in chapter “General: Support of performance analyses on preview pages”.
CORE-10680	Modifications made to a scheme were not taken into account in the preview in very rare cases.
CORE-10755	New Java Reference and Strategy



ID	Description
	Further information can be found in chapter “Administration: News concerning Java support”.
CXT-586	Optimization of authentication and new, optional parameters for the <code>web.xml</code> file of the “FragmentCreator” module. Further information can be found in chapter “FirstSpirit Content Experience Tools (CXT): Optimization of authentication”.
CXT-659	FirstSpirit Content Experience Tools: Latest module versions Further information can be found in chapter “FirstSpirit Content Experience Tools (CXT): Latest module versions”.

9.9 FragmentCreator

ID	Description
CXT-529	When generating referenced fragments, the current status and not the released status were erroneously taken into account.
CXT-582	The storage behavior when changing a fragment in the MicroApp widget has been optimized.
CXT-616	Work with the Quill Markdown Editor has been improved. The “Quill” integration is currently in the EAP status (“Early Access Program”).
CXT-650	Using FirstSpirit Jetty Web Server may have resulted in a malfunction when referencing fragments or media.

9.10 Generation

ID	Description
CXT-529	When generating referenced fragments, the current status and not the released status were erroneously taken into account.



9.11 Integrated software

ID	Description
CORE-10466	In the current FirstSpirit release, updated internally used software. Further information can be found in chapter “System: Update of internally used software”.
CORE-10755	New Java Reference and Strategy Further information can be found in chapter “Administration: News concerning Java support”.

9.12 Isolated mode (BETA)

ID	Description
CORE-10755	New Java Reference and Strategy Further information can be found in chapter “Administration: News concerning Java support”.

9.13 Java

ID	Description
CORE-10438	The display of forms in the Template Store was optimized for the use with Java 11.
CORE-10638	The parameters <code>-XX:SurvivorRatio=1</code> and <code>-XX:+NeverTenure</code> should no longer be used from Java 9 onward, as they have negative effects on the system's overall performance. Further information can be found in chapter “System: Wrapper configuration: The parameters <code>-XX:SurvivorRatio=1</code> and <code>-XX:+NeverTenure</code> should no longer be used from Java 9 onward”.
CORE-10690	From the latest release of FirstSpirit, the recommended Java version (reference) for use with the FirstSpirit Server is changing to OpenJDK 11 (in the current version) (previously: Oracle JDK 8u181). In addition, OpenJDK 12 has been included in the list of compatible JDKs . Support for Java 8 will cease in the future. Further information can be found in chapter “System: New JDKs for use with the FirstSpirit Server”.



ID	Description
CORE-10755	New Java Reference and Strategy Further information can be found in chapter “Administration: News concerning Java support”.

9.14 Support for JSON

ID	Description
CORE-10279	The format of the JSON output has been optimized as of the current release. Further information can be found in chapter “SiteArchitect: JSON: Optimized output format”.

9.15 Launcher

ID	Description
CORE-10711	The module “FirstSpirit Launcher JRE” is now included in the FirstSpirit standard scope of delivery. With the current release, the Java versions included have also been updated. Further information can be found in chapter “SiteArchitect / ServerManager: Module FirstSpirit Launcher JRE: New in the standard scope of delivery and java version update”.
CORE-10755	New Java Reference and Strategy Further information can be found in chapter “Administration: News concerning Java support”.

9.16 Module development

ID	Description
CORE-10690	From the latest release of FirstSpirit, the recommended Java version (reference) for use with the FirstSpirit Server is changing to OpenJDK 11 (in the current version) (previously: Oracle JDK 8u181). In addition, OpenJDK 12 has been included in the list of compatible JDKs . Support for Java 8 will cease in the future.



ID	Description
	Further information can be found in chapter “System: New JDKs for use with the FirstSpirit Server”.

9.17 Modules

ID	Description
CXT-586	<p>Optimization of authentication and new, optional parameters for the <code>web.xml</code> file of the “FragmentCreator” module.</p> <p>Further information can be found in chapter “FirstSpirit Content Experience Tools (CXT): Optimization of authentication”.</p>
CXT-659	<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>

9.18 Performance

ID	Description
CORE-10442	<p>Support of performance analyses on preview pages via preview URL parameter <code>/showLog=profile</code></p> <p>Further information can be found in chapter “General: Support of performance analyses on preview pages”.</p>
CORE-10638	<p>The parameters <code>-XX:SurvivorRatio=1</code> and <code>-XX:+NeverTenure</code> should no longer be used from Java 9 onward, as they have negative effects on the system's overall performance.</p> <p>Further information can be found in chapter “System: Wrapper configuration: The parameters <code>-XX:SurvivorRatio=1</code> and <code>-XX:+NeverTenure</code> should no longer be used from Java 9 onward”.</p>



9.19 Editor

ID	Description
CORE-6010	When adding elements from a report to the FS_INDEX input component using drag-and-drop, compatibility detection has been optimized.
CXT-356	In the current release, FragmentCreator visualizes if a fragment has a reference to another fragment. Further information can be found in chapter “FirstSpirit Content Experience Tools (CXT): Visualizing references”.
CXT-557	Improvement of the multi-tab and multi-frame capability Further information can be found in chapter “FirstSpirit Content Experience Tools (CXT): Multi-tab and multi-frame capability”.
CXT-561 CORE-9022	Optimization of the standard workflows Further information can be found in chapter “FirstSpirit Content Experience Tools (CXT): Optimization of the standard workflows”.

9.20 Remote access

ID	Description
CXT-356	In the current release, FragmentCreator visualizes if a fragment has a reference to another fragment. Further information can be found in chapter “FirstSpirit Content Experience Tools (CXT): Visualizing references”.

9.21 Server Administrator

ID	Description
CORE-10582	If there are problems with the accessibility of the database, the error message of the database driver is now passed on.



ID	Description
CORE-10638	<p>The parameters <code>-XX:SurvivorRatio=1</code> and <code>-XX:+NeverTenure</code> should no longer be used from Java 9 onward, as they have negative effects on the system's overall performance.</p> <p>Further information can be found in chapter "System: Wrapper configuration: The parameters <code>-XX:SurvivorRatio=1</code> and <code>-XX:+NeverTenure</code> should no longer be used from Java 9 onward".</p>
CORE-10690	<p>From the latest release of FirstSpirit, the recommended Java version (reference) for use with the FirstSpirit Server is changing to OpenJDK 11 (in the current version) (previously: Oracle JDK 8u181). In addition, OpenJDK 12 has been included in the list of compatible JDKs. Support for Java 8 will cease in the future.</p> <p>Further information can be found in chapter "System: New JDKs for use with the FirstSpirit Server".</p>
CORE-10717	Compatibility of FirstSpirit web applications with the Servlet API 3.0 has been restored.
CORE-10742	<p>Support for WebSphere Application Server for use with FirstSpirit will be discontinued in the future.</p> <p>Further information can be found in chapter "Administration: Support for WebSphere Application Server will be discontinued in the future".</p>

9.22 ServerManager

ID	Description
CORE-10755	<p>New Java Reference and Strategy</p> <p>Further information can be found in chapter "Administration: News concerning Java support".</p>

9.23 SiteArchitect

ID	Description
CORE-551	An error could occur when editing links in the input component CMS_INPUT_DOMTABLE.
CORE-10361	Improved display of the current status in the task list for parallel use of workflows.



ID	Description
CORE-10438	The display of forms in the Template Store was optimized for the use with Java 11.
CORE-10755	New Java Reference and Strategy Further information can be found in chapter “Administration: News concerning Java support”.

9.24 Template Store

ID	Description
CORE-10438	The display of forms in the Template Store was optimized for the use with Java 11.

9.25 Template Development

ID	Description
CORE-10279	The format of the JSON output has been optimized as of the current release. Further information can be found in chapter “SiteArchitect: JSON: Optimized output format”.
CORE-10438	The display of forms in the Template Store was optimized for the use with Java 11.
CORE-10442	Support of performance analyses on preview pages via preview URL parameter / <code>showLog=profile</code> Further information can be found in chapter “General: Support of performance analyses on preview pages”.

9.26 Preview

ID	Description
CORE-10442	Support of performance analyses on preview pages via preview URL parameter / <code>showLog=profile</code> Further information can be found in chapter “General: Support of performance analyses on preview pages”.



9.27 Web server

ID	Description
CORE-10717	Compatibility of FirstSpirit web applications with the Servlet API 3.0 has been restored.
CORE-10742	Support for WebSphere Application Server for use with FirstSpirit will be discontinued in the future. Further information can be found in chapter “Administration: Support for WebSphere Application Server will be discontinued in the future”.

9.28 Webstart

ID	Description
CORE-10755	New Java Reference and Strategy Further information can be found in chapter “Administration: News concerning Java support”.

