



# Release Notes FirstSpirit™ 2019-06

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e-Spirit AG

Stockholmer Allee 24 44269 Dortmund | Germany

T +49 231 . 477 77-0 F +49 231 . 477 77-499

e-Spirit



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#### 1 Administration

# 1.1 Deprecation: Support for IBM AIX and Solaris 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. As a result, the support for the operating systems still supported so far

- IBM AIX
- Solaris

will be discontinued in the future.

For a complete list of supported operating systems see Technical requirements and recommendations (Documentation for administrators).

In this context, the delivery of the file fs-os-extension-5.2.xy.tar.gz, which was required for the installation of FirstSpirit on IBM AIX and Solaris systems via the Tar-Gzip archive introduced with FirstSpirit 2018-11, will be discontinued as of the current FirstSpirit release.

# 1.2 Release of tar.gz archives for installing and updating the FirstSpirit Server

With the current FirstSpirit release we also officially release the new tar.gz archives for installing and updating the FirstSpirit Server.

- fs-install-[version].tar.gz to install the FirstSpirit Server and
- fs-update-[version].tar.gz to update the FirstSpirit Server.



The new archives can be deployed flexibly in different customer-specific environments (i.e. operating systems, legacy mode, java version). They were introduced, starting their **EAP phase**, with **FirstSpirit 2018-11**, and have successfully been used since.

**Requirements** for operating a FirstSpirit Server are "Java" and the "Java Service Wrapper".

The "Java Service Wrapper" and related control files are provided by e-Spirit. They constitute the FirstSpirit server's operations layer. A Java version is not provided by e-Spirit.

#### Installing viaTar-Gzip install archive

Installing from a tar.gz archive (fs-install-[version].tar.gz) consists of 5 steps:

- 1. Unpack the install archive. Where necessary the archive has to be decompressed first (**G(un)zip**), then extracted.
- 2. Copy the FirstSpirit server file fs-isolated-server.jar for the desired FirstSpirit version to the directory ~FS/server/lib-isolated. (~FS = directory containing the FirstSpirit server installer files)
- 3. Copy the license file (fs-license.conf) to the directory ~FS/conf. (the license file can be requested from your designated Account Manager or via https://help.e-spirit.de/.)
- 4. Set the environment variable FS\_JAVA\_HOME to the directory with the desired Java version (e.g. FS\_JAVA\_HOME=C:\Program Files\Java\jdk-11). (alternatively the complete Java path can also be specified in the file fs-wrapper.isolated.conf.)
- 5. Start the FirstSpirit servers for the first time:
  - under Linux with ~FS/bin/fs5 start
  - under Windows with ~FS\bin\fs5 install and ~FS\bin\fs5 start (by starting the service just installed)
    or (alternatively with ~FS\bin\fs5.cmd console (without using a Windows service)
  - **Attention!** For fs5 install under Windows you need system administrator privileges.



#### The following assumptions are made in this manual:

- You are installing in Isolated mode (see Isolated mode ( $\rightarrow$ Manual for Module Developers)).
- The HTTP port will be 8000 and the socket port 1088.

#### **Installing the Windows service**

~FS\bin\fs5 install
The Windows service can be configured via the wrapper.ntservice.\* parameters in the file fs-wrapper.isolated.conf (or fs-wrapper.conf, respectively).

#### Installing with a different port

■ Before step 5) (Start the FirstSpirit servers) you can modify HTTP\_PORT and/or SOCKET\_PORT in the file ~FS/conf/fs-server.conf.

#### Installing in legacy mode

- Instead of step 2) (Copy the FirstSpirit server file fs-isolated-server.jar) copy the file fs-server.jar for the desired FirstSpirit version to ~FS/server/lib.
- Before step 5) (Start the FirstSpirit servers) delete the file ~FS/bin/fs5.mode and rename ~FS/bin/fs5.mode.legacy to ~FS/bin/fs5.mode.

#### Hints for installing FirstSpirit under Linux:

- We strongly advise against operating FirstSpirit as the root user.
- Users and groups are not created automatically, i.e. the administrator has create and configure an account before installing FirstSpirit.
- Services also have to be managed by the administrator with firstspirit5/bin/fs5.init we are providing an example for SysV-Init.

#### **Demo project "Mithras Energy"**





After the installation you can also download the demo project "Mithras Energy" with the respective modules and install both via the ServerManager. To be able to fully use the demo project the module Apache FOP (fs-fop.fsm) is required.

#### Updating via tar-gzip update archive

The FirstSpirit server's operation layer (**Java Service Wrappe**r and configuration files) can be updated with the tar.gz archive fs-update-[version].tar.gz.

To update the operations layer unpack the archive in your FirstSpirit server directory.

Example call under Linux:

```
~/firstspirit5$ tar xvfz fs-update-[version].tar.gz
```

After unpacking take note of the unpacked files' user and group access right, and adjust them if necessary.

## 1.3 Connection problem fixed and libraries updated

A problem has been solved which in rare cases could cause the connection from the SiteArchitect to the server to be closed.

The following libraries have been updated:

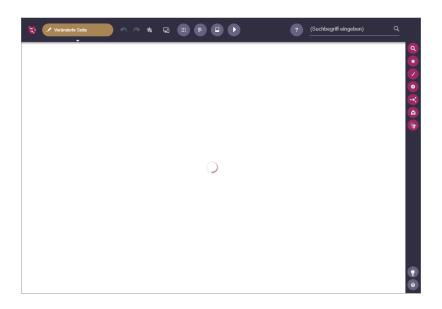
- commons-codec-1.11
- commons-logging-1.2
- httpclient-4.5.8
- httpcore-4.4.11
- httpmime-4.5.8
- jna-4.5.2



### 2 ContentCreator

## 2.1 Loading animation when loading a page

A loading animation in the ContentCreator now shows that the preview of a page is loaded. Previously, only white background was displayed for pages that took a long time to load.



## 3 FirstSpirit Content Experience Tools (CXT)

#### 3.1 Latest module versions

FirstSpirit 2019-06 supports the following module versions for "FirstSpirit Content Experience Tools":

Module / file name	Version number
FirstSpirit DAP Bridge	1.16
dataservice-[version].fsm	
FirstSpirit FragmentCreator	1.21
<pre>fragment-creator-[version].fsm</pre>	
FirstSpirit Fragment DAP	1.14
<pre>fragmentdap-[version].fsm</pre>	
FirstSpirit Media DAP	1.12
mediadap-[version].fsm	



FirstSpirit Markdown	1.11
markdown-editor-[version].fsm	
FirstSpirit Tagging Editor	1.11
tagging-editor-[version].fsm	
FirstSpirit FragmentCreator - Caas Integration	1.8
caas-integration-[version].fsm	

# 3.2 Announcement: Release of FragmentCreator and availability in the Cloud / SaaS

#### Release

As of the upcoming release **FirstSpirit 2019-07**, FragmentCreator will be released, the ramp-up- / EAP-phase will be finished.

The new client passed extensive internal quality assurance tests and was tested in real customer scenarios. With the release the FragmentCreator officially becomes another product of the FirstSpirit family. It can be operated stably and is subject to the general maintenance regulations of e-Spirit. Bugs can - as with other e-Spirit software products - be reported regularly to e-Spirit Technical Support (https://help.e-spirit.com).

The underlying CXT platform, on which FragmentCreator is based, is currently being further developed. The release of this platform is planned for a future release.

#### Availability in the Cloud

FirstSpirit is also increasingly being hosted in a SaaS model. The costs and responsibility for providing and updating the infrastructure lie with an external service provider. (More information on this topic can be found in the blog entry FirstSpirit in the Cloud.)

As of the upcoming release **FirstSpirit 2019-07**, FragmentCreator will also be available in the FirstSpirit cloud and can then be used by customers who use FirstSpirit Cloud and have a corresponding license for FragmentCreator.

# 3.3 Important: FragmentCreator requires manual adaptation of the "web.xml" file

As of FirstSpirit 2019-06, the CXT MicroApps will register on the integrated Eureka server. This requires a password. It is stored in the web.xml file of the "FragmentCreator" module:



```
<context-param>
  <param-name>eurekaPassword</param-name>
  <param-value>${RANDOM_VALUE}</param-value>
</context-param>
```

Using this default configuration, the password is regenerated with each start.

Changing the value \${RANDOM\_VALUE} is only necessary if a fixed password is required to integrate external MicroApps.

No adjustments are required for new installations as of FirstSpirit 2019-06; for existing FirstSpirit installations the code snippet specified above must be added to the web.xml file of the module "FragmentCreator". Otherwise the module cannot be deployed and a 404 error occurs when the FragmentCreator is started.

## 4 Module Development, Scripts, API

## 4.1 Deprecation: "Legacy mode" will be discontinued in the future

Since the introduction of "Isolated mode" for the FirstSpirit server, modules can be developed in two different modes ("isolated" and "legacy").

With the current release the "legacy mode" is deprecated. "Legacy mode" will be dropped in the medium term. All modules and servers should be converted by then. Before the "Legacy mode" will be dropped, this will be announced in the Release Notes at an early stage.

"Legacy mode" is replaced by "Isolated mode". The main goal of the FirstSpirit server's "Isolated mode" is to give module developers greater freedom in selecting the libraries they use. Especially the potential conflicts with libraries supplied by the FirstSpirit core should be hereby minimised. "Isolated mode" was released with FirstSpirit Release 2019-02.

As of this release, **new** FirstSpirit servers should be installed using the installation archive <code>fs-install-[version].tar.gz</code>. The installation archive <code>fs-install-[version].tar.gz</code> will also be released with the current release. When using this archive, the server is installed in "Isolated mode" by default. If modules are used, they should be Isolated-capable in order to ensure smooth operation.



- Existing FirstSpirit modules that have not yet been converted to "Isolated mode" are (still) executable. If these contain a web component that uses libraries that are not available in the module, it may be necessary to use the Compatibility module until the module is migrated to "Isolated mode".
  - No other adjustments are necessary in the short term. In the medium term, however, all resources in modules should be adapted to the new conditions in order to benefit from the advantages of "Isolated mode".

For more information please see FirstSpirit Manual for Module Developers, Chapter "Isolated mode" (or on local FirstSpirit servers in the online help in the left-hand navigation bar under "Manual for Module Developers (Beta) / Isolated mode").

If you require assistance with the migration, please contact e-Spirit Technical Support. There you will also get access to the "FSM Dependency Checker" tool, which can be used to analyse internal and external dependencies of existing FirstSpirit modules.

# 4.2 Example modules for accessing web services via OData and SOAP converted to Isolated Mode.

e-Spirit provides two example modules that contain DataAccessPlugin implementations for access to web services via the standardized protocols Open Data Protocol (OData) and Simple Object Access Protocol (SOAP). Each of these modules may be configured to access one or more web services of the specific type. The data from these web services is then made available in input components of type FS\_INDEX.

The example modules were adapted as part of the conversion of the FirstSpirit modules to "Isolated mode":

- The display name of the modules (tag <displayname>) was supplemented by the addition (I, L). This indicates that the respective module can be operated both on FirstSpirit servers that are already running in "Isolated mode" and on servers that are still running in "Legacy mode". The unique identifier / name of the modules (tag name) remains unchanged.
- The build process for both modules was switched from Apache Ant to Gradle.
  Together with the FirstSpirit Module Gradle Plugin, the Gradle build management tool supports the creation of FirstSpirit modules and simplifies the entire build process. Both Gradle



and the Gradle plug-in are delivered in a current version together with the example modules. Documentation of the Gradle plug-in will follow soon.

General information on the modules can be found at: https://docs.e-spirit.com/odfs/plug-developmen/examples/modules-accessi/index.html.

For special information on the build process see: https://docs.e-spirit.com/odfs/plug-developmen/examples/modules-accessi/compilation-ins/index.html.

## 4.3 de.espirit.firstspirit.agency.RenderingAgent: Recursive use possible

FirstSpirit content can be generated via the RenderingAgent interface (package: de.espirit.firstspirit.agency, FirstSpirit Developer API). The interface enables a special generation for specific dynamic content to be controlled directly via the API.

As of the current release, the interface can now also be used recursively and up to a recursion depth of 9.

When using the RenderingAgent recursively, it is recommended to configure logging to the Application Engine (using de.espirit.firstspirit.agency.RenderingAgent.Renderer.redirectTemplateLogToDefaultLog()), for example as follows:

```
import de.espirit.firstspirit.agency.RenderingAgent;
mypage = context.getVariableValue("page");
renderingAgent = context.requireSpecialist(RenderingAgent.TYPE);
renderer = renderingAgent.createRenderer(mypage).redirectTemplateLogToDefaultLog().
   additionalContext("page", mypage).preview();
return renderer.render();
```

## 4.4 New API method <user>.getExternalGroups()

The new method <user>.getExternalGroups() (FirstSpirit Developer API, package de.espirit.firstspirit.access, interface User) returns a list of ExternalGroup objects.

The External Group objects returned by this new method have the status Read-Only.



## 5 SiteArchitect / ServerManager

# 5.1 Module "FirstSpirit Launcher JRE": Replacement of Oracle Java by AdoptJDK

The FirstSpirit Desktop Apps (FirstSpirit SiteArchitect and ServerManager) are started and updated ("Rollout") via the FirstSpirit Launcher.

The "FirstSpirit Launcher JRE" module enables customers and partners to easily switch between different Java versions for operating the FirstSpirit Desktop Apps.

Release notes for FirstSpirit 2019-05 and 2018-07 already outlined the plan to become more independent of Oracle as a provider of Java versions. Since April 2019 Oracle no longer provides public JDKs. With the current release, after an evaluation and test phase, the last included Oracle Java version was now replaced by an alternative version of AdoptJDK:

- up to now: Oracle Java 8u181
- as of FirstSpirit 2019-06: AdoptOpenJDK 8u212

This means that Oracle Java is no longer used for the FirstSpirit Launcher.

<u>Note:</u> Java version 8 has the status "Outdated", as this version is no longer recommended for operating FirstSpirit and should only be used in cases of incompatibilities of customer-specific integrations with Java versions greater than 8.

For more information please see documentation about the module "FirstSpirit Launcher JRE", see "FirstSpirit Launcher JRE" on page *FirstSpirit Online Documentation*, Documentation / For administrators.

#### 6 Search

# 6.1 New parameter "indexing.extendedDatasetKeys" for influencing the indexing of content at server level (for datasets)

The parameter <code>indexing.extendedDatasetKeys</code> (fs-server.conf) can be used to adjust the format of the search index when using external databases.



If indexing.extendedDatasetKeys=true is set, the format of the search index is changed so that datasets from different tables with the same primary key can be found via the search.

The default value is indexing.extendedDatasetKeys=false. With this setting, only one of these datasets is found when using external databases.

After changing the parameter, the search index must be recalculated for all projects that use external databases (see Recalculating the search index). Otherwise, the old versions can still be found when changes are made to datasets.

## 7 System

## 7.1 Update of internally used software

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

#### **Apache Derby (integrated database)**

Update from version 10.12.1.1 to 10.14.1.0

Note about Apache Derby:

As before, use of Apache Derby for production purposes is not recommended!

Use of Derby databases prohibits in-place **downgrades** to previous FirstSpirit versions. Error message after downgrade:

ERROR XSLAN: Database at [path] has an incompatible format with the current version of the software. The database was created by or upgraded by version 10.14.

Workaround: Export with FirstSpirit 2019-06 and import into a FirstSpirit server running FirstSpirit 2019-05.

Eclipse Jetty (contained in the module fs-jetty.fsm / "FirstSpirit Jetty Service")

Update from version 9.4.14 to version 9.4.18



!

Note about Eclipse Jetty:

As before, use of Eclipse Jetty for production purposes is not recommended!

#### Java Service Wrapper (configuration and monitoring of the FirstSpirit Java VM)

#### Update from version 3.5.36 to version 3.5.39

Note about Java Service Wrapper:

When the FirstSpirit Server is updated (auto update, in-place upgrade), the Java Service Wrapper's files are **not** refreshed automatically.

The Java Service Wrapper should be updated in line with the following chapters in the *FirstSpirit Installation Instructions*:

- Updating via a tar archive (for Unix) \*
- Updating via the installation program (for Microsoft Windows) or via
- the tar. gzip update archive (File fs-update-5.2.\*.tar.gz) (see also "Release of tar.gz archives for installing and updating the FirstSpirit Server").
- \* When an existing FirstSpirit Server is updated via the "tar" archive ("\*.tgz" file) on Unix systems, therefore, the files with extension .a must be deleted from the ~/server/lib and ~/server/lib-isolated directories following a manual update.

## 7.2 Version comparison under macOS and update of JIDE libraries

Fixed a bug that could cause problems when using version comparison with macOS when using Java versions greater than 8.

In this context, JIDE libraries used by FirstSpirit were also updated from version 3.6.9 to 3.7.6.



# 7.3 Wrapper configuration: The parameter -Xmn should no longer be used from Java 9 onward

The value given at -xmn defines the area of the Java Heap which is used for temporary Java objects. The parameter -xmn should no longer be used from Java 9 onward, as it has negative effects on the Garbage Collection G1 (Garbage-First).

See also "General Recommendations for G1": https://docs.oracle.com/javase/9/gctuning/garbage-first-garbage-collector-tuning.htm

This configuration is defined accordingly for all servers which are newly installed, from the current FirstSpirit version onwards. Existing installations should be adapted manually.

### 8 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	



Functionality	Deprecated as of	Will be removed/ Was removed as of
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.MaintenanceModeInfo)	2018-07	
FirstSpirit Developer API: getStartingTimeOfStageAsDate (de.espirit.firstspirit.server.MaintenanceModeInfo)	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	
Solaris support for FirstSpirit	2019-06	October 2019



Functionality	Deprecated as of	Will be removed/ Was removed as of
AIX support for FirstSpirit	2019-06	October 2019
Legacy mode for the FirstSpirit server and module development	2019-06	

## 9 Overview

ID	Description	Categories
CORE-10161	The example modules for accessing web services via OData and SOAP have been converted to Isolated Mode. In addition the build process has been changed to Gradle.  Further information can be found in chapter "Module Development, Scripts, API: Example modules for accessing web services via OData and SOAP converted to Isolated Mode.".	•
CORE-10472	New sections that had been created could not be displayed immediately in the preview in rare cases.	ContentCreator
CORE-10478	The parameter indexing.extendedDatasetKeys (fs-server.conf) can be used to adjust the format of the search index when using external databases. The default value is indexing.extendedDatasetKeys=false.  Further information can be found in chapter "Search: New parameter "indexing.extendedDatasetKeys" for influencing the indexing of content at server level (for datasets)".	Database, Indexing
CORE-10506	A problem has been solved which in rare cases could cause the connection from the SiteArchitect to the server to be closed.  Further information can be found in chapter "Administration: Connection problem fixed and libraries updated".	FirstSpirit Administrator, SiteArchitect
CORE-10546	Improved storage behavior for individual user sessions.	Server Administrator



ID	Description	Categories
CORE-10626	Tar.gz archives released for installation and update  Further information can be found in chapter "Administration: Release of tar.gz archives for installing and updating the FirstSpirit Server".	Server Administrator
CORE-10650	When using FirstSpirit ContentTransport or external synchronization, malfunction could occur in rare cases if projects have unequal language quantities	Content Transport, External synchronization
CORE-10667	The new API method <user>.getExternalGroups() returns a list of ExternalGroup objects.  Further information can be found in chapter "Module Development, Scripts, API: New API method <user>.getExternalGroups() ".</user></user>	FirstSpirit API
CORE-10673	In the current FirstSpirit release, updated internally used software.  Further information can be found in chapter "System: Update of internally used software".	Integrated software
CORE-10689	As of the current release, the last Oracle Java version contained in the "FirstSpirit Launcher JRE" module has been replaced by an alternative version of AdoptJDK.  Further information can be found in chapter "SiteArchitect / ServerManager: Module "FirstSpirit Launcher JRE": Replacement of Oracle Java by AdoptJDK".	•
CORE-10719	When using external synchronization, a local project ID for GCA nodes was incorrectly transported.	External synchronization
CORE-10720	When using external synchronization, a wrong ID for the metadata template was transported by mistake. This could lead to a merge conflict when exporting from different projects	External synchronization
CORE-10731	If reporting is activated, temporary files were erroneously deleted only when the FirstSpirit server was shut down. These files are now deleted immediately.	FirstSpirit Administrator



ID	Description	Categories
CORE-10749	Recursive use of de.espirit.firstspirit.agency.RenderingAgent possible  Further information can be found in chapter "Module Development, Scripts, API: de.espirit.firstspirit.agency.RenderingAgent: Recursive use possible".	FirstSpirit API
CORE-10757	When transporting global project information, the local project ID counter was incorrectly exported as well. This potentially caused a conflict in the merge files.	External synchronization
CORE-10759	The parameter -xmn should no longer be used from Java 9 onward, as it has negative effects on the Garbage Collection G1 (Garbage-First).  Further information can be found in chapter "System: Wrapper configuration: The parameter -Xmn should no longer be used from Java 9 onward".	
CORE-10768	Version comparison under macOS and update of JIDE libraries  Further information can be found in chapter "System: Version comparison under macOS and update of JIDE libraries".	Editor, Integrated software, SiteArchitect
CORE-10773	Corrected an error that could cause database assignments to be lost when transporting a database schema using External Synchronization.	
CORE-10775	A loading animation in the ContentCreator now shows that the preview of a page is loaded.  Further information can be found in chapter "ContentCreator: Loading animation when loading a page".	ContentCreator, Editor
CORE-10794	When using external synchronization, the path to the file that uses this unresolvable reference is now output for missing necessary dependencies.	External synchronization
CORE-10801	In very rare cases a malfunction could occur when shutting down the FirstSpirit server.	Server Administrator



ID	Description	Categories
CORE-10815	Using the component with "Fragment Data Access Plugin" ( <source name="FirstSpiritFragmentAccess/FSFAConnector"/> ), the toolbar icons were rarely not displayed during the first hover.	ContentCreator, Editor
CORE-10828	Deleting a language template in the ServerManager could cause a malfunction when opening the Server Properties.	FirstSpirit Administrator, Languages, Server Administrator, ServerManager
CORE-10829	In rare cases, moving sections by drag-and-drop could lead to malfunction.	ContentCreator, Editor
CORE-10846	Optimized loading behavior for individual objects.	Performance, SiteArchitect
CORE-10858	Using the FirstSpirit SAML Login Module could cause a login to the server to fail with a 403 error message ${\tt Invalid}$ ${\tt XSRF}$ token.	Server Administrator
CORE-10885	Deprecation: "Legacy mode" will be discontinued in the future.  Further information can be found in chapter "Module Development, Scripts, API: Deprecation: "Legacy mode" will be discontinued in the future".	Developer, Isolated mode, Module development, Modules
CORE-10894	Support for the operating systems IBM AIX and Solaris for use with FirstSpirit servers will be discontinued in the future.  Further information can be found in chapter "Administration: Deprecation: Support for IBM AIX and Solaris will be discontinued in the future".	Developer, FirstSpirit Administrator
CORE-10903	A security gap was closed through which users could obtain extended rights in the FirstSpirit ServerManager.	Security, ServerManager
CXT-546	Existing CXT installations require manual adaptation of the web.xml file to use FragmentCreator.  Further information can be found in chapter "FirstSpirit Content Experience Tools (CXT): Important: FragmentCreator requires manual adaptation of the "web.xml" file".	FirstSpirit Administrator, FirstSpirit Content Experience Tools (CXT)



ID	Description	Categories
CXT-569	Considering template changes in a fragment project was optimized in FragmentCreator.	FragmentCreator
CXT-677	Temporarily display problems could occur in Microsoft Edge and Mozilla Firefox.	Editor, FragmentCreator
CXT-702	The filter area was accidentally closed after each setting.	FragmentCreator
CXT-706	In rare cases, the display of fragments was not up-to-date due to performance problems.  Error messages Conflicting changes! and CxtElement request firstspirit-fragments-form/ saveFormRequest failed	Editor, FragmentCreator
CXT-710	Planned with FirstSpirit 2019-07: Release of FragmentCreator and availability in the cloud  Further information can be found in chapter "FirstSpirit Content Experience Tools (CXT): Announcement: Release of FragmentCreator and availability in the Cloud / SaaS".	FirstSpirit Content Experience Tools (CXT), FragmentCreator
CXT-716	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), FragmentCreator, Modules

# 10 Categories

# 10.1 Content Transport

ID	Description
CORE-10650	When using FirstSpirit ContentTransport or external synchronization, malfunction could occur in rare cases if projects have unequal language quantities



## 10.2 ContentCreator

ID	Description
CORE-10472	New sections that had been created could not be displayed immediately in the preview in rare cases.
CORE-10775	A loading animation in the ContentCreator now shows that the preview of a page is loaded.  Further information can be found in chapter "ContentCreator: Loading animation when loading a page".
CORE-10815	Using the component with "Fragment Data Access Plugin" ( <source name="FirstSpiritFragmentAccess/FSFAConnector"/> ), the toolbar icons were rarely not displayed during the first hover.
CORE-10829	In rare cases, moving sections by drag-and-drop could lead to malfunction.

# 10.3 Data Access Plug-In

cessing web services via OData and SOAP have been converted the build process has been changed to Gradle.
found in chapter "Module Development, Scripts, API: Example ervices via OData and SOAP converted to Isolated Mode.".

## 10.4 Database

ID	Description	
CORE-10478	The parameter indexing.extendedDatasetKeys (fs-server.conf) can be used to a the format of the search index when using external databases. The default valindexing.extendedDatasetKeys=false.	
	Further information can be found in chapter "Search: New parameter "indexing.extendedDatasetKeys" for influencing the indexing of content at server level (for datasets)".	



ID	Description
CORE-10773	Corrected an error that could cause database assignments to be lost when transporting a database schema using External Synchronization.

# 10.5 Developer

ID	Description
CORE-10161	The example modules for accessing web services via OData and SOAP have been converted to Isolated Mode. In addition the build process has been changed to Gradle.
	Further information can be found in chapter "Module Development, Scripts, API: Example modules for accessing web services via OData and SOAP converted to Isolated Mode.".
CORE-10885	Deprecation: "Legacy mode" will be discontinued in the future.
	Further information can be found in chapter "Module Development, Scripts, API: Deprecation: "Legacy mode" will be discontinued in the future".
CORE-10894	Support for the operating systems IBM AIX and Solaris for use with FirstSpirit servers will be discontinued in the future.
	Further information can be found in chapter "Administration: Deprecation: Support for IBM AIX and Solaris will be discontinued in the future".

# 10.6 External synchronization

ID	Description
CORE-10650	When using FirstSpirit ContentTransport or external synchronization, malfunction could occur in rare cases if projects have unequal language quantities
CORE-10719	When using external synchronization, a local project ID for GCA nodes was incorrectly transported.
CORE-10720	When using external synchronization, a wrong ID for the metadata template was transported by mistake. This could lead to a merge conflict when exporting from different projects



ID	Description
CORE-10757	When transporting global project information, the local project ID counter was incorrectly exported as well. This potentially caused a conflict in the merge files.
CORE-10773	Corrected an error that could cause database assignments to be lost when transporting a database schema using External Synchronization.
CORE-10794	When using external synchronization, the path to the file that uses this unresolvable reference is now output for missing necessary dependencies.

# 10.7 FirstSpirit Content Experience Tools (CXT)

ID	Description
CXT-546	Existing CXT installations require manual adaptation of the web.xml file to use FragmentCreator.  Further information can be found in chapter "FirstSpirit Content Experience Tools (CXT): Important: FragmentCreator requires manual adaptation of the "web.xml" file".
CXT-710	Planned with FirstSpirit 2019-07: Release of FragmentCreator and availability in the cloud  Further information can be found in chapter "FirstSpirit Content Experience Tools (CXT):  Announcement: Release of FragmentCreator and availability in the Cloud / SaaS".
CXT-716	FirstSpirit Content Experience Tools: Latest module versions  Further information can be found in chapter "FirstSpirit Content Experience Tools (CXT): Latest module versions".

## 10.8 FirstSpirit Administrator

ID	Description
CORE-10506	A problem has been solved which in rare cases could cause the connection from the SiteArchitect to the server to be closed.
	Further information can be found in chapter "Administration: Connection problem fixed and libraries updated".



ID	Description
CORE-10731	If reporting is activated, temporary files were erroneously deleted only when the FirstSpirit server was shut down. These files are now deleted immediately.
CORE-10828	Deleting a language template in the ServerManager could cause a malfunction when opening the Server Properties.
CORE-10894	Support for the operating systems IBM AIX and Solaris for use with FirstSpirit servers will be discontinued in the future.  Further information can be found in chapter "Administration: Deprecation: Support for IBM AIX
	and Solaris will be discontinued in the future".
CXT-546	Existing CXT installations require manual adaptation of the $web.xml$ file to use FragmentCreator.
	Further information can be found in chapter "FirstSpirit Content Experience Tools (CXT): Important: FragmentCreator requires manual adaptation of the "web.xml" file".
CXT-716	FirstSpirit Content Experience Tools: Latest module versions
	Further information can be found in chapter "FirstSpirit Content Experience Tools (CXT): Latest module versions".

# 10.9 FirstSpirit API

ID	Description
CORE-10667	The new API method <code><user>.getExternalGroups()</user></code> returns a list of ExternalGroup objects.
	Further information can be found in chapter "Module Development, Scripts, API: New API method <user>.getExternalGroups() ".</user>
CORE-10749	Recursive use of de.espirit.firstspirit.agency.RenderingAgent possible
	Further information can be found in chapter "Module Development, Scripts, API: de.espirit.firstspirit.agency.RenderingAgent: Recursive use possible".



# 10.10 FragmentCreator

ID	Description
CXT-569	Considering template changes in a fragment project was optimized in FragmentCreator.
CXT-677	Temporarily display problems could occur in Microsoft Edge and Mozilla Firefox.
CXT-702	The filter area was accidentally closed after each setting.
CXT-706	In rare cases, the display of fragments was not up-to-date due to performance problems. Error messages Conflicting changes! and CxtElement request firstspirit-fragments-form/saveFormRequest failed
CXT-710	Planned with FirstSpirit 2019-07: Release of FragmentCreator and availability in the cloud  Further information can be found in chapter "FirstSpirit Content Experience Tools (CXT):  Announcement: Release of FragmentCreator and availability in the Cloud / SaaS".
CXT-716	FirstSpirit Content Experience Tools: Latest module versions  Further information can be found in chapter "FirstSpirit Content Experience Tools (CXT): Latest module versions".

# 10.11 Indexing

ID	Description
CORE-10478	The parameter <code>indexing.extendedDatasetKeys</code> (fs-server.conf) can be used to adjust the format of the search index when using external databases. The default value is <code>indexing.extendedDatasetKeys=false</code> .
	Further information can be found in chapter "Search: New parameter "indexing.extendedDatasetKeys" for influencing the indexing of content at server level (for datasets)".



# 10.12 Integrated software

ID	Description
CORE-10673	In the current FirstSpirit release, updated internally used software.
	Further information can be found in chapter "System: Update of internally used software".
CORE-10689	As of the current release, the last Oracle Java version contained in the "FirstSpirit Launcher JRE" module has been replaced by an alternative version of AdoptJDK.
	Further information can be found in chapter "SiteArchitect / ServerManager: Module "FirstSpirit Launcher JRE": Replacement of Oracle Java by AdoptJDK".
CORE-10768	Version comparison under macOS and update of JIDE libraries
	Further information can be found in chapter "System: Version comparison under macOS and update of JIDE libraries".

## 10.13 Isolated mode

ID	Description
CORE-10161	The example modules for accessing web services via OData and SOAP have been converted to Isolated Mode. In addition the build process has been changed to Gradle.
	Further information can be found in chapter "Module Development, Scripts, API: Example modules for accessing web services via OData and SOAP converted to Isolated Mode.".
CORE-10885	Deprecation: "Legacy mode" will be discontinued in the future.
	Further information can be found in chapter "Module Development, Scripts, API: Deprecation: "Legacy mode" will be discontinued in the future".



## 10.14 Java

ID	Description
CORE-10759	The parameter -Xmn should no longer be used from Java 9 onward, as it has negative effects on the Garbage Collection G1 (Garbage-First).
	Further information can be found in chapter "System: Wrapper configuration: The parameter - Xmn should no longer be used from Java 9 onward".

## 10.15 Launcher

Description
As of the current release, the last Oracle Java version contained in the "FirstSpirit Launcher JRE" module has been replaced by an alternative version of AdoptJDK.
Further information can be found in chapter "SiteArchitect / ServerManager: Module "FirstSpirit Launcher JRE": Replacement of Oracle Java by AdoptJDK".

# 10.16 Module development

ID		Description
CORE-1	0885	Deprecation: "Legacy mode" will be discontinued in the future.
		Further information can be found in chapter "Module Development, Scripts, API: Deprecation: "Legacy mode" will be discontinued in the future".

## 10.17 Modules

ID	Description
CORE-10885	Deprecation: "Legacy mode" will be discontinued in the future.
	Further information can be found in chapter "Module Development, Scripts, API: Deprecation: "Legacy mode" will be discontinued in the future".





Description
FirstSpirit Content Experience Tools: Latest module versions
Further information can be found in chapter "FirstSpirit Content Experience Tools (CXT): Latest module versions".

## 10.18 Performance

ID	Description
CORE-10759	The parameter -Xmn should no longer be used from Java 9 onward, as it has negative effects on the Garbage Collection G1 (Garbage-First).
	Further information can be found in chapter "System: Wrapper configuration: The parameter - Xmn should no longer be used from Java 9 onward".
CORE-10846	Optimized loading behavior for individual objects.

## 10.19 Editor

ID	Description
CORE-10768	Version comparison under macOS and update of JIDE libraries
	Further information can be found in chapter "System: Version comparison under macOS and update of JIDE libraries".
CORE-10775	A loading animation in the ContentCreator now shows that the preview of a page is loaded.
	Further information can be found in chapter "ContentCreator: Loading animation when loading a page".
CORE-10815	Using the component with "Fragment Data Access Plugin" ( <source name="FirstSpiritFragmentAccess/FSFAConnector"/> ), the toolbar icons were rarely not displayed during the first hover.
CORE-10829	In rare cases, moving sections by drag-and-drop could lead to malfunction.
CXT-677	Temporarily display problems could occur in Microsoft Edge and Mozilla Firefox.



ID	Description
CXT-706	In rare cases, the display of fragments was not up-to-date due to performance problems.  Error messages Conflicting changes! and CxtElement request firstspirit-fragments-form/saveFormRequest failed

## 10.20 Server Administrator

ID	Description
CORE-10546	Improved storage behavior for individual user sessions.
CORE-10626	Tar.gz archives released for installation and update  Further information can be found in chapter "Administration: Release of tar.gz archives for installing and updating the FirstSpirit Server".
CORE-10759	The parameter -Xmn should no longer be used from Java 9 onward, as it has negative effects
CORE-10759	on the Garbage Collection G1 (Garbage-First).
	Further information can be found in chapter "System: Wrapper configuration: The parameter - Xmn should no longer be used from Java 9 onward".
CORE-10801	In very rare cases a malfunction could occur when shutting down the FirstSpirit server.
CORE-10828	Deleting a language template in the ServerManager could cause a malfunction when opening the Server Properties.
CORE-10858	Using the FirstSpirit SAML Login Module could cause a login to the server to fail with a 403 error message Invalid XSRF token.

# 10.21 ServerManager

ID	Description
CORE-10689	As of the current release, the last Oracle Java version contained in the "FirstSpirit Launcher JRE" module has been replaced by an alternative version of AdoptJDK.
	Further information can be found in chapter "SiteArchitect / ServerManager: Module "FirstSpirit Launcher JRE": Replacement of Oracle Java by AdoptJDK".



ID	Description
CORE-10828	Deleting a language template in the ServerManager could cause a malfunction when opening the Server Properties.
CORE-10903	A security gap was closed through which users could obtain extended rights in the FirstSpirit ServerManager.

# 10.22 Security

ID	Description
CORE-10903	A security gap was closed through which users could obtain extended rights in the FirstSpirit ServerManager.

## 10.23 SiteArchitect

ID	Description
CORE-10506	A problem has been solved which in rare cases could cause the connection from the SiteArchitect to the server to be closed.
	Further information can be found in chapter "Administration: Connection problem fixed and libraries updated".
CORE-10689	As of the current release, the last Oracle Java version contained in the "FirstSpirit Launcher JRE" module has been replaced by an alternative version of AdoptJDK.
	Further information can be found in chapter "SiteArchitect / ServerManager: Module "FirstSpirit Launcher JRE": Replacement of Oracle Java by AdoptJDK".
CORE-10768	Version comparison under macOS and update of JIDE libraries
	Further information can be found in chapter "System: Version comparison under macOS and update of JIDE libraries".
CORE-10846	Optimized loading behavior for individual objects.



# 10.24 Languages

ID	Description
CORE-10828	Deleting a language template in the ServerManager could cause a malfunction when opening the Server Properties.