



# FirstSpirit™

*Unlock Your Content*

## Release Notes

### FirstSpirit™ 2023.7

<b>Status</b>	<b>RELEASED</b>
Department	FS-Core
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## 1 Administration

### 1.1 Update of internally used software

As of the release 2023.7, the following internally used software has been updated.

- **Apache Batik** (Display, creation and manipulation of scalable vector graphics, SVG)  
Updated from version 1.14 to version 1.16
- **TwelveMonkeys ImageIO** (extended Java support for image file formats)  
Updated from version 3.8.2 to version 3.9.4

### 1.2 Replacement of DH ARC4 with ChaCha20 transport encryption

With the current FirstSpirit version the DH ARC4 transport encryption is replaced by ChaCha20 transport encryption.

X25519-ChaCha20-Poly1305 is a replacement to the DH\_Arc4 algorithm because it is more secure and has no known vulnerabilities.

### 1.3 New compression mode: Zstandard

With the current FirstSpirit version, another compression mode Zstandard is now available and can be selected in the connection settings. The new compression mode aims to provide fast compression speeds while maintaining a high compression ratio.



CONNECTION SETTINGS

Show default applications

Use settings

Mode HTTP ▾

Use HTTPS protocol

Host

Port

Memory 1536 ▾

Compression 4 (Zstandard) ▾

Encryption 0 (none)

Servlet zone 1 (Deflate)

Optional parameters 2 (Deflate Speed)

3 (Deflate Best)

4 (Zstandard)

Save Cancel

Connection settings: Compression

For more information, see *FirstSpirit start page / Areas of the start page / User* (→*Documentation for Administrators*), section [Configuring connection settings](#).

### 1.4 Optional password encryption in the configuration files

Password encryption now also includes the password for configured Tomcat web servers.

**Note:** The following steps are required when downgrading the FirstSpirit server:

Manual configuration adjustment:

- Shut down FirstSpirit Server.
- Before starting with the old version, replace the encrypted password with the decrypted password in the corresponding `ini` file of the web server.

OR

Password encryption deactivation before shutting down the new version:

- In `fs-server.conf`, enter the value 0 in the `password.encryption.active` parameter.



- Optional: Enable encryption after the downgrade is complete.

For more information, see *FirstSpirit Manual for Administrators*, [Password encryption](#).

## 2 Administration / Modules

### 2.1 Announcement: Migration to Jakarta EE 6.0

The migration to Jakarta EE 6.0 is an essential step to ensure the security of web applications.

#### Support and current timeline

Here is the current plan:

- 2023-06 Beta-version of the FirstSpirit JakartaEE Edition is available for testing (available via [Support](#))
- 2023-08 Stable release (2023.9) with support for automatic migration
- 2024-08 Support for automatic migration is removed with FirstSpirit 2024.9

**!** We strongly recommend testing the used modules and instances as soon as possible to ensure a smooth transition.

The FirstSpirit installation may be affected if any of the following conditions apply:

- The FirstSpirit installation is not maintained in the Crownpeak Cloud and deploys web-applications to an application server like Apache Tomcat.
- A custom module is used that contains a WebApp component with code that uses the legacy JavaEE API, such as the Servlet API.
- A custom module is used that contains a WebApp component with dependencies that use the old JavaEE API, e.g., `Spring Boot 2.x`.

The module used could be affected if at least one of the following conditions applies:



- The module contains a WebApp component with code that uses the old JavaEE API, e.g., the Servlet API.
- The module contains a WebApp component with dependencies which use the old JavaEE API, e.g., Spring Boot 2.x.

! If FirstSpirit is run in an on-premises scenario, the Tomcat version must be updated when migrating to the FirstSpirit JakartaEE edition. Since the servlet version will be updated to 6.0, a 10.1.x version of Tomcat is required.

More information and updates can be found in the [Crownpeak Community](#) and the [detailed Jakarta FAQ](#).

Contact [Customer Support Team](#) if you have questions or feedback regarding the migration.

## 2.2 Logging optimization of the FOP module

The logging of the FOP module has been adjusted. Instead of the `fs-wrapper.log` the log outputs are now in the `fs-server.log`. Furthermore, the number of log outputs has been significantly reduced.

In the course of this, relevant errors during PDF generation are now also visible for the generation. To prevent these errors from increasing the number of warnings for a corresponding generation, these messages are temporarily output with the INFO log level.

In a later FirstSpirit version, the log level of the messages will be increased to the log level WARN.

Since corresponding INFO outputs are not output with the previous standard log configuration of FirstSpirit, we recommend setting the log level for the `org.apache.fop` class to INFO in order to be able to detect any existing problems in FOP generation in advance.

For this purpose, the logging configuration must be extended as follows:

Log4j2

```
<Logger name="org.apache.fop" level="INFO" additivity="false">
  <AppenderRef ref="fs"/>
</Logger>
```



Log4j1

```
log4j.logger.org.apache.fop=INFO
```

## 3 External Synchronization / Content Transport

### 3.1 ContentTransport: Improved feature cleanup

The temporary feature files are now automatically deleted from the server (<FirstSpiritROOT>/data/projects/project\_<id>/features directory) after the installation process is complete, if the feature was installed via the GUI or by schedule task.

If features are installed via API, then the deletion itself must be carried out. For this purpose, the FeatureAgent interface (FirstSpirit Developer API, Package `de.espirit.firstspirit.feature`) has been extended by the following methods.

- `getFeatureFiles()` - returns a list of the feature ZIPs currently present in the project
- `deleteFeatureFile(<feature file>)` - deletes the specified feature ZIP from the <FirstSpiritROOT>/data/projects/project\_<id>/features directory of the respective project.

In addition, the unneeded contents of the <FirstSpiritROOT>/data/projects/project\_<id>/features directory are no longer included in the project export.

## 4 FirstSpirit Content Experience Tools (CXT)

### 4.1 Latest module versions

FirstSpirit 2023.7 supports the following module versions for FirstSpirit Content Experience Tools.

Module / file name	Version number
FirstSpirit CXT Plattform	3.0.10
platform-[version].fsm	
FirstSpirit CXT DAP Bridge	1.44.12
dataservice-[version].fsm	





FirstSpirit CXT FragmentCreator	4.0.7
<code>fragment-creator-[version].fsm</code>	
FirstSpirit Fragment DAP	1.40.20
<code>fragmentdap-[version].fsm</code>	
FirstSpirit Media DAP	1.31.11
<code>mediadap-[version].fsm</code>	
FirstSpirit PageRef DAP	1.9.11
<code>pagerefdap-[version].fsm</code>	
FirstSpirit Markdown Editor	1.29.10
<code>markdown-editor-[version].fsm</code>	
FirstSpirit Tagging Editor	1.29.10
<code>tagging-editor-[version].fsm</code>	
FirstSpirit CXT FragmentCreator - CaaS Integration	1.31.11
<code>caas-integration-[version].fsm</code>	

## 4.2 Optimization of authentication

With the current release, session handling for the MicroApps has been improved.

In this context, an optional parameter has been introduced. This parameter can be configured either for all MicroApps (file `cxt-microapps-common.properties`) or individually per MicroApp.

- `cxt.platform.connection-cleanup-rate`  
Defines when the MicroApps close their FS connection (in minutes).  
Default value: *PT30M* (30 Minutes)

For more information see *Installation / Modules / Installing modules / MicroApp configuration parameters* (→*Documentation "Content Experience Tools"*).

## 5 Module Development, Scripts, API

### 5.1 Stream-Support for Listable

A new method `toStream()` has been added to the interface `de.espirit.common.util.Listable` (FirstSpirit Access-API, Package `de.espirit.common.util`).



## 6 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	
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	



Functionality	Deprecated as of	Will be removed/ Was removed as of
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	
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	



Functionality	Deprecated as of	Will be removed/ Was removed as of
Support for Log4j 1	2022-05	

## 7 Overview

ID	Description	Categories
CORE-9655	Stream-Support for Listable (Interface <code>de.espirit.common.util.Listable</code> , Package <code>de.espirit.common.util</code> , FirstSpirit Access-API)  Further information can be found in chapter “Module Development, Scripts, API: Stream-Support for Listable”.	Developer, FirstSpirit API
CORE-10156	Password encryption now also includes the password for configured Tomcat web servers.  Further information can be found in chapter “Administration: Optional password encryption in the configuration files”.	Server Administrator
CORE-13772 CORE-15379	The logging of the FOP module has been adjusted.  Further information can be found in chapter “Administration / Modules: Logging optimization of the FOP module”.	Modules, Server Administrator
CORE-15207	Update of internally used software  Further information can be found in chapter “Administration: Update of internally used software”.	Integrated software
CORE-15328	With the current FirstSpirit version, a new compression mode <code>Zstandard</code> is now available, which can be selected in the connection settings.  Further information can be found in chapter “Administration: New compression mode: Zstandard”.	Server Administrator



ID	Description	Categories
CORE-15329	Within templates the wrong object type was returned when using <code>gomFormElement.name</code> expressions ( <code>de.espirit.firstspirit.common.text.Designator</code> instead of <code>String</code> ).	Template Development
CORE-15334	With the current FirstSpirit version the <code>DH ARC4</code> transport encryption is replaced by <code>ChaCha20</code> transport encryption.  Further information can be found in chapter “Administration: Replacement of <code>DH ARC4</code> with <code>ChaCha20</code> transport encryption”.	Security, Server Administrator
CORE-15338 CORE-8222	Feature cleanup has been optimized.  Further information can be found in chapter “External Synchronization / Content Transport: ContentTransport: Improved feature cleanup”.	Content Transport, FirstSpirit API
CORE-15340	A Content Security Policy (CSP) header will be set for the FirstSpirit Root WebApp with the current FirstSpirit version.	FirstSpirit Administrator, FirstSpirit home page, Server Administrator
CORE-15404	FirstSpirit Content Experience Tools: Latest module versions  Further information can be found in chapter “FirstSpirit Content Experience Tools (CXT): Latest module versions”.	FirstSpirit Content Experience Tools (CXT)
CORE-15436	Announcement: Migration to Jakarta EE 6.0  Further information can be found in chapter “Administration / Modules: Announcement: Migration to Jakarta EE 6.0”.	FirstSpirit Administrator, Module development, Modules, Server Administrator
CXT-2729	In certain rights configuration, page references could not be moved to folders whose start nodes had restricted rights.	ContentCreator, Permissions
CXT-2811	The interface <code>DisplayElementOperation</code> (FirstSpirit Developer API, package <code>de.espirit.firstspirit.ui.operations</code> ) now also supports the display of elements from media and data source management, as well as data sets for which there is no separate preview page.	ContentCreator, FirstSpirit API
CXT-2843	In certain projects, a <code>CMS_INPUT_DOM</code> entry component that was emptied with the <code>EMPTY</code> rule, could not be saved.	ContentCreator, Dynamic Forms



ID	Description	Categories
CXT-2859	Optimization of authentication and a new optional parameter for the MicroApps.  Further information can be found in chapter “FirstSpirit Content Experience Tools (CXT): Optimization of authentication”.	FirstSpirit Content Experience Tools (CXT)
CXT-2882	In the cropping dialog, the display of images has been improved.	ContentCreator
CXT-2891	Too many incoming references were followed up for displaying uses in the References report, so the results list included more items than expected.	ContentCreator
CXT-2903	To avoid unwanted session expiration, the timeout for the CXT platform is set to 60 minutes.	FirstSpirit Content Experience Tools (CXT)
CXT-2906	While using the maintenance mode, the login error page was not displayed correctly in ContentCreator.	ContentCreator

## 8 Categories

### 8.1 Content Transport

ID	Description
CORE-15338	Feature cleanup has been optimized.
CORE-8222	Further information can be found in chapter “External Synchronization / Content Transport: ContentTransport: Improved feature cleanup”.

### 8.2 ContentCreator

ID	Description
CXT-2729	In certain rights configuration, page references could not be moved to folders whose start nodes had restricted rights.
CXT-2811	The interface <code>DisplayElementOperation</code> (FirstSpirit Developer API, package <code>de.espirit.firstspirit.ui.operations</code> ) now also supports the display of elements



ID	Description
	from media and data source management, as well as data sets for which there is no separate preview page.
CXT-2843	In certain projects, a <code>CMS_INPUT_DOM</code> entry component that was emptied with the <code>EMPTY</code> rule, could not be saved.
CXT-2882	In the cropping dialog, the display of images has been improved.
CXT-2891	Too many incoming references were followed up for displaying uses in the References report, so the results list included more items than expected.
CXT-2906	While using the maintenance mode, the login error page was not displayed correctly in ContentCreator.

### 8.3 Dynamic Forms

ID	Description
CXT-2843	In certain projects, a <code>CMS_INPUT_DOM</code> entry component that was emptied with the <code>EMPTY</code> rule, could not be saved.

### 8.4 Developer

ID	Description
CORE-9655	Stream-Support for <code>Listable</code> (Interface <code>de.espirit.common.util.Listable</code> , Package <code>de.espirit.common.util</code> , FirstSpirit Access-API)  Further information can be found in chapter “Module Development, Scripts, API: Stream-Support for Listable”.

### 8.5 FirstSpirit Content Experience Tools (CXT)

ID	Description
CORE-15404	FirstSpirit Content Experience Tools: Latest module versions



ID	Description
	Further information can be found in chapter “FirstSpirit Content Experience Tools (CXT): Latest module versions”.
CXT-2859	Optimization of authentication and a new optional parameter for the MicroApps.  Further information can be found in chapter “FirstSpirit Content Experience Tools (CXT): Optimization of authentication”.
CXT-2903	To avoid unwanted session expiration, the timeout for the CXT platform is set to 60 minutes.

## 8.6 FirstSpirit home page

ID	Description
CORE-15340	A Content Security Policy (CSP) header will be set for the FirstSpirit Root WebApp with the current FirstSpirit version.

## 8.7 FirstSpirit Administrator

ID	Description
CORE-15340	A Content Security Policy (CSP) header will be set for the FirstSpirit Root WebApp with the current FirstSpirit version.
CORE-15436	Announcement: Migration to Jakarta EE 6.0  Further information can be found in chapter “Administration / Modules: Announcement: Migration to Jakarta EE 6.0”.

## 8.8 FirstSpirit API

ID	Description
CORE-9655	Stream-Support for <code>Listable</code> (Interface <code>de.espirit.common.util.Listable</code> , Package <code>de.espirit.common.util</code> , FirstSpirit Access-API)





ID	Description
	Further information can be found in chapter “Module Development, Scripts, API: Stream-Support for Listable”.
CORE-15338	Feature cleanup has been optimized.
CORE-8222	Further information can be found in chapter “External Synchronization / Content Transport: ContentTransport: Improved feature cleanup”.
CXT-2811	The interface <code>DisplayElementOperation</code> (FirstSpirit Developer API, package <code>de.espirit.firstspirit.ui.operations</code> ) now also supports the display of elements from media and data source management, as well as data sets for which there is no separate preview page.

## 8.9 Integrated software

ID	Description
CORE-15207	Update of internally used software
	Further information can be found in chapter “Administration: Update of internally used software”.

## 8.10 Module development

ID	Description
CORE-15436	Announcement: Migration to Jakarta EE 6.0
	Further information can be found in chapter “Administration / Modules: Announcement: Migration to Jakarta EE 6.0”.

## 8.11 Modules

ID	Description
CORE-13772	The logging of the FOP module has been adjusted.
CORE-15379	



ID	Description
	Further information can be found in chapter “Administration / Modules: Logging optimization of the FOP module”.
CORE-15436	Announcement: Migration to Jakarta EE 6.0  Further information can be found in chapter “Administration / Modules: Announcement: Migration to Jakarta EE 6.0”.

## 8.12 Permissions

ID	Description
CXT-2729	In certain rights configuration, page references could not be moved to folders whose start nodes had restricted rights.

## 8.13 Server Administrator

ID	Description
CORE-10156	Password encryption now also includes the password for configured Tomcat web servers.  Further information can be found in chapter “Administration: Optional password encryption in the configuration files”.
CORE-13772 CORE-15379	The logging of the FOP module has been adjusted.  Further information can be found in chapter “Administration / Modules: Logging optimization of the FOP module”.
CORE-15328	With the current FirstSpirit version, a new compression mode <code>Zstandard</code> is now available, which can be selected in the connection settings.  Further information can be found in chapter “Administration: New compression mode: Zstandard”.
CORE-15334	With the current FirstSpirit version the <code>DH ARC4</code> transport encryption is replaced by <code>ChaCha20</code> transport encryption.



ID	Description
	Further information can be found in chapter “Administration: Replacement of DH ARC4 with ChaCha20 transport encryption”.
CORE-15340	A Content Security Policy (CSP) header will be set for the FirstSpirit Root WebApp with the current FirstSpirit version.
CORE-15436	Announcement: Migration to Jakarta EE 6.0  Further information can be found in chapter “Administration / Modules: Announcement: Migration to Jakarta EE 6.0”.

## 8.14 Security

ID	Description
CORE-15334	With the current FirstSpirit version the DH ARC4 transport encryption is replaced by ChaCha20 transport encryption.  Further information can be found in chapter “Administration: Replacement of DH ARC4 with ChaCha20 transport encryption”.

## 8.15 Template Development

ID	Description
CORE-15329	Within templates the wrong object type was returned when using <code>gomFormElement.name</code> expressions ( <code>de.espirit.firstspirit.common.text.Designator</code> instead of <code>String</code> ).

