FirstSpirit™
Unlock Your Content

Release Notes
FirstSpirit™ 2023.8

Status	**RELEASED**
Department	FS-Core
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1   Administration

1.1   Default compression mode: Zstandard

With the current FirstSpirit version, the `Zstandard` compression mode is the default value for FirstSpirit protocol compression.

This applies to new API connections, client connection settings, and servlets (web.xml).

If the connection parameters have already been defined differently, the settings are not affected.

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.

3 FirstSpirit Content Experience Tools (CXT)

3.1 Latest module versions

FirstSpirit 2023.8 supports the following module versions for FirstSpirit Content Experience Tools.

Module / file name	Version number
FirstSpirit CXT Plattform	4.0.0
`platform-[version].fsm`	
FirstSpirit CXT DAP Bridge	1.44.13
`dataservice-[version].fsm`	
FirstSpirit CXT FragmentCreator	4.0.8
`fragment-creator-[version].fsm`	
FirstSpirit Fragment DAP	1.40.21

```
fragmentdap-[version].fsm
```
FirstSpirit Media DAP   1.31.12
```
mediadap-[version].fsm
```
FirstSpirit PageRef DAP   1.9.12
```
pagerefdap-[version].fsm
```
FirstSpirit Markdown Editor   1.29.11
```
markdown-editor-[version].fsm
```
FirstSpirit Tagging Editor   1.29.11
```
tagging-editor-[version].fsm
```
FirstSpirit CXT FragmentCreator - CaaS   1.31.11
Integration
```
caas-integration-[version].fsm
```

4   Module Development, Scripts, API

4.1   Events for SEO URL Storage changes

With the current FirstSpirit version it is possible to get corresponding events via SEO URL changes (class `de.espirit.firstspirit.event.UrlEvent`) using the `EventBusAgent` (FirstSpirit Developer API, Package `de.espirit.firstspirit.agency`).

Example script:

```
import de.espirit.firstspirit.agency.BrokerAgent;
import de.espirit.firstspirit.event.UrlEvent;
import de.espirit.firstspirit.agency.EventBusAgent;
import java.util.function.Consumer;
eventListener = new Consumer<UrlEvent>() {
 void accept(event) {
  ...
 }
};
brokerAgent = context.requireSpecialist(BrokerAgent.TYPE);
specialistsBroker = brokerAgent.getBrokerByProjectName("<Projectname>");
eventBusAgent = specialistsBroker.requireSpecialist(EventBusAgent.TYPE);
eventBusAgent.register(UrlEvent.BUS_IDENTIFIER, eventListener);
// optional
Thread.sleep(<time>);
eventBusAgent.unregister(UrlEvent.BUS_IDENTIFIER, eventListener);
```

The last two lines are optional and are only needed if the events are not to be listened to permanently.

5   Security

5.1   CSP header configurable for the FirstSpirit Root WebApp

By setting a Content Security Policy via the CSP header, the allowed sources of content such as scripts, stylesheets, images, fonts, and more can be defined.

The CSP header can be configured via the `SecurityFilter` using the `ContentSecurityPolicyHeader` parameter.

The `ContentSecurityPolicyHeader` parameter can be configured in the following files and is evaluated with the following priority:

- `web.xml` of the WebApp [highest priority]

- `fs-server.conf`

- Java System-Property

- OS Environment Property [lowest priority]

Default value of the CSP header:

```
default-src 'self'; object-src 'none'; style-src 'self'; form-action 'self';
script-src 'self' 'nonce-$NONCE' $UPGRADE_INSECURE $FRAME_ANCESTORS
```

The following placeholders can be used in the configuration:

- `$NONCE` - the nonce value valid for the current HTTP request

- `$FRAME_ANCESTORS` - allowed frame embedding according to the `frameOptionsHeader` property from `fs-server.conf`.
  The replacement with default settings: `; frame-ancestors 'self'`
  If `ALLOW_ALL` is set, the replacement is an empty string.

- $UPGRADE_INSECURE - upgrade-insecure-requests according to what is set for the SecurityFilter in the TransportSecurity parameter or its default value.
  The default value is KEEP_SECURE.
  The replacement with default settings:
  - for an HTTPS request: ; upgrade-insecure-requests

  - for an HTTP request the substitution is an empty string

web.xml of the WebApp

Default configuration:

```xml
<filter>
   <filter-name>SecurityFilter</filter-name>
   <filter-class>de.espirit.firstspirit.io.servlet.SecurityFilter</filter-class>
   <init-param>
      <param-name>ContentSecurityPolicyHeader</param-name>
      <param-value>default-src 'self'; object-src 'none'; style-src 'self';
                 form-action 'self';
                 script-src 'self' 'nonce-$NONCE' $UPGRADE_INSECURE $FRAME_ANCESTORS
      </param-value>
   </init-param>
</filter>
```

An empty value disables the CSP header:

```xml
<filter>
   <filter-name>SecurityFilter</filter-name>
   <filter-class>de.espirit.firstspirit.io.servlet.SecurityFilter</filter-class>
   <init-param>
      <param-name>ContentSecurityPolicyHeader</param-name>
      <param-value></param-value>
   </init-param>
</filter>
```

fs-server.conf

Default configuration:

```
securityFilter.ContentSecurityPolicyHeader=default-src 'self'; object-src 'none';
style-src 'self'; form-action 'self';
script-src 'self' 'nonce-$NONCE' $UPGRADE_INSECURE $FRAME_ANCESTORS
```

An empty value disables the CSP header:

```
securityFilter.ContentSecurityPolicyHeader=
```

Java System-Property

- `fs-wrapper.isolated.conf`

- `setenv.sh` file of Tomcat

The value can be set using the parameter
`wrapper.java.additional.##=-DsecurityFilter.ContentSecurityPolicyHeader`,
where `##` is the number of a previously unused entry.

OS Environment Property

The value can be defined using the variable named
`SecurityFilter_ContentSecurityPolicyHeader`.

6 System

6.1 Updates to integrated third-party software

As of the current release, the following internally used software has been updated:

- **Spring Boot**
  Update from version 2.7.0 to version 2.7.13

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 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	
FirstSpirit Developer API: remainingDurationOfCurrentStageInMillis (de.espirit.firstspirit.server.MaintenanceModeInfo)	2018-07	
FirstSpirit Developer API: getStartingTimeOfStageAsDate (de.espirit.firstspirit.server.MaintenanceModeInfo)	2018-07	

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

8   Overview

ID	Description	Categories
CORE-10636	When using NULL parameter values in output channels, template references could be recognized incompletely.	Template Development
CORE-15193	The storage duration of FirstSpirit jar files on server side (directory `<FirstSpiritROOT>/work/storage/jars`) and client side (directory `/home/<fsuser>/.firstspirit_<version>/jars`) has been reduced from 90 to 45 days.	FirstSpirit Administrator
CORE-15252	The new event with the class `de.espirit.firstspirit.event.UrlEvent` is now generated when saved URLs are (re)set. The `EventBusAgent` can be used to react to such an event. Further information can be found in chapter "Module Development, Scripts, API: Events for SEO URL Storage changes".	Developer, Module development
CORE-15377	Fixed a bug in SiteArchitect that in rare cases prevented the initial display of submenus in the context menu.	SiteArchitect
CORE-15378	With the current FirstSpirit version, the `Zstandard` compression mode is the default value for FirstSpirit protocol compression. Further information can be found in chapter "Administration: Default compression mode: Zstandard".	Server Administrator
CORE-15402	With the current FirstSpirit version, the CSP header can be configured. Further information can be found in chapter "Security: CSP header configurable for the FirstSpirit Root WebApp".	FirstSpirit Administrator, FirstSpirit home page, Server Administrator
CORE-15417	Fixed a class loading error in the "FirstSpirit Portal" module ("SAP Business Package for FirstSpirit", `fs-portal.fsm`) when executing the schedule task action "GeneratePortalXML".	Modules
CORE-15450	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)

ID	Description	Categories
CORE-15459	The dialog for editing the "Message of the Day" has been adjusted to avoid display errors even with a large number of language templates.	ServerManager
CORE-15465	Schedule with actions based on modules that are no longer installed on the server caused display problems in ServerMonitoring. This has been fixed.	Server Administrator, ServerMonitoring
CORE-15466	Fixed a missing admin status about a group membership for external users logging in to a server for the first time.	Server Administrator
CORE-15507	Fixed a bug that in very rare cases could cause the import of valid XML files to fail when using "External Synchronization". (Error message: `de.espirit.common.xml.XmlParsingError: unexpected EOF`)	External synchronization
CORE-15508	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-2935 CXT-2934	Updates to integrated third-party software Further information can be found in chapter "System: Updates to integrated third-party software".	ContentCreator
CXT-2936	The preview of datasets could not be opened in the data source management.	ContentCreator
CXT-2946	Some editors in nested language-dependent forms could not be edited in the preview in all cases.	ContentCreator
DEVEX-618	Errors of type `java.lang.Error` are now also written to the configured log file.	FSDevTools

9   Categories

9.1   ContentCreator

ID	Description
CXT-2935 CXT-2934	Updates to integrated third-party software Further information can be found in chapter "System: Updates to integrated third-party software".
CXT-2936	The preview of datasets could not be opened in the data source management.
CXT-2946	Some editors in nested language-dependent forms could not be edited in the preview in all cases.

9.2   Developer

ID	Description
CORE-15252	The new event with the class `de.espirit.firstspirit.event.UrlEvent` is now generated when saved URLs are (re)set. The `EventBusAgent` can be used to react to such an event. Further information can be found in chapter "Module Development, Scripts, API: Events for SEO URL Storage changes".

9.3   External synchronization

ID	Description
CORE-15507	Fixed a bug that in very rare cases could cause the import of valid XML files to fail when using "External Synchronization". (Error message: `de.espirit.common.xml.XmlParsingError: unexpected EOF`)

9.4   FirstSpirit Content Experience Tools (CXT)

ID	Description
CORE-15450	FirstSpirit Content Experience Tools: Latest module versions Further information can be found in chapter "FirstSpirit Content Experience Tools (CXT): Latest module versions".

9.5   FirstSpirit home page

ID	Description
CORE-15402	With the current FirstSpirit version, the CSP header can be configured. Further information can be found in chapter "Security: CSP header configurable for the FirstSpirit Root WebApp".

9.6   FirstSpirit Administrator

ID	Description
CORE-15193	The storage duration of FirstSpirit jar files on server side (directory `<FirstSpiritROOT>/work/storage/jars`) and client side (directory `/home/<fsuser>/.firstspirit_<version>/jars`) has been reduced from 90 to 45 days.
CORE-15402	With the current FirstSpirit version, the CSP header can be configured. Further information can be found in chapter "Security: CSP header configurable for the FirstSpirit Root WebApp".
CORE-15508	Announcement: Migration to Jakarta EE 6.0 Further information can be found in chapter "Administration / Modules: Announcement: Migration to Jakarta EE 6.0".

9.7   FSDevTools

ID	Description
DEVEX-618	Errors of type `java.lang.Error` are now also written to the configured log file.

9.8   Module development

ID	Description
CORE-15252	The new event with the class `de.espirit.firstspirit.event.UrlEvent` is now generated when saved URLs are (re)set. The `EventBusAgent` can be used to react to such an event. Further information can be found in chapter "Module Development, Scripts, API: Events for SEO URL Storage changes".
CORE-15508	Announcement: Migration to Jakarta EE 6.0 Further information can be found in chapter "Administration / Modules: Announcement: Migration to Jakarta EE 6.0".

9.9   Modules

ID	Description
CORE-15417	Fixed a class loading error in the "FirstSpirit Portal" module ("SAP Business Package for FirstSpirit", `fs-portal.fsm`) when executing the schedule task action "GeneratePortalXML".
CORE-15508	Announcement: Migration to Jakarta EE 6.0 Further information can be found in chapter "Administration / Modules: Announcement: Migration to Jakarta EE 6.0".

9.10   Server Administrator

ID	Description
CORE-15378	With the current FirstSpirit version, the `Zstandard` compression mode is the default value for FirstSpirit protocol compression. Further information can be found in chapter "Administration: Default compression mode: Zstandard".
CORE-15402	With the current FirstSpirit version, the CSP header can be configured. Further information can be found in chapter "Security: CSP header configurable for the FirstSpirit Root WebApp".
CORE-15465	Schedule with actions based on modules that are no longer installed on the server caused display problems in ServerMonitoring. This has been fixed.
CORE-15466	Fixed a missing admin status about a group membership for external users logging in to a server for the first time.
CORE-15508	Announcement: Migration to Jakarta EE 6.0 Further information can be found in chapter "Administration / Modules: Announcement: Migration to Jakarta EE 6.0".

9.11   ServerManager

ID	Description
CORE-15459	The dialog for editing the "Message of the Day" has been adjusted to avoid display errors even with a large number of language templates.

9.12   ServerMonitoring

ID	Description
CORE-15465	Schedule with actions based on modules that are no longer installed on the server caused display problems in ServerMonitoring. This has been fixed.

9.13   SiteArchitect

ID	Description
CORE-15377	Fixed a bug in SiteArchitect that in rare cases prevented the initial display of submenus in the context menu.

9.14   Template Development

ID	Description
CORE-10636	When using NULL parameter values in output channels, template references could be recognized incompletely.