# FirstSpirit™
## Unlock Your Content

# Release Notes
## FirstSpirit™ 2023.11

**Status**  **RELEASED**

Department  FS-Core
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# Table of contents

# 1    Administration

## 1.1    Update of internally used software

As of the release 2023.11, the following internally used software has been updated.

- **Eclipse Jetty** (contained in the module `fs-jetty.fsm` / "FirstSpirit Jetty Service")
  Update to **version 12.0.1**
  As before, use of Eclipse Jetty for production purposes is not recommended!

- **JxBrowser** (Chrome browser engine for displaying the integrated preview in FirstSpirit SiteArchitect)
  Update to version 7.35.1 (Chromium 117.0.5938.62) --> Security update due to CVE-2023-4863

## 1.2    Critical security vulnerability: "Heap Buffer Overflow" in WebP - JxBrowser update

Due to CVE-2023-4863, the bundled JxBrowser has been updated to the version 7.35.1 (Chromium 117.0.5938.62). The JxBrowser is used for the integrated preview in the SiteArchitect.

A "heap buffer overflow" in WebP allowed a remote attacker to perform an out-of-bounds memory-write, and thus possibly inject malicious code. A manipulated WebP image can therefor lead to code injection.

> **!**    FirstSpirit versions since 2019.11 are affected.

**How can the vulnerability be exploited?**

- An editor adds a manipulated WebP image to a project.

**What do you have to do?**

- (Server) Update to 5.2.230817 (Non-Jakarta) or 5.2.231106 (Jakarta)

- (Client) Update the local browsers

**Mitigation without FS Update**

- (Server) Prevent uploading of WebP (set appropriate restrictions in the project) or

- (Server) Configure WebP as media type `file`

- (Client) Disable the integrated preview in SA (JxBrowser)

- (Client) Update the local browsers

# 2    External Synchronization / Content Transport

## 2.1    Content Transport: Feature Model Transport

The current release supports the transport of the feature model.

A feature model contains information about which FirstSpirit store nodes and entities belong to the content of the feature package. This information is stored in the `feature.xml` file, which is contained in the ZIP feature file.

The feature model can now also be installed in the target project.

- per FirstSpirit API: Method `installFeature` from the interface `FeatureInstallAgent`

- per "fs-cli" (FSDevTools from version 4.5.0): Command `feature install` with parameter `--include-feature-model`

It should be mentioned that the feature model can be installed exactly when all FirstSpirit store nodes from `feature.xml` can be found in the target project after the feature has been installed. If at least one object from `feature.xml` cannot be found, the feature model installation will fail with an exception.

> **!**  The Content2 source has to be transported explicitly when transporting data sets.

# 3    FirstSpirit Content Experience Tools (CXT)

## 3.1    Latest module versions

FirstSpirit 2023.11 supports the following module versions for FirstSpirit Content Experience Tools.

| Module / file name | Version number |
|---|---|
| FirstSpirit CXT Plattform<br>`platform-[version].fsm` | 5.0.2 |
| FirstSpirit CXT DAP Bridge<br>`dataservice-[version].fsm` | 1.44.15 |
| FirstSpirit CXT FragmentCreator<br>`fragment-creator-[version].fsm` | 5.0.1 |
| FirstSpirit Fragment DAP<br>`fragmentdap-[version].fsm` | 1.40.23 |
| FirstSpirit Media DAP<br>`mediadap-[version].fsm` | 1.31.14 |
| FirstSpirit PageRef DAP<br>`pageref-[version].fsm` | 1.9.14 |
| FirstSpirit Markdown Editor<br>`markdown-editor-[version].fsm` | 1.29.13 |
| FirstSpirit Tagging Editor<br>`tagging-editor-[version].fsm` | 1.29.13 |
| FirstSpirit CXT FragmentCreator - CaaS Integration<br>`caas-integration-[version].fsm` | 1.31.13 |

# 4    Module Development, Scripts, API

## 4.1    Switchover of the FirstSpirit byte code level from Java 11 to Java 17

The Java dependencies provided by Crownpeak, such as the `fs-isolated-runtime.jar`, now require at least Java 17 during the compile process.

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# 5 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.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 | |
| 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/<br>Was removed as of |
|---|---|---|
| Support for Log4j 1 | 2022-05 | |

# 6    Overview

| ID | Description | Categories |
|---|---|---|
| CORE-5663 | The time information for ongoing maintenance work is now output in the user's local time zone. | Server Administrator |
| CORE-14898 | The installation of the "FS INTEGRATION" web component from the "FirstSpirit Dynamic Database Access" module (`fs-integration.fsm`) in the ContentCreator led to an exception. | ContentCreator, Modules, Server Administrator |
| CORE-14953 | Switchover of the FirstSpirit byte code level from Java 11 to Java 17<br><br>Further information can be found in chapter "Module Development, Scripts, API: Switchover of the FirstSpirit byte code level from Java 11 to Java 17". | Java, Module development |
| CORE-15332 | Checks on deployed web applications, for example in the ServerManager, now result in less logging in the FirstSpirit server log. | Server Administrator |
| CORE-15376 | When configuring archiving tasks, the option "Maintain version history completely (no archiving)" has been removed. | ServerManager |
| CORE-15475<br>DEVEX-622 | The current release supports the transport of the feature model.<br><br>Further information can be found in chapter "External Synchronization / Content Transport: Content Transport: Feature Model Transport". | Content Transport, FSDevTools, FirstSpirit API |
| CORE-15523 | Fixed rare cases during site generation where the fallback language was not correctly chosen for FS_CATALOG components. | Generation, Input Components |
| CORE-15589 | A possible incorrect output of the user of a task in the audit logging has been fixed. | Server Administrator |
| CORE-15594 | Fixed an error in archiving that could cause the initial repository revision to be archived. | Archiving, FirstSpirit Administrator |

| ID | Description | Categories |
|---|---|---|
| CORE-15626 | Fixed a display problem in the schedule task edit dialog that could occur when adding or deleting actions. | Server Administrator, ServerManager |
| CORE-15630 | Improved behaviour when network transfer is blocked or interrupted. | ContentCreator, ServerManager, SiteArchitect |
| CORE-15637 | A problem with archiving was fixed that could lead to a large number of error messages in the archiving log (e.g. `Ambiguous store type for id XY`). | Archiving |
| CORE-15654 | Updating the FirstSpirit web applications `fs5root` (start page) in the ServerManager now no longer causes it to have to be closed during the process. Instead, the connection is automatically reconnected in most cases. | Server Administrator, ServerManager |
| CORE-15672 | Update of internally used software<br><br>Further information can be found in chapter "Administration: Update of internally used software". | Integrated software |
| CORE-15689 | A vulnerability has been discovered in the WebP library libwebp (CVE-2023-4863). The vulnerability is classified as critical. Crownpeak therefore recommends a prompt update to a secured FirstSpirit version (current build of 2023.8 or 2023.11). Due to CVE-2023-4863, the JxBrowser used by FirstSpirit for the integrated preview in SiteArchitect has been updated to the version 7.35.1 (Chromium 117.0.5938.62).<br><br>Further information can be found in chapter "Administration: Critical security vulnerability: "Heap Buffer Overflow" in WebP - JxBrowser update". | Preview, Security, SiteArchitect |
| CORE-15700 | FirstSpirit Content Experience Tools: Latest module versions<br><br>Further information can be found in chapter "FirstSpirit Content Experience Tools (CXT): Latest module versions". | FirstSpirit Content Experience Tools (CXT) |

| ID | Description | Categories |
|---|---|---|
| CXT-2999<br>CXT-2728 | The display and use of default and fallback values in the ContentCreator has been improved. However, the existing restrictions are still valid (see *Template development / ContentCreator / Restrictions* (→*FirstSpirit Online Documentation*)). | ContentCreator |
| CXT-3009 | Within forms there were display problems for the FS_BUTTON input component. | ContentCreator |
| CXT-3027 | In case of misconfiguration, it could happen that non-visible SEO URLs of the element were reset. | ContentCreator |

# 7 Categories

## 7.1 Archiving

| ID | Description |
|---|---|
| CORE-15594 | Fixed an error in archiving that could cause the initial repository revision to be archived. |
| CORE-15637 | A problem with archiving was fixed that could lead to a large number of error messages in the archiving log (e.g. `Ambiguous store type for id XY`). |

## 7.2 Content Transport

| ID | Description |
|---|---|
| CORE-15475<br>DEVEX-622 | The current release supports the transport of the feature model.<br><br>Further information can be found in chapter "External Synchronization / Content Transport: Content Transport: Feature Model Transport". |

## 7.3    ContentCreator

| ID | Description |
|---|---|
| CORE-14898 | The installation of the "FS INTEGRATION" web component from the "FirstSpirit Dynamic Database Access" module (`fs-integration.fsm`) in the ContentCreator led to an exception. |
| CORE-15630 | Improved behaviour when network transfer is blocked or interrupted. |
| CXT-2999 CXT-2728 | The display and use of default and fallback values in the ContentCreator has been improved. However, the existing restrictions are still valid (see *Template development / ContentCreator / Restrictions* (→*FirstSpirit Online Documentation*)). |
| CXT-3009 | Within forms there were display problems for the FS_BUTTON input component. |
| CXT-3027 | In case of misconfiguration, it could happen that non-visible SEO URLs of the element were reset. |

## 7.4    Input Components

| ID | Description |
|---|---|
| CORE-15523 | Fixed rare cases during site generation where the fallback language was not correctly chosen for FS_CATALOG components. |

## 7.5    FirstSpirit Content Experience Tools (CXT)

| ID | Description |
|---|---|
| CORE-15700 | FirstSpirit Content Experience Tools: Latest module versions<br><br>Further information can be found in chapter "FirstSpirit Content Experience Tools (CXT): Latest module versions". |

## 7.6    FirstSpirit Administrator

| ID | Description |
|---|---|
| CORE-15594 | Fixed an error in archiving that could cause the initial repository revision to be archived. |

## 7.7    FirstSpirit API

| ID | Description |
|---|---|
| CORE-15475 DEVEX-622 | The current release supports the transport of the feature model. Further information can be found in chapter "External Synchronization / Content Transport: Content Transport: Feature Model Transport". |

## 7.8    FSDevTools

| ID | Description |
|---|---|
| CORE-15475 DEVEX-622 | The current release supports the transport of the feature model. Further information can be found in chapter "External Synchronization / Content Transport: Content Transport: Feature Model Transport". |

## 7.9    Generation

| ID | Description |
|---|---|
| CORE-15523 | Fixed rare cases during site generation where the fallback language was not correctly chosen for FS_CATALOG components. |

## 7.10    Integrated software

| ID | Description |
|---|---|
| CORE-15672 | Update of internally used software |

| ID | Description |
|---|---|
| | Further information can be found in chapter "Administration: Update of internally used software". |

## 7.11   Java

| ID | Description |
|---|---|
| CORE-14953 | Switchover of the FirstSpirit byte code level from Java 11 to Java 17 <br><br> Further information can be found in chapter "Module Development, Scripts, API: Switchover of the FirstSpirit byte code level from Java 11 to Java 17". |

## 7.12   Module development

| ID | Description |
|---|---|
| CORE-14953 | Switchover of the FirstSpirit byte code level from Java 11 to Java 17 <br><br> Further information can be found in chapter "Module Development, Scripts, API: Switchover of the FirstSpirit byte code level from Java 11 to Java 17". |

## 7.13   Modules

| ID | Description |
|---|---|
| CORE-14898 | The installation of the "FS INTEGRATION" web component from the "FirstSpirit Dynamic Database Access" module (`fs-integration.fsm`) in the ContentCreator led to an exception. |

## 7.14   Server Administrator

| ID | Description |
|---|---|
| CORE-5663 | The time information for ongoing maintenance work is now output in the user's local time zone. |
| CORE-14898 | The installation of the "FS INTEGRATION" web component from the "FirstSpirit Dynamic Database Access" module (`fs-integration.fsm`) in the ContentCreator led to an exception. |

| ID | Description |
|---|---|
| CORE-15332 | Checks on deployed web applications, for example in the ServerManager, now result in less logging in the FirstSpirit server log. |
| CORE-15589 | A possible incorrect output of the user of a task in the audit logging has been fixed. |
| CORE-15626 | Fixed a display problem in the schedule task edit dialog that could occur when adding or deleting actions. |
| CORE-15654 | Updating the FirstSpirit web applications `fs5root` (start page) in the ServerManager now no longer causes it to have to be closed during the process. Instead, the connection is automatically reconnected in most cases. |

## 7.15   ServerManager

| ID | Description |
|---|---|
| CORE-15376 | When configuring archiving tasks, the option "Maintain version history completely (no archiving)" has been removed. |
| CORE-15626 | Fixed a display problem in the schedule task edit dialog that could occur when adding or deleting actions. |
| CORE-15630 | Improved behaviour when network transfer is blocked or interrupted. |
| CORE-15654 | Updating the FirstSpirit web applications `fs5root` (start page) in the ServerManager now no longer causes it to have to be closed during the process. Instead, the connection is automatically reconnected in most cases. |

## 7.16   Security

| ID | Description |
|---|---|
| CORE-15689 | A vulnerability has been discovered in the WebP library libwebp (CVE-2023-4863). The vulnerability is classified as critical. Crownpeak therefore recommends a prompt update to a secured FirstSpirit version (current build of 2023.8 or 2023.11). Due to CVE-2023-4863, the JxBrowser used by FirstSpirit for the integrated preview in SiteArchitect has been updated to the version 7.35.1 (Chromium 117.0.5938.62). |

| ID | Description |
|---|---|
|  | Further information can be found in chapter "Administration: Critical security vulnerability: "Heap Buffer Overflow" in WebP - JxBrowser update". |

## 7.17   SiteArchitect

| ID | Description |
|---|---|
| CORE-15630 | Improved behaviour when network transfer is blocked or interrupted. |
| CORE-15689 | A vulnerability has been discovered in the WebP library libwebp (CVE-2023-4863). The vulnerability is classified as critical. Crownpeak therefore recommends a prompt update to a secured FirstSpirit version (current build of 2023.8 or 2023.11). Due to CVE-2023-4863, the JxBrowser used by FirstSpirit for the integrated preview in SiteArchitect has been updated to the version 7.35.1 (Chromium 117.0.5938.62).<br><br>Further information can be found in chapter "Administration: Critical security vulnerability: "Heap Buffer Overflow" in WebP - JxBrowser update". |

## 7.18   Preview

| ID | Description |
|---|---|
| CORE-15689 | A vulnerability has been discovered in the WebP library libwebp (CVE-2023-4863). The vulnerability is classified as critical. Crownpeak therefore recommends a prompt update to a secured FirstSpirit version (current build of 2023.8 or 2023.11). Due to CVE-2023-4863, the JxBrowser used by FirstSpirit for the integrated preview in SiteArchitect has been updated to the version 7.35.1 (Chromium 117.0.5938.62).<br><br>Further information can be found in chapter "Administration: Critical security vulnerability: "Heap Buffer Overflow" in WebP - JxBrowser update". |