



FirstSpirit™

Unlock Your Content

Release Notes

FirstSpirit™ 2022.12

| | |
|---------------|--------------------------------|
| Status | RELEASED |
| Department | FS-Core |
| Copyright | 2022 Crownpeak Technology GmbH |

Crownpeak Technology GmbH

Stockholmer Allee 24
44269 Dortmund | Germany

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

info-dach@crowpeak.com
www.e-Spirit.com

crowpeak*k*

Table of contents

| | | |
|----------|--|-----------|
| 1 | Administration..... | 5 |
| 1.1 | 'externalGroupFilter': Group filter on login..... | 5 |
| 1.2 | Providing language templates automatically..... | 5 |
| 1.3 | Placeholder in the definition of external groups..... | 6 |
| 1.4 | Create new project from template..... | 6 |
| 2 | ContentCreator..... | 7 |
| 2.1 | TailoredUI: Server-wide configuration via service..... | 7 |
| 3 | FirstSpirit Content Experience Tools (CXT)..... | 8 |
| 3.1 | Latest module versions..... | 8 |
| 3.2 | Extension and modification of the MicroApp JavaScript API..... | 8 |
| 4 | SiteArchitect / ServerManager..... | 10 |
| 4.1 | Unique GID of a project in project properties..... | 10 |
| 5 | System..... | 10 |
| 5.1 | Integrated Software..... | 10 |
| 6 | Deprecations..... | 10 |
| 7 | Overview..... | 13 |



| | | |
|----------|---|-----------|
| 8 | Categories..... | 16 |
| 8.1 | AWS S3 Deployment..... | 16 |
| 8.2 | ContentCreator..... | 16 |
| 8.3 | Corporate Content..... | 17 |
| 8.4 | Database..... | 17 |
| 8.5 | Dynamic Forms..... | 17 |
| 8.6 | Developer..... | 18 |
| 8.7 | FirstSpirit Content Experience Tools (CXT)..... | 18 |
| 8.8 | FirstSpirit Administrator..... | 19 |
| 8.9 | FirstSpirit API..... | 20 |
| 8.10 | FragmentCreator..... | 20 |
| 8.11 | FSDevTools..... | 21 |
| 8.12 | Integrated software..... | 21 |
| 8.13 | Support for JSON..... | 21 |
| 8.14 | Module development..... | 21 |
| 8.15 | Modules..... | 22 |
| 8.16 | Editor..... | 22 |
| 8.17 | Server Administrator..... | 22 |
| 8.18 | ServerManager..... | 23 |
| 8.19 | Security..... | 23 |
| 8.20 | SiteArchitect..... | 23 |



8.21 Preview.....23



1 Administration

1.1 'externalGroupFilter': Group filter on login

By default, when a user authenticates via an external provider (e.g. LDAP, SAML Identity Provider), the complete group information that is transmitted is stored in FirstSpirit.

Via the new

```
externalGroupFilter
```

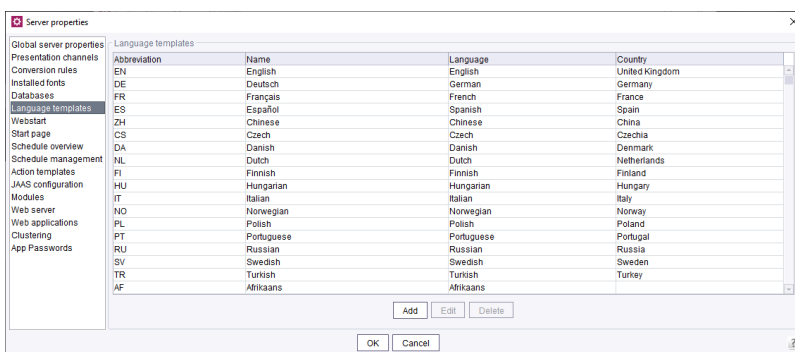
parameter which is defined in *fs-server.conf*, it is now possible to define via a regular expression which subset of this group information should be taken over by FirstSpirit.

Example:

```
externalGroupFilter=.*(csm_admin|FirstSpirit).*
```

1.2 Providing language templates automatically

With the current release, FirstSpirit provides templates for all languages supported by the Java version used by the FirstSpirit server.



Language templates



1.3 Placeholder in the definition of external groups

When defining external groups, since FirstSpirit version 2022.12 it is possible to use a placeholder in the form

```
{name of the placeholder}
```

can be defined. This placeholder is replaced accordingly during the project import.

The placeholders can be defined as `-D` parameters in `fs-wrapper.isolated.conf`, as variables of the operating system, in `fs-server-aux.conf` or `fs-server.conf` (with decreasing priority). Variables that are passed to the FirstSpirit Java process as `-D` parameters thus have the highest priority, while variables defined in the `fs-server.conf` are overwritten by all other places (see *FirstSpirit ServerMonitoring / FirstSpirit / Configuration / Server* (→*Documentation for Administrators*)).

Example (with 3 wildcards):

```
cn=${developer},ou=${department},dc=${company},dc=com
```

Note: This function is useful in connection with project templates (see *FirstSpirit ServerManager / Menu bar items / Project* (→*Documentation for Administrators*)).

1.4 Create new project from template

For FirstSpirit servers on which projects are frequently created that are based on the same foundation (e.g. predefined groups, users, orders, templates, ...) there is now the option of creating corresponding project templates that can be selected when a new project is created.

This menu item is only available to server administrators.

A project template can be created by setting up and exporting a project accordingly.

Note: The name of the project is used as the display name of the template.

The project export file must be stored in the `<FirstSpiritROOT>/data/templates/projects` directory.



When creating a new project the **Project template** field is only displayed if project templates are also stored on the FirstSpirit server. The project templates stored there are offered for selection in a drop-down input component.



Project – Create from template

If one of these projects is selected, the corresponding project will be imported (orders will be activated, any existing schemas must be linked to the corresponding database layer).

For more information, see *FirstSpirit Manual for Administrators*, chapter “Project”.

2 ContentCreator

2.1 TailoredUI: Server-wide configuration via service

The Tailored UI is now server-wide configurable using the “Feature Configuration Service”, project-specific settings are no longer mandatory.

For projects to which the project component “CXT ContentCreator Extension: Feature Configuration” (“FirstSpirit ServerManager / Project properties / Project components”) is or was added, the configuration made there is taken into account. For projects without this project component, the configuration of the Feature Configuration Service is taken into account.

Existing configuration made at project level **before** an upgrade to FirstSpirit 2022.12 is still valid after an upgrade to FirstSpirit 2022.12. If a configuration is to be made at server level, the project component “CXT ContentCreator Extension: Feature Configuration” must be removed for the project or projects concerned so that a configuration made at server level takes effect in the project. To adopt an existing project configuration at server level, the **From Project** button can be used.



3 FirstSpirit Content Experience Tools (CXT)

3.1 Latest module versions

FirstSpirit 2022.121 supports the following module versions for “FirstSpirit Content Experience Tools”.

| Module / file name | Version number |
|---|----------------|
| FirstSpirit CXT Plattform platform-[version].fsm | 3.0.0 |
| FirstSpirit CXT DAP Bridge dataservice-[version].fsm | 1.44.9 |
| FirstSpirit CXT FragmentCreator fragment-creator-[version].fsm | 4.0.0 |
| FirstSpirit Fragment DAP fragmentdap-[version].fsm | 1.40.13 |
| FirstSpirit Media DAP mediadap-[version].fsm | 1.31.8* |
| FirstSpirit PageRef DAP pagerefdap-[version].fsm | 1.9.8 |
| FirstSpirit Markdown Editor markdown-editor-[version].fsm | 1.29.7* |
| FirstSpirit Tagging Editor tagging-editor-[version].fsm | 1.29.7 |
| FirstSpirit CXT FragmentCreator - CaaS Integration caas-integration-[version].fsm | 1.31.8 |

* These modules require FirstSpirit 2020-03 or higher from this version.

3.2 Extension and modification of the MicroApp JavaScript API

The MicroApps API was changed: new methods were added and one method was renamed. This concerns the JavaScript objects

```
CxtMicroAppBridge
CxtMicroApps
```



Querying possible MicroApps was previously done using the method

```
getButtons
```

This method has been renamed to

```
requestMicroAppActions
```

With this query now a list of

```
contextTypes (optional)
```

and

```
clientIds (mandatory field)
```

can be passed.

MicroApps define themselves which `contextTypes` and `clientIds` they support.

Possible `clientIds` are for example

```
content-creator or  
fragment-creator
```

Example

previously

```
window.CxtMicroApps.getButtons(context).then(...)
```

now

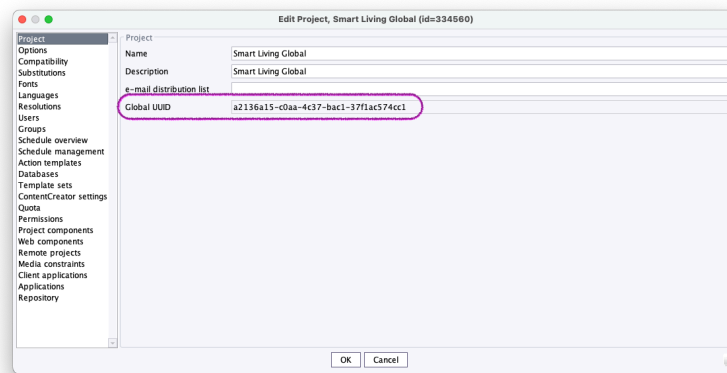
```
window.CxtMicroApps.requestMicroAppActions(clientId, contextTypes, context).then(...)
```



4 SiteArchitect / ServerManager

4.1 Unique GID of a project in project properties

With the current FirstSpirit version the unique GID of a project is displayed in the project properties. This GID can be copied but not changed.



The unique GID of a project

5 System

5.1 Integrated Software

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

- **JxBrowser** (Chrome browser engine for displaying the integrated preview in FirstSpirit SiteArchitect)
Update to version 7.27
The engine now uses "Chromium" in the version 102.0.5005.167.

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



7 Overview

| ID | Description | Categories |
|--------------|--|--|
| CLOUDPROV-19 | With version 1.6.11 a misbehavior in the S3 Deployment module was corrected that caused the upload not to terminate when the associated schedule entry was canceled. | AWS S3 Deployment |
| CORE-11147 | The standardized JSON output has been adjusted. The forward slash is no longer protected by a preceding backslash. | Support for JSON |
| CORE-11161 | In the current FirstSpirit version, updated internally used software. Further information can be found in chapter “System: Integrated Software”. | Integrated software, Preview, SiteArchitect |
| CORE-14401 | In rare cases, a WARN message <code>Failure adapting gid</code> could occur when using read-only schemas based on databases managed by FirstSpirit. This incorrect warning is now no longer issued. | Database, FirstSpirit Administrator |
| CORE-14577 | The connection URL for Java-clients like the SiteArchitect to the FirstSpirit server now omits the port number if a default port is used, e.g. 443 for HTTPS. | FirstSpirit Administrator |
| CORE-14646 | The <code>BerkeleyUtil.jar</code> has been enriched with the Maven meta information of the libraries used to make it easier to determine their versions. | FirstSpirit Administrator |
| CORE-14691 | The Javadoc of the <code>setCropData()</code> method from the <code>PictureResolution</code> interface (package <code>de.espirit.firstspirit.access.store.mediastore</code> , FirstSpirit Access API) has been improved. When setting crop information of pictures, a warning <code>Removing cropData for picture XY because the selection is null!</code> is now also logged if the given <code>cropData</code> object does not contain a selection. The crop information will be removed in this case. | FirstSpirit API |
| CORE-14699 | FirstSpirit provides templates for all languages supported by the Java version used by the FirstSpirit server. Further information can be found in chapter “Administration: Providing language templates automatically”. | Server Administrator |



| ID | Description | Categories |
|------------|--|---|
| CORE-14703 | <p>A new project can now be created from a project template.</p> <p>Further information can be found in chapter “Administration: Create new project from template”.</p> | FirstSpirit Administrator |
| CORE-14705 | An error has been fixed that in very rare cases could cause an “Enterprise Backup” run to fail with an “unknown revision” exception. | FirstSpirit Administrator |
| CORE-14709 | An error could occur in SiteArchitect when a dataset was loaded during startup for which the current user does not have read permissions. | SiteArchitect |
| CORE-14724 | An error has been eliminated that could lead to problems when indexing in the remote projects with cross-project database use (such as in certain Corporate Content scenarios). | Corporate Content, Database, Developer, FirstSpirit Administrator |
| CORE-14726 | <p>New <code>externalGroupFilter</code> parameter.</p> <p>Further information can be found in chapter “Administration: 'externalGroupFilter': Group filter on login”.</p> | FirstSpirit Administrator |
| CORE-14747 | <p>The unique GID of a project is displayed in the project properties.</p> <p>Further information can be found in chapter “SiteArchitect / ServerManager: Unique GID of a project in project properties”.</p> | ServerManager |
| CORE-14759 | In the “fs-server start script” for Linux a misleading configuration entry (<code>WRAPPER_CONF=" ../conf/wrapper.conf"</code> to <code>WRAPPER_CONF=" ../conf/fs-wrapper.isolated.conf"</code>) was corrected. This configuration entry is not used in practice because the value in the <code>fs-server.shconf</code> is overwritten. | Server Administrator |
| CORE-14761 | Adjustments in FirstSpirit SecurityFilter: For the Strict-Transport-Security header, the property <code>includeSubDomains</code> is now also set in the default configuration. | FirstSpirit Administrator, Security |
| CORE-14787 | The Module “FirstSpirit Security” was not fully functional within FirstSpirit versions 2022.10 and 2022.11. | FirstSpirit Administrator, Modules |



| ID | Description | Categories |
|------------|---|--|
| CORE-14799 | <p>If a schedule is canceled but the running schedule action is not finished within 5 minutes, a FATAL error message is now logged.</p> <pre>timeout waiting for task cancellation - "<action name>", schedule entry "<schedule name>" (id="<id>", project id="<project ID>")</pre> | FirstSpirit Administrator |
| CORE-14811 | <p>When defining external groups, it is possible to define a placeholder. Further information can be found in chapter “Administration: Placeholder in the definition of external groups”.</p> | FirstSpirit Administrator |
| CORE-14818 | When using the new Chrome browser (JxBrowser 7.x), an <code>IllegalStateException</code> could occur during preview navigation. | Preview |
| CORE-14823 | <p>FirstSpirit Content Experience Tools: Latest module versions</p> <p>Further information can be found in chapter “FirstSpirit Content Experience Tools (CXT): Latest module versions”.</p> | Developer, FirstSpirit Administrator, FirstSpirit Content Experience Tools (CXT), FragmentCreator, Modules |
| CORE-14832 | When creating a new project, the default language will now be configured using <code>UTF-8</code> as the HTML encoding. | FirstSpirit Administrator |
| CORE-14856 | If the staging directory is mapped to an application server without its <code>webapps</code> directory being known to FirstSpirit (e.g. Tomcat without corresponding configuration), a <code>generation-task</code> , together with the <code>webserver.jetty.hide=true</code> setting in <code>fs-server.conf</code> , used the “null” directory in the FirstSpirit installation directory as its base directory. This behaviour has been corrected and the <code>null</code> directory is automatically removed when using the new FirstSpirit version. | FirstSpirit Administrator |
| CORE-14884 | When using the updated Chrome integration, reload loops could occur if the preview contained inner frames and the content highlighting follows both the workspace and preview. | Preview, SiteArchitect |



| ID | Description | Categories |
|-----------|--|---|
| CXT-2018 | <p>The Tailored UI is now server-wide configurable using the “Feature Configuration Service”, project-specific settings are no longer mandatory.</p> <p>Further information can be found in chapter “ContentCreator: TailoredUI: Server-wide configuration via service”.</p> | ContentCreator, Developer, Editor, FirstSpirit Administrator |
| CXT-2715 | When using custom UploadHooks, a rejected file upload could result in empty Media elements. | ContentCreator |
| CXT-2722 | <p>The MicroApps API was changed: new methods were added and one method was renamed.</p> <p>Further information can be found in chapter “FirstSpirit Content Experience Tools (CXT): Extension and modification of the MicroApp JavaScript API”.</p> | Developer, FirstSpirit Content Experience Tools (CXT), Module development |
| CXT-2723 | Within subforms the user groups could not be checked using IN_GROUP rules. | ContentCreator, Dynamic Forms |
| DEVEX-567 | Fixed an error in the command <code>module installBulk</code> , where no indication of the cause of the problem was given in case of an error. | FSDDevTools |

8 Categories

8.1 AWS S3 Deployment

| ID | Description |
|--------------|--|
| CLOUDPROV-19 | With version 1.6.11 a misbehavior in the S3 Deployment module was corrected that caused the upload not to terminate when the associated schedule entry was canceled. |

8.2 ContentCreator

| ID | Description |
|----------|---|
| CXT-2018 | The Tailored UI is now server-wide configurable using the “Feature Configuration Service”, project-specific settings are no longer mandatory. |



| ID | Description |
|----------|--|
| | Further information can be found in chapter “ContentCreator: TailoredUI: Server-wide configuration via service”. |
| CXT-2715 | When using custom UploadHooks, a rejected file upload could result in empty Media elements. |
| CXT-2723 | Within subforms the user groups could not be checked using IN_GROUP rules. |

8.3 Corporate Content

| ID | Description |
|------------|---|
| CORE-14724 | An error has been eliminated that could lead to problems when indexing in the remote projects with cross-project database use (such as in certain Corporate Content scenarios). |

8.4 Database

| ID | Description |
|------------|---|
| CORE-14401 | In rare cases, a WARN message <code>Failure adapting gid</code> could occur when using read-only schemas based on databases managed by FirstSpirit. This incorrect warning is now no longer issued. |
| CORE-14724 | An error has been eliminated that could lead to problems when indexing in the remote projects with cross-project database use (such as in certain Corporate Content scenarios). |

8.5 Dynamic Forms

| ID | Description |
|----------|--|
| CXT-2723 | Within subforms the user groups could not be checked using IN_GROUP rules. |



8.6 Developer

| ID | Description |
|------------|--|
| CORE-14724 | An error has been eliminated that could lead to problems when indexing in the remote projects with cross-project database use (such as in certain Corporate Content scenarios). |
| CORE-14823 | <p>FirstSpirit Content Experience Tools: Latest module versions</p> <p>Further information can be found in chapter “FirstSpirit Content Experience Tools (CXT): Latest module versions”.</p> |
| CXT-2018 | <p>The Tailored UI is now server-wide configurable using the “Feature Configuration Service”, project-specific settings are no longer mandatory.</p> <p>Further information can be found in chapter “ContentCreator: TailoredUI: Server-wide configuration via service”.</p> |
| CXT-2722 | <p>The MicroApps API was changed: new methods were added and one method was renamed.</p> <p>Further information can be found in chapter “FirstSpirit Content Experience Tools (CXT): Extension and modification of the MicroApp JavaScript API”.</p> |

8.7 FirstSpirit Content Experience Tools (CXT)

| ID | Description |
|------------|--|
| CORE-14823 | <p>FirstSpirit Content Experience Tools: Latest module versions</p> <p>Further information can be found in chapter “FirstSpirit Content Experience Tools (CXT): Latest module versions”.</p> |
| CXT-2722 | <p>The MicroApps API was changed: new methods were added and one method was renamed.</p> <p>Further information can be found in chapter “FirstSpirit Content Experience Tools (CXT): Extension and modification of the MicroApp JavaScript API”.</p> |



8.8 FirstSpirit Administrator

| ID | Description |
|------------|---|
| CORE-14401 | In rare cases, a WARN message <code>Failure adapting gid</code> could occur when using read-only schemas based on databases managed by FirstSpirit. This incorrect warning is now no longer issued. |
| CORE-14577 | The connection URL for Java-clients like the SiteArchitect to the FirstSpirit server now omits the port number if a default port is used, e.g. 443 for HTTPS. |
| CORE-14646 | The <code>BerkeleyUtil.jar</code> has been enriched with the Maven meta information of the libraries used to make it easier to determine their versions. |
| CORE-14703 | A new project can now be created from a project template. Further information can be found in chapter “Administration: Create new project from template”. |
| CORE-14705 | An error has been fixed that in very rare cases could cause an “Enterprise Backup” run to fail with an “unknown revision” exception. |
| CORE-14724 | An error has been eliminated that could lead to problems when indexing in the remote projects with cross-project database use (such as in certain Corporate Content scenarios). |
| CORE-14726 | New <code>externalGroupFilter</code> parameter. Further information can be found in chapter “Administration: 'externalGroupFilter': Group filter on login”. |
| CORE-14761 | Adjustments in FirstSpirit SecurityFilter: For the Strict-Transport-Security header, the property <code>includeSubDomains</code> is now also set in the default configuration. |
| CORE-14787 | The Module “FirstSpirit Security” was not fully functional within FirstSpirit versions 2022.10 and 2022.11. |
| CORE-14799 | If a schedule is canceled but the running schedule action is not finished within 5 minutes, a FATAL error message is now logged. <code>timeout waiting for task cancellation - "<action name>", schedule entry "<schedule name>" (id="<id>", project id="<project ID>")</code> |
| CORE-14811 | When defining external groups, it is possible to define a placeholder. Further information can be found in chapter “Administration: Placeholder in the definition of external groups”. |



| ID | Description |
|------------|--|
| CORE-14823 | <p>FirstSpirit Content Experience Tools: Latest module versions</p> <p>Further information can be found in chapter “FirstSpirit Content Experience Tools (CXT): Latest module versions”.</p> |
| CORE-14832 | When creating a new project, the default language will now be configured using UTF-8 as the HTML encoding. |
| CORE-14856 | If the staging directory is mapped to an application server without its webapps directory being known to FirstSpirit (e.g. Tomcat without corresponding configuration), a generation-task, together with the <code>webserver.jetty.hide=true</code> setting in <code>fs-server.conf</code> , used the “null” directory in the FirstSpirit installation directory as its base directory. This behaviour has been corrected and the <code>null</code> directory is automatically removed when using the new FirstSpirit version. |
| CXT-2018 | <p>The Tailored UI is now server-wide configurable using the “Feature Configuration Service”, project-specific settings are no longer mandatory.</p> <p>Further information can be found in chapter “ContentCreator: TailoredUI: Server-wide configuration via service”.</p> |

8.9 FirstSpirit API

| ID | Description |
|------------|--|
| CORE-14691 | The Javadoc of the <code>setCropData()</code> method from the <code>PictureResolution</code> interface (package <code>de.espirit.firstspirit.access.store.mediastore</code> , FirstSpirit Access API) has been improved. When setting crop information of pictures, a warning <code>Removing cropData for picture XY because the selection is null!</code> is now also logged if the given <code>cropData</code> object does not contain a selection. The crop information will be removed in this case. |

8.10 FragmentCreator

| ID | Description |
|------------|--|
| CORE-14823 | FirstSpirit Content Experience Tools: Latest module versions |



| ID | Description |
|----|---|
| | Further information can be found in chapter “FirstSpirit Content Experience Tools (CXT): Latest module versions”. |

8.11 FSDevTools

| ID | Description |
|-----------|--|
| DEVEX-567 | Fixed an error in the command <code>module installBulk</code> , where no indication of the cause of the problem was given in case of an error. |

8.12 Integrated software

| ID | Description |
|------------|---|
| CORE-11161 | In the current FirstSpirit version, updated internally used software. Further information can be found in chapter “System: Integrated Software”. |

8.13 Support for JSON

| ID | Description |
|------------|--|
| CORE-11147 | The standardized JSON output has been adjusted. The forward slash is no longer protected by a preceding backslash. |

8.14 Module development

| ID | Description |
|----------|---|
| CXT-2722 | The MicroApps API was changed: new methods were added and one method was renamed. Further information can be found in chapter “FirstSpirit Content Experience Tools (CXT): Extension and modification of the MicroApp JavaScript API”. |



8.15 Modules

| ID | Description |
|------------|--|
| CORE-14787 | The Module “FirstSpirit Security” was not fully functional within FirstSpirit versions 2022.10 and 2022.11. |
| CORE-14823 | <p>FirstSpirit Content Experience Tools: Latest module versions</p> <p>Further information can be found in chapter “FirstSpirit Content Experience Tools (CXT): Latest module versions”.</p> |

8.16 Editor

| ID | Description |
|----------|--|
| CXT-2018 | <p>The Tailored UI is now server-wide configurable using the “Feature Configuration Service”, project-specific settings are no longer mandatory.</p> <p>Further information can be found in chapter “ContentCreator: TailoredUI: Server-wide configuration via service”.</p> |

8.17 Server Administrator

| ID | Description |
|------------|--|
| CORE-14699 | <p>FirstSpirit provides templates for all languages supported by the Java version used by the FirstSpirit server.</p> <p>Further information can be found in chapter “Administration: Providing language templates automatically”.</p> |
| CORE-14759 | In the “fs-server start script” for Linux a misleading configuration entry (<code>WRAPPER_CONF=" ../conf/wrapper.conf "</code> to <code>WRAPPER_CONF=" ../conf/fs-wrapper.isolated.conf "</code>) was corrected. This configuration entry is not used in practice because the value in the <code>fs-server.shconf</code> is overwritten. |



8.18 ServerManager

| ID | Description |
|------------|--|
| CORE-14747 | The unique GID of a project is displayed in the project properties. Further information can be found in chapter “SiteArchitect / ServerManager: Unique GID of a project in project properties”. |

8.19 Security

| ID | Description |
|------------|--|
| CORE-14761 | Adjustments in FirstSpirit SecurityFilter: For the Strict-Transport-Security header, the property <code>includeSubDomains</code> is now also set in the default configuration. |

8.20 SiteArchitect

| ID | Description |
|------------|--|
| CORE-11161 | In the current FirstSpirit version, updated internally used software. Further information can be found in chapter “System: Integrated Software”. |
| CORE-14709 | An error could occur in SiteArchitect when a dataset was loaded during startup for which the current user does not have read permissions. |
| CORE-14884 | When using the updated Chrome integration, reload loops could occur if the preview contained inner frames and the content highlighting follows both the workspace and preview. |

8.21 Preview

| ID | Description |
|------------|---|
| CORE-11161 | In the current FirstSpirit version, updated internally used software. Further information can be found in chapter “System: Integrated Software”. |



| ID | Description |
|------------|--|
| CORE-14818 | When using the new Chrome browser (JxBrowser 7.x), an IllegalStateException could occur during preview navigation. |
| CORE-14884 | When using the updated Chrome integration, reload loops could occur if the preview contained inner frames and the content highlighting follows both the workspace and preview. |

