



FirstSpirit™

Unlock Your Content

Release Notes

FirstSpirit™ 2020-05

Status	RELEASED
Department	FS-Core
Copyright	2020 e-Spirit AG
File name	Releasenotes_2020_05_EN

e-Spirit AG

Stockholmer Allee 24
44269 Dortmund | Germany

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

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

e-Spirit

Table of contents

1	Administration.....	6
1.1	Browser compatibilities.....	6
1.2	The FirstSpirit session cookie now supports the attribute SameSite.....	7
2	ContentCreator.....	9
2.1	Workflows: Selecting a deadline time.....	9
2.2	User prompting/UX: Display of check boxes, radio buttons and toggles.....	10
2.3	Tables: Vertical alignment of content in cells ("valign").....	12
3	External Synchronization / Content Transport.....	16
3.1	External Synchronization and Content Transport: Improved support for shared access to a database.....	16
4	FirstSpirit Content Experience Tools (CXT).....	17
4.1	Latest module versions.....	17
4.2	Extension of MicroApps API: Embedding of MicroApps into a page ("widget").....	18
4.3	Fragment DAP: filter fragments in report by category.....	19
4.4	FragmentCreator: Revision of the design (input fields).....	20



5	Module Development, Scripts, API.....	21
5.1	Global module resources: Improved stability when resolving dependencies.....	21
5.2	JSON function: Improved support for FS_REFERENCE.....	22
5.3	Creating a pop-up dialog as a warning message.....	24
5.4	Improved configuration options for user-specific URLs (AdvancedUrlCreator).....	25
6	SiteArchitect / ContentCreator.....	30
6.1	Workflow: Changing the order of transitions on an activity.....	30
7	System.....	32
7.1	Updates to integrated third-party software.....	32
8	Template development.....	32
8.1	Workflows: More configuration options for context-based information in e- mails.....	32
9	Deprecations.....	34
10	Overview.....	36



11	Categories.....	42
11.1	Advanced URL.....	42
11.2	Workflow.....	42
11.3	Content Transport.....	43
11.4	ContentCreator.....	43
11.5	Data Access Plug-In.....	45
11.6	Database.....	45
11.7	Content Store.....	46
11.8	Debugging.....	46
11.9	Services.....	46
11.10	Input Components.....	47
11.11	Developer.....	47
11.12	External synchronization.....	50
11.13	FirstSpirit Content as a Service (CaaS).....	50
11.14	FirstSpirit Content Experience Tools (CXT).....	50
11.15	FirstSpirit Administrator.....	51
11.16	FirstSpirit API.....	52
11.17	FragmentCreator.....	53
11.18	Release.....	54
11.19	Generation.....	54
11.20	Integrated software.....	55



11.21	Isolated mode.....	55
11.22	Support for JSON.....	55
11.23	Migration.....	56
11.24	Module development.....	56
11.25	Modules.....	57
11.26	Spell Checker.....	57
11.27	Editor.....	58
11.28	Reports.....	59
11.29	Server Administrator.....	60
11.30	ServerManager.....	60
11.31	ServerMonitoring.....	61
11.32	Security.....	61
11.33	SiteArchitect.....	61
11.34	Template Store.....	62
11.35	Template Development.....	62



1 Administration

1.1 Browser compatibilities

FirstSpirit is an enterprise content management system that was designed for use in complex IT landscapes and which supports numerous operating systems, Java Runtime Environments, and databases. To guarantee high-quality software and ensure that FirstSpirit can run in all supported configurations, regular quality assurance tests are carried out. However, the large number of third-party components that are supported, the short release cycles, and the combination and configuration options for third-party components mean that testing is extremely complex.

As a result, FirstSpirit generally supports the latest version of a third-party component. These are regularly tested by e-Spirit AG and measures are taken to rectify any errors or incompatibilities. When looking at and selecting third-party components to be supported for operation with FirstSpirit, e-Spirit also gives special consideration to components that cover the largest possible market shares and that are used successfully by a large number of customers.

This includes the browsers that are used to access the FirstSpirit web apps: Because **Microsoft Internet Explorer** has been gradually replaced by Microsoft Edge, First Spirit will no longer support Microsoft Internet Explorer in future. Instead, Google Chrome and Microsoft Edge Chromium are recommended. The development of the new ContentCreator was already strongly focused on these two browsers: The new ContentCreator is therefore no longer compatible with Microsoft Internet Explorer for technical reasons.

Cessation of support for Microsoft Internet Explorer for all FirstSpirit web apps is planned for FirstSpirit 2020-07. We also plan to retire the “old” ContentCreator with this release.

The point of reference is always the latest version of the **Chrome** browser available on the operating system in question. Regular tests are performed on this browser and steps are taken to eliminate errors based on error messages.

Browsers that are similar to Chrome (such as Apple Safari) are also supported and tested, but functionality may be restricted (e.g., limited SVG support).

An overview of planned browser compatibilities from FirstSpirit 2020-07:

Recommended browsers/reference:



- Google Chrome
- Microsoft Edge

Compatible browsers:

- Mozilla Firefox
- Apple Safari (subject to restrictions)

Not compatible:

- Microsoft Internet Explorer
- Opera and others

The “FirstSpirit Technical Data Sheet” has been adapted accordingly (<https://docs.e-spirit.com/odfs/edocs/admi/technical-requi/index.html>).

1.2 The FirstSpirit session cookie now supports the attribute SameSite

FirstSpirit uses several standard web applications (fs5root, fs5webedit, fs5webmon, fs5preview, fs5staging) as well as possibly additional, project-local web applications (fs5webedit_PROJECTID and fs5preview_PROJECTID). For authentication of the web applications (WebAuthentication) on the FirstSpirit server, a technology is used which uses randomly generated **session cookies**. Through the use of session cookies, the user's login data only has to be transferred once from the web browser to the FirstSpirit server. After the successful login, the web browser uses exclusively the unique session cookie, which is valid for a limited period of time, and which is then sent from the web browser to the server with every further server enquiry, instead of the login data, in order to authenticate the user there.

The session cookie is an integral part of the Servlet API and is used for many other use cases besides authentication.

Many browsers (including Chrome 80) have massively restricted third-party cookies since the beginning of the year. All cookies that do not have the attribute `SameSite=None` are automatically restricted to first-level domains. **This behavior leads to problems when FirstSpirit web applications are integrated into other web applications (e.g. as IFrame).** In this case the new standard browser behavior ensures that the FirstSpirit session cookies are blocked by the browser and that the users in the embedded FirstSpirit web application can no longer be authenticated via the session cookie, for example.



For this use case with the current FirstSpirit release the session cookie can be extended by **the attribute SameSite=None**. SameSite is a standard that is intended to prevent cookies from being automatically sent by the browser with so-called cross-site requests and thus offers protection against cross-site request forgery (CSRF). In addition to this security aspect, the SameSite attribute allows you to define which cookies can be read in which context.

! The SameSite attribute requires a “Secure” flag. Cookies with SameSite=None without a “Secure” flag are rejected by the browser. The “Secure” flag defines that a cookie is always sent over a secure HTTPS connection.

The value for the FirstSpirit Session Cookies can be set via the configuration file `fs-server.conf`, both globally via the parameter `servletSessionCookieSameSite` and individually for specific WebApp paths, e.g. `servletSessionCookieSameSite.fs5webmon=None` for FirstSpirit ServerMonitoring. A WebApp-specific configuration overwrites the global setting `servletSessionCookieSameSite` for this WebApp path.

In the default configuration (of the `fs-server.conf` config file) no global value is set for `servletSessionCookieSameSite`.

```
# Servlet engine session cookie SameSite attribute. If left empty, the SameSite
# attribute for the session cookie is not
# set and the servlet engine defaults apply.
# Supported values: None, Strict, Lax
servletSessionCookieSameSite=
# Servlet engine session cookie SameSite attribute for a specific webapp context path.
# 'ROOT' is the reserved name for the root webapp context path.
# servletSessionCookieSameSite.ROOT=None
# servletSessionCookieSameSite.fs5webmon=None
# servletSessionCookieSameSite.webappContextPath=None
```

Possible values for the SameSite attribute:

- **Strict:**
 - The session cookie is only sent in the first-party context (i.e. only if the page for the cookie matches the URL in the browser) and
 - not together with cross-site requests initiated by third-party websites.



- Lax:
 - The session cookie is only sent in the first-party context (i.e. only if the page for the cookie matches the URL in the browser) and
 - only together with cross-site requests that are considered “safe”. This applies to secure HTTP methods (GET, HEAD, OPTIONS, and TRACE) and top-level navigation (actions that cause the URL in the browser address bar to change, such as links). `SameSite=Lax` is the default setting in modern browsers.
- None:
 - The session cookie is sent in all contexts (i.e. also in the third-party context), i.e. sending is allowed across origins.
 - In this setting, the attribute does not provide any additional protection against CSRF. However, this setting can be useful if a FirstSpirit web application is to be integrated into another web application.
- Value not set (FirstSpirit default):
 - If the value is not set, the default settings of the Servlet Engine are used.
 - If no value is configured here for the `SameSite` attribute, the browser default setting is used. Modern browsers interpret an unset `SameSite` attribute as `SameSite=Lax`.

! e-Spirit recommends retaining the default settings of the `fs-server.conf` configuration file. In most cases the default setting covers both security aspects (good protection against cross-site request forgery) and user concerns (good user experience). Only in exceptional cases (e.g. FirstSpirit as an embedded web app) a change is necessary.

2 ContentCreator

2.1 Workflows: Selecting a deadline time

For workflows, a deadline can be specified by which the entire workflow must be completed. The deadline, which can be selected by the editor, is shown to the next editor in the corresponding action window. Furthermore, the deadline is shown in the report area for tasks.



Previously, it was only possible to select a date as the deadline. In the current release, a time can also be selected.

2.2 User prompting/UX: Display of check boxes, radio buttons and toggles

The input elements “check box” (CMS_INPUT_CHECKBOX), “radio button” (CMS_INPUT_RADIOBUTTON) and “toggle” (CMS_INPUT_TOGGLE) allow the selection of values specified by the project developer. “Radio buttons” and “toggles” allow the selection of one value; a “check box” allows the selection of multiple values. With “radio buttons” and “toggles”, activating a field deactivates any previously selected field; with a “check box”, this is not the case.

In the new FirstSpirit ContentCreator, these input elements are now once again easier to distinguish from one another. The editor can more easily see the status of these input elements in a form and how they are operated: “Radio buttons” are now represented by circles, while “check boxes” are boxes.



Contact person

Mr. Smith ☒ Mrs. Big ☒

Mrs. Meyer ☐ Mr. Miller ☐

Color selection

Blue ☐ Green ☐

Red ☒ Yellow ☐

On/off

On ☒

On/off (Radiobutton)

On ☒ Off ☐

This new visualization also affects ContentCreator dialogs, such as the “Create new page” dialog:

Create new page ? X

Names

German

Add another language +

Navigation

Page with menu item ☒ Page without menu item ☐

Where in the navigation menu would you like to create the menu item?

- Home
- Page
- About us
- Products
- Services
- Press
- FirstSpirit

Layout

Empty page ☒ Apply layout ☐ Copy content ☐ From master copy ☐

Which layout should be used?

(Enter search term)

Finish Close



2.3 Tables: Vertical alignment of content in cells (“valign”)

The **vertical alignment** can now be determined for content in tables (CMS_INPUT_DOM / “Inline tables” and CMS_INPUT_DOMTABLE) in FirstSpirit ContentCreator. To do this, the new attribute `valign` can be used in a similar way to the existing attribute `align` (for horizontal alignment). The predefined keywords for the different alignments are

- *top*
- *middle* (default setting)
- *bottom*

1) Example – CMS_INPUT_DOM / Inline tables:

Style templates can be used to define table layout properties for inline tables, e.g., background color, text alignment, etc. The form for entering vertical text alignment in a style template (e.g., in the “standard style template”) must contain the identifier `valign`.

Example:



```
<CMS_INPUT_RADIOBUTTON name="valign" gridHeight="1" useLanguages="no">
  <ENTRIES>
    <ENTRY value="top">
      <LANGINFOS>
        <LANGINFO lang="" label="Top"/>
        <LANGINFO lang="DE" label="Oben"/>
      </LANGINFOS>
    </ENTRY>
    <ENTRY value="middle">
      <LANGINFOS>
        <LANGINFO lang="" label="Centre"/>
        <LANGINFO lang="DE" label="Zentriert"/>
      </LANGINFOS>
    </ENTRY>
    <ENTRY value="bottom">
      <LANGINFOS>
        <LANGINFO lang="" label="Bottom"/>
        <LANGINFO lang="DE" label="Unten"/>
      </LANGINFOS>
    </ENTRY>
  </ENTRIES>
  <LANGINFOS>
    <LANGINFO lang="" label="Vertical alignment"/>
    <LANGINFO lang="DE" label="Vertikale Ausrichtung"/>
  </LANGINFOS>
</CMS_INPUT_RADIOBUTTON>
```

Display in ContentCreator:



The alignment that is defined by the editor in the corresponding dialog “Edit cell properties” can be output in the HTML template set of the style template, for example, and therefore in the preview and on the generated page, e.g.,

```
...
style='
...
$CMS_VALUE(if(!valign.isEmpty, "vertical-align:" + valign + ";"))$
...
'
```

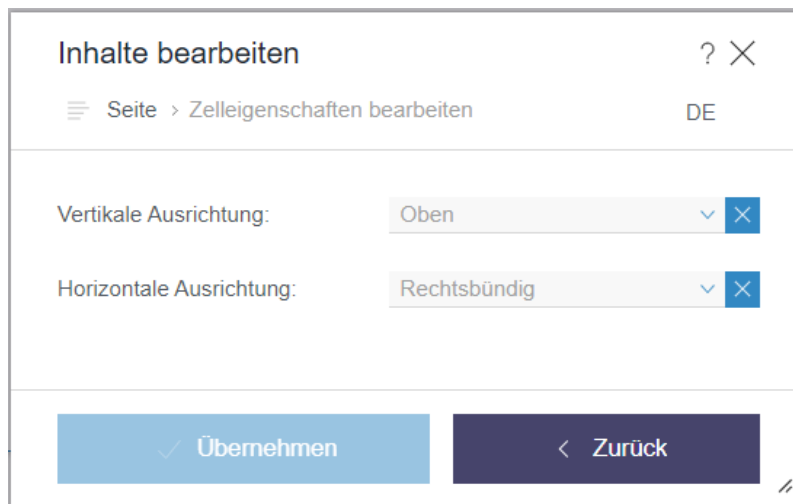
2) Example – CMS_INPUT_DOMTABLE:

For CMS_INPUT_DOMTABLE, cell properties are defined by the editor via a dialog that can be configured via the attribute `propertyConfig`. The vertical alignment of content can also be activated via the keyword *valign*, e.g.,

```
<CMS_INPUT_DOMTABLE name="table"
  propertyConfig="
    valign:Vertical alignment:
      [top:Top|middle:Middle|bottom:Bottom],
    align:Horizontal alignment:
      [left:Left|center:Center|right:Right]">
  <LANGINFOS>
    <LANGINFO lang="*" label="Table"/>
    <LANGINFO lang="DE" label="Tabelle"/>
  </LANGINFOS>
</CMS_INPUT_DOMTABLE>
```

Display in ContentCreator:





The properties of a cell of a CMS_INPUT_DOMTABLE, defined by the editor, can be evaluated and output via the HTML template set of the standard format template “Table cell”. The system object `#cell` is available for this purpose.

Example:

```
<td..
...
$CMS_VALUE(if(!#cell.valign.isEmpty, " valign='" + #cell.valign + "'"))$
$CMS_VALUE(if(!#cell.align.isEmpty, " align='" + if(#cell.align == "block",
    "justify", #cell.align) + "'"))$
...
</td>
```

Note: There are **no** plans to introduce corresponding support for the attribute `valign` for FirstSpirit SiteArchitect.

For more information, see

- Templates for inline tables: <https://docs.e-spirit.com/odfs/templates-basic/composition-tem/inline-tables/index.html>
- CMS_INPUT_DOMTABLE: <https://docs.e-spirit.com/odfs/template-develo/forms/input-component/domtable/index.html>



- `#style` system object: <https://docs.e-spirit.com/odfs/template-develo/template-syntax/system-objects/style/index.html>
- `#cell` system object: <https://docs.e-spirit.com/odfs/template-develo/template-syntax/system-objects/cell/index.html>

3 External Synchronization / Content Transport

3.1 External Synchronization and Content Transport: Improved support for shared access to a database

Using the “FirstSpirit External Synchronization” and “FirstSpirit Content Transport” mechanisms, database content (datasets) and the associated database structures (schemas, tables, columns) of a FirstSpirit project (source project) can be exported and imported into other FirstSpirit projects (target projects). The `dbnames` of column names and tables are recalculated during synchronization. This behavior can, under the following conditions, lead to the problem that columns and tables in the target projects cannot be found in the database:

- the FirstSpirit schemas of the participating projects reference the same database tables (and do not point to their own database tablespaces) and
- the `dbnames` do not match the automatically calculated `dbnames`

For this special use case an additional mapping file (`Mapping.xml`) can now be used when exporting and importing database schemas. In this file the database names of the source project are stored together with FirstSpirit's own unique identifiers (UUIDs), e. g.:

```
<xs:gid dbName="j_categories_column_x" uuid="66843bbe-da0d-46e3-a136-76bd93d782bb"/>
<xs:gid dbName="j_categories_column_y" uuid="4ba29641-26af-4edd-bac0-5a352913974d"/>
...
```

Using this unique assignment, it is now possible to synchronize the database schemas of read-only-connected databases (“No Schema Sync”) via “External Synchronization” or “Content Transport” as follows:



- If a schema is changed in the source project and synchronized with other FirstSpirit projects using one of the two mechanisms, the names of database tables and database columns are transferred from the source project to the target projects.
- If a new database table or database column is created in the target project, the corresponding dbname of the source schema is now preferred.

When using “FirstSpirit External Synchronization” the mapping file (Mapping.xml) can be added to the export file via a new option in the interface `ExportOperation.SchemaOptions` (`setExportGidMapping=true`) as follows:

```
ExportOperation exportOperation = ... // get the export operation via agent;  
ExportOperation.SchemaOptions schemaOptions = exportOperation.addSchema(schema);  
schemaOptions.setExportGidMapping(true);  
ExportOperation.Result result = exportOperation.perform(...);
```

The previous export format did not have to be extended for the new functionality. The **export format in version 3.2** can still be used.

! The command line tool “FSDevTools” will only support the new option **from version 2.6 on**. This version is not yet available. By default, no mapping file is created when using “FSDevTools” (`setExportGidMapping=false`).

Without a mapping file (default behavior when using “FirstSpirit External Synchronization”) the dbnames of the column names and tables are recalculated as before during synchronization. For the regular use cases there will be no deviation during recalculation, so that the use of a mapping file is not necessary.

When using the “FirstSpirit Content Transport” functionality, the mapping file (Mapping.xml) is automatically generated and used.

4 FirstSpirit Content Experience Tools (CXT)

4.1 Latest module versions

FirstSpirit 2020-05 supports the following module versions for “FirstSpirit Content Experience Tools”:



Module / file name	Version number
FirstSpirit CXT DAP Bridge	1.28
<code>dataservice-[version].fsm</code>	
FirstSpirit CXT FragmentCreator	2.4
<code>fragment-creator-[version].fsm</code>	
FirstSpirit Fragment DAP	1.25
<code>fragmentdap-[version].fsm</code>	
FirstSpirit Media DAP	1.23*
<code>mediadap-[version].fsm</code>	
FirstSpirit Markdown Editor	1.21*
<code>markdown-editor-[version].fsm</code>	
FirstSpirit Tagging Editor	1.21
<code>tagging-editor-[version].fsm</code>	
FirstSpirit CXT FragmentCreator - CaaS	1.21
Integration	
<code>caas-integration-[version].fsm</code>	

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

4.2 Extension of MicroApps API: Embedding of MicroApps into a page ("widget")

Previously, MicroApps in MicroApp Framework could be called up as modal dialogs via the MicroApps API (`CxtMicroApps.getButtons(context)`).

In the current release, the MicroApps API has been expanded to include the method `CxtMicroApps.embedMicroApp`, which can be used to embed MicroApps directly into an HTML page ("widget").

The API also allows handlers to be added and used, and enables responses to events.

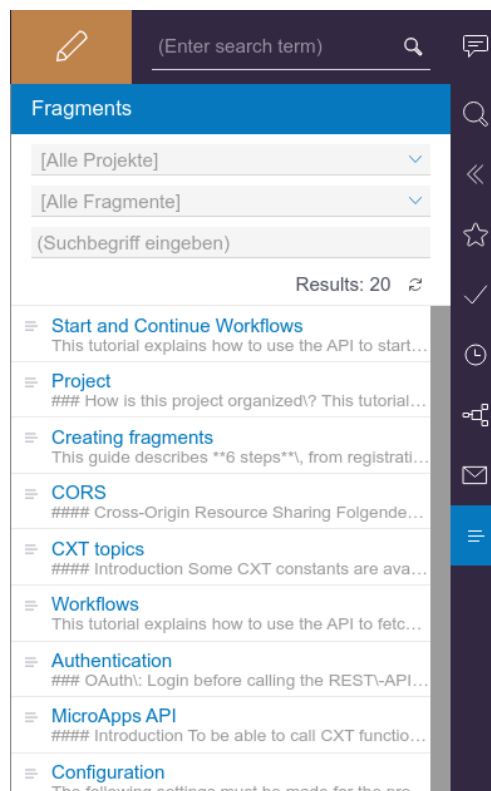
Note: The API is currently intended for internal use only and is being tested internally and by partners. In the future, it will also be made available to external customers.



4.3 Fragment DAP: filter fragments in report by category

Previously, the Fragment DAP `<SOURCE name="FirstSpiritFragmentAccess/FSFACConnector">` report allowed to filter for fragments based on a remote project filter and search terms. With this release, a new filter adds the option to limit the listed fragments based on their category.

The default filter settings are unrestricted, which allows to view all available fragments from every remote project.



Fragment DAP report with no filters applied

In addition to the previous functionality that allowed searching for search terms or limiting the list to fragments from a specific project, the new drop-down menu for category filtering is added. It contains all categories of the remote projects and selecting any category will filter for fragments that belong to that category.



In case that the same category name is available in more than one project, selecting that category filter displays all fragments belonging to that category from any project. To filter the results, a specific project or search terms be applied, just as before.

4.4 FragmentCreator: Revision of the design (input fields)

As part of the revision and merging of the technical basis for FirstSpirit ContentCreator and FragmentCreator, the graphic interface of FragmentCreator was revised and adapted to the design principles of ContentCreator.

The design update does not involve any functional changes for editors or developers. All functions in the interfaces are available in principle at the known positions. Neither on the development side nor on the operational side are there any costs associated with the design update.

The modifications of the current release primarily affect the input fields for text and selection as well as the tags (CMS_INPUT_TEXT, CMS_INPUT_CHECKBOX, CMS_INPUT_COMBOBOX, CMS_INPUT_RADIOBUTTON, FS_TAGGING and others).

The image shows two side-by-side screenshots of the FragmentCreator interface, labeled 'old' and 'new' in red text. The 'old' interface (left) features a 'mobile' tab, a 'TAGS' input field, a 'DESCRIPTION' field with the text 'Neues Fragment', a 'TEXT' field with 'Lorem ipsum dolor', a 'Zwei' dropdown menu, and two groups of selection options: a checkbox group with 'Eins', 'Zwei', and 'Drei' (where 'Drei' is checked), and a radio button group with 'Eins', 'Zwei', and 'Drei' (where 'Eins' is selected). The 'new' interface (right) features a 'mobile' tab, a 'Tags' input field, a 'DESCRIPTION' field with 'Neues Fragment', a 'TEXT' field with 'Lorem ipsum dolor', an 'OPTIONS' dropdown menu with 'Zwei', a 'CHECKBOXES' group with 'Eins', 'Zwei', and 'Drei' (where 'Drei' is checked), and a 'RADIOBOXES' group with 'Eins', 'Zwei', and 'Drei' (where 'Eins' is selected).



The adaptation of the documentation with regard to the design is successive, therefore the presentation in the documentation potentially no longer corresponds to the current software status.

5 Module Development, Scripts, API

5.1 Global module resources: Improved stability when resolving dependencies

Module resources have a specific **scope**. This means that the corresponding jars and directories can either only be reached within the module (locally within the module) or server-wide (globally). **Global resources (scope="global")** are also available to other modules on the server. However, all classes are in a namespace and each class can therefore only exist once. It is for this reason that different versions of a class cannot be used.

Classloading and versioning of resources: If the same global resources are provided by several modules in different versions, only one of these global resources can be used by all modules. To prevent conflicts between different modules, the classes are – as far as possible – loaded via individual module Classloaders that are separated from each other. In the case of global resources, one of these classes is then made available via the combined, global Classloader.

If names are identical, an attempt is made to ascertain whether resources are **compatible** with one another. In order to do this, the unique identifier ("name") and the **version** of the resource supplied ("version") are required in the resource definition (`module.xml`) and it is necessary to specify the minimum compatible version ("minVersion") (optional) and the maximum compatible version ("maxVersion"), e.g.:

```
<web-resources>
  <resource name="..." version="4.4" minVersion="4.4" maxVersion="4.5.2">
    lib/httpclient-compatibility.jar
  </resource>
</web-resources>
```

Previous behavior

Previously, it was not possible to ensure that the latest version of a global resource was always used. Resources locally within a module were loaded via the relevant module Classloader and one of these resources was then made available via the combined global Classloader. Although this process



ensured that the versions were compatible with the other modules (based on “name”, “maxVersion”, and “minVersion”), the latest version (i.e., the version with the highest version number) was not always used.

This behavior could cause problems when modules were updated; for example, because services that access these global resources no longer functioned with a different version.

New behavior

The latest FirstSpirit release ensures that in normal operation, the latest version of a global resource is always used (i.e., the version with the highest version number), even if these were previously loaded via various module Classloaders. If several modules provide the same version of a global resource, in this case, too, the global resource is always loaded from the same module. The compatibility of the versions with the other modules is still taken into account (based on “name”, “maxVersion”, and “minVersion”).

The following applies: If several modules provide the same global resource, and if the versions are compatible with each other, the version with the highest version number is always used.

This increases the stability when it comes to resolving dependencies after a module update. There is now a greater probability that modules containing global resources which are used by different services will remain functional after a module update. In isolated cases, however, restarting the FirstSpirit Server may still be necessary.

Additional documentation:

- [Module development \(versioning resources\)](#)
- [Module definition](#)
- [Module update](#)

5.2 JSON function: Improved support for FS_REFERENCE

In the latest FirstSpirit release, the JSON function also supports referenced objects of the input component FS_REFERENCE.

No new version of the JSON output format will be published for this change; the changes will be made in the **current format version 1.1**.



Overview of changes in format version 1.1

The input component FS_REFERENCE is used to record any reference. The type of referenced object is not predetermined: References to media (images and files), page references, folders, sections on the current page, and many other objects can be defined.

Using the JSON function, the referenced FirstSpirit objects of the input component FS_REFERENCE can now be transferred to a JSON object structure (previously the referenced objects were not rendered). In this process, the object itself is not rendered; the function only renders the data that is required for referencing.

Example: An input component of type FS_REFERENCE refers, via the `sections="only"` mode, to the sections on the current page.

The output of the page reference (or the page) in format 1.1 therefore contains the new area "section": which holds data on the referenced sections (`"fsType": "Section"`)

```
"st_reference_pageref": {
  "fsType": "FS_REFERENCE",
  "name": "st_reference_pageref",
  "value": {
    "fsType": "PageRef",
    "name": "test",
    "identifier": "c88bc52c-aab9-4f66-870c-1354ca73fcb1",
    "uid": "test",
    "uidType": "SITESTORE_LEAF",
    "url": "http://www.myurl.de/external_sync_DE/test.json",
    "section": {
      "fsType": "Section",
      "name": "cms_input_text",
      "displayName": "CMS_INPUT_TEXT",
      "identifier": "c56cbc16-e70d-426d-af0f-16de05578922"
    }
  }
}
```

Additional documentation:

- [JSON configuration \(ServerManager\)](#)



- JSON output (templates)
- FS_REFERENCE input component

Notes on the format version

The format version can be explicitly configured via the JSON settings:

```
$CMS_SET(#global.json.formatVersion, "1.1")$
```

If an unchanged JSON output is required outside the framework of FirstSpirit updates, the format version should be explicitly set in the project settings under Global Settings.

If the format version is not explicitly set, the latest JSON format version (1.1) will always be used.

5.3 Creating a pop-up dialog as a warning message

Pop-up dialogs created using the interface `RequestOperation` (FirstSpirit Developer-API, Package `de.espirit.firstspirit.ui.operations`) can now also be created as warning messages via Enum `RequestOperation.Kind` (FirstSpirit Developer-API, Package `de.espirit.firstspirit.ui.operations`):

Example:

```
import de.espirit.firstspirit.agency.OperationAgent;
import de.espirit.firstspirit.ui.operations.RequestOperation;
import de.espirit.firstspirit.ui.operations.RequestOperation.Kind;
opAgent = context.requireSpecialist(OperationAgent.TYPE);
if (opAgent != null) {
    RequestOperation requestOp = opAgent.getOperation(RequestOperation.TYPE);
    requestOp.setKind(Kind.WARN);
    requestOp.setTitle("Whoa, there!");
    requestOp.perform("Once you delete this content, there's no getting it back.
        Make sure you want to do this!");
} else {
    context.logInfo("...");
}
```

Possible types (`RequestOperation.Kind`):



- WARN (new)
- INFO
- QUESTION
- ERROR

In SiteArchitect and ServerManager, WARNING-type pop-up dialogs are displayed with an exclamation mark, and INFO-type pop-up dialogs are displayed with an “i” symbol.

In ContentCreator, there is no visual difference between WARNING-type and INFO-type pop-up dialogs. Both types are displayed in exactly the same way with an exclamation mark.

5.4 Improved configuration options for user-specific URLs (AdvancedUrlCreator)

FirstSpirit provides API interfaces and a reference implementation (“Advanced URL Creator”) in order to integrate user-specific path strategies for URL generation in FirstSpirit. All configuration parameters (including the standard parameters evaluated by FirstSpirit as well as user-defined parameters) must either be defined via a schedule script that is executed before the actual generation schedule or via the configuration settings in the `module.xml` file.

The FirstSpirit framework evaluates some predefined standard parameters directly. These include:

- `useWelcomeFileNames` (for configuring start page references)
- `stripWelcomeFileNames` (removes the extension `/index.*` from the Advanced URL)

For more standard parameters, see the FirstSpirit manual: [Standard configuration parameters](#).

The following applies to all parameters: The capitalization of parameters is not relevant, i.e., `useWelcomeFileNames`, `USEWELCOMEFILENAMES`, or `usewelcomefilenames` are all valid designations for the same parameter.

The parameters “`useWelcomeFileNames`” and “`stripWelcomeFileNames`”, which are used for the configuration of user-specific path strategies for URL generation, offer new configuration options in the latest FirstSpirit release.



Change relating to the parameter “useWelcomeFileNames”

The “useWelcomeFileNames” parameter can be used to configure start page references.

```
context.setProperty("#urlCreatorSettings",  
Collections.singletonMap("usewelcomefilenames", "true"));
```

Previous behavior:

Possible values:

- true or yes or value not set (default value)
- false or no

true or yes (default value): If the parameter is passed with the value “true” (default value), the file name `index.*` is always provided for page references which are marked as the start page of a folder in the Site Store when an Advanced URL is generated (regardless of the display name or the file name from the properties dialog).

In standard URL generation mode,

```
../en/startpage/mithras_home.html
```

becomes the following in advanced mode with “useWelcomeFileNames” (true):

```
../Startpage/index.html
```

For page references which are not marked as start pages, on the other hand, the display name continues to be used when the Advanced URL is generated.

false or no: If the parameter is passed with the value “false”, regardless of whether a page reference is a start page or not, the URLs are generated based on the display name of the page reference (with the blank space being replaced by a “-” character):

```
../Startpage/Mithras-Homepage.html
```



New behavior:

Possible values:

- `true` or `yes` or value not set (default value): Only the first HTML template set uses `Welcomefilenames`.
- `false` or `no`: No `Welcomefilenames` are used.
- `all`: All HTML template sets use `Welcomefilenames`. (This type of configuration can lead to identical URLs, see (*)).
- Comma-separated list of template sets: All listed channels use `Welcomefilenames`. (This type of configuration can lead to identical URLs, see (*)).

`true` or `yes`: If the parameter is passed with the value “true” (default value), the file name `index.*` is provided for page references which are marked as the start page of a folder in the Site Store when an Advanced URL is generated (regardless of the display name or the file name from the properties dialog) – but this only applies to the first HTML template set (e.g., “html”), whereas for all other template sets (e.g., “php”) the URLs are still generated based on the display name for the page reference (with the blank space being replaced by a “-” character).

```
../Startpage/index.html
```

`false` or `no`: If the parameter is passed with the value “false”, regardless of whether a page reference is a start page or not, the URLs are generated based on the display name of the page reference (with the blank space being replaced by a “-” character):

```
../Startpage/Mithras-Homepage.html
```

`all`: If the parameter is passed with the value “all”, the file name `index.*` is provided for page references which are marked as the start page of a folder in the Site Store when an Advanced URL is generated (regardless of the display name or the file name from the properties dialog) – for all HTML template sets contained in the project. (This type of configuration can lead to identical URLs, see (*)).

List of template sets: If a list of template sets is passed to the parameter, the file name `index.*` is provided for page references which are marked as the start page of a folder in the Site Store when an



Advanced URL is generated (regardless of the display name or the file name from the properties dialog) – for all HTML template sets that are included in the list. The name of the template set is given here (“template set name”: see FirstSpirit product manual under [Template sets for a project](#)). (This type of configuration can lead to identical URLs, see (*)).



(*) With a configuration that uses Welcomefilenames for all or multiple template sets, a folder can contain several index.* files (e.g., “/index.html” and “/index.php”). If the /index.* extensions are then also removed via stripWelcomeFileNames, this will result in identical URLs. It is strongly advised not to use this type of configuration.

Change relating to the parameter “stripWelcomeFileNames”

The “stripWelcomeFileNames” parameter is only relevant if the URL path strategy used also uses the “useWelcomeFileNames” configuration parameter.

The “stripWelcomeFileNames” parameter can be used to remove the “/index*” extension added by “useWelcomeFileNames” from the Advanced URL (but not from the file name under which the page is stored in the file system).

```
factorySettings = new HashMap();  
factorySettings.put("usewelcomefilenames", "true");  
factorySettings.put("stripwelcomefilenames", "true");  
context.setProperty("#urlCreatorSettings", factorySettings);
```

Previous behavior:

Possible values:

- true or yes or value not set (default value)
- false or no

If the parameters “useWelcomeFileNames” and “stripWelcomeFileNames” are passed with the value “true” (default value), the display name of the start page is removed from the Advanced URL for page references which are marked as the start page of a folder in the Site Store.

In standard URL generation mode,



```
../en/startpage/mithras_home.html
```

becomes the following (in the file system) in advanced mode with “useWelcomeFileNames” and “stripWelcomeFileNames”:

```
../Startpage/index.html
```

and the Advanced URL becomes:

```
../Startpage
```

As a result, although the start page of the “Startpage” folder is created in the file system with the extension “/index.*”, it can (if the web server has been configured accordingly) be called via the “/Startpage/” URL.

If the project contains more than one template set, “stripWelcomeFileNames” only removes “index.{master extension}”. “Master extension” is the file extension from the first template set (usually “html”).

If the “stripWelcomeFileNames” parameter is passed with the value “false”, the extension “/index.*” is retained for all start page references both in the file system and in the Advanced URL.

New behavior:

Possible values:

- `true` or `yes` or value not set (default value): “/index.*” (usually “/index.html”) is shortened.
- `false` or `no`: URL is not shortened
- List of extensions: All listed extensions (e.g., “/index.html” and “/index.php”) are shortened.

`true` or `yes`: If the “stripWelcomeFileNames” parameter is passed with the value “true” (default value), the start page of the “Startpage” folder is created in the file system with the extension “/index.*”, but can (if the web server has been configured accordingly) be called via the “/Startpage/” URL.

`false` or `no`: If the “stripWelcomeFileNames” parameter is passed with the value “false”, the extension “/index.*” is retained for all start page references both in the file system and in the Advanced URL.



List of extensions: If a list of extensions is passed to the parameter, the extension “/index.*” is shortened for page references which are marked as the start page of a folder in the Site Store when an Advanced URL is generated and, with the right web server configuration, can be called via the relevant URL (in a similar way to the behavior with the value “true”). The names of the extensions are given here (“Target file extension:” see FirstSpirit product manual under [Template sets for a project](#)).

6 SiteArchitect / ContentCreator

6.1 Workflow: Changing the order of transitions on an activity

A workflow is a sequence of tasks that is completed according to a fixed, predefined structure. In FirstSpirit, this is made up of state, activities, and transitions. Transitions form the link between activities and states.

Project-specific workflows can be created using a graphical editor in FirstSpirit SiteArchitect (“Templates” / “Workflows”). Instances of these workflows can then be started in context on each element in a FirstSpirit project (SiteArchitect: context menu in the tree view / “Workflow” and in ContentCreator via the element state) or, if there is no context, using the FirstSpirit menu bar (“Tasks” / “Workflow” or in ContentCreator via “Actions”). Every instance of a workflow has to run according to the rules set in the workflow. For each activity, a dialog opens that offers the editor the option to advance the workflow by choosing a transition (via a button in the dialog).

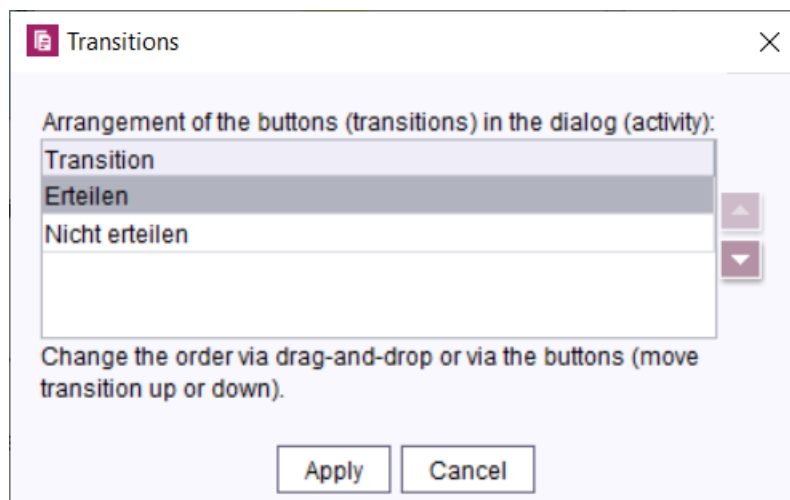
In the latest FirstSpirit release, the order for displaying the transitions on an activity in a workflow can be configured.

The configuration is managed on the workflow in FirstSpirit SiteArchitect (“Templates” / “Workflows”) in the “State diagram” tab. If a manual activity is selected in the graphical editor, the new property “Transitions” will appear in the Properties view (right) under “General”. This will show all outgoing transitions for the selected activity. The transitions can be opened in a separate window via the



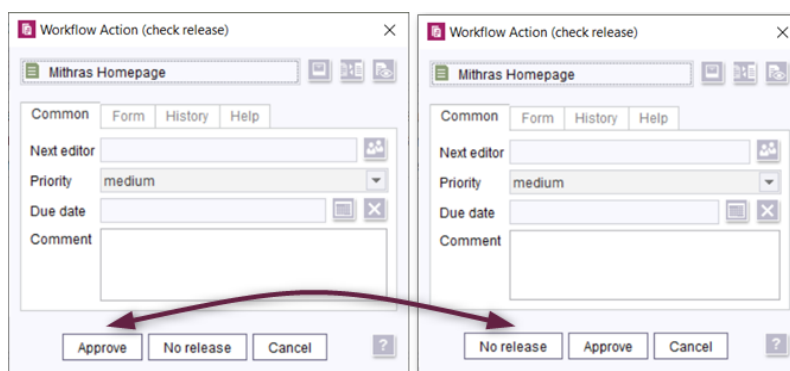
icon that appears after the property. The order of the transitions can be changed in this view using drag-and-drop or the buttons on the right-hand side of the window (Move up / Move down).





Changing the order of outgoing transitions

The changed order affects the display of buttons in the dialog.



Changed order of transitions in dialog

Further information:

- [Configuring workflows \(templates\)](#)
- [Workflows in SiteArchitect](#)
- [Workflows in ContentCreator](#)
- [Workflows in FragmentCreator](#)



7 System

7.1 Updates to integrated third-party software

The following internal software has been updated in the latest FirstSpirit release:

ASM (library for analyzing and modifying Java byte code)

Updated from **version 7.3.1** to **version 8.0.1**.

8 Template development

8.1 Workflows: More configuration options for context-based information in e-mails

In e-mails sent by workflows, special placeholders may be used that are automatically replaced by the system based on the context. For example, this can be used to include a link to preview the page on which the workflow is active or to provide a wide range of other information in the e-mail.

The placeholders can be configured based on the properties of an activity or a transition in the “E-mail” tab (“Template store”/“Workflows”/“State diagram”). When a transition or an activity is switched, e-mails containing the relevant information are then sent automatically.

In the current FirstSpirit release, the following options have been added to the placeholders:

- `%DATE_TIME%` = due date (when set) with time. The format is localized, e.g., in the English version: “February 25, 1986 at 11:04:37 AM CET”.
- `%HISTORY_SHORT%` = History of the workflow instance showing only the last three entries in ascending order (e.g., entry: 8, 9, 10).
- `%HISTORY_LAST%` = History of the workflow instance showing only the last entry (e.g., entry: 10).
- `%HISTORY_DESC%` = History of the workflow instance showing all entries in descending order (e.g., entry: 10, 9, 8, 7, 6, 5, 4, 3, 2, 1).



- %HISTORY_SHORT_DESC% = History of the workflow instance showing only the last three entries in descending order (e.g., entry: 10, 9, 8).
- %LAST_USER_FULLNAME% = The last editor; the full name of the person is displayed (if this is not known, the login name is shown).
- %NEXT_USER_FULLNAME% = The names of the persons permitted to edit the workflow at the next stage. The full names are displayed (if these are not known, the login names are shown).

All previous placeholders are still supported:

- %FIRSTspiritURL% = HTTP connection mode (standard mode; master language)
- %FIRSTspiritSOCKETURL% = SOCKET connection mode (master language)
- %PAGESTORE_PREVIEW_URL% = Preview URL for a page from the Page Store (master language)
- %SITESTORE_PREVIEW_URL% = Preview URL for a page reference from the Site Store (master language)
- %WF_NAME% = Name of the workflow
- %CREATOR% = The name of the person who created the workflow. The full name is displayed (if this is not known, the login name is shown).
- %LAST_USER% = The name of the person who last edited the workflow. The login name is shown.
- %LAST_COMMENT% = Last comment
- %NEXT_USER% = The names of the persons permitted to edit the workflow at the next stage. The login names are shown.
- %PRIORITY% = Priority
- %DATE% = Due date (only if set)



- %HISTORY% = History of the workflow instance showing all entries in ascending order (e.g., entry: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10).
- %WEBeditURL% = WebEdit link to the preview of the page (master language)

Additional documentation:

- [Workflows/Properties of an activity/E-mail tab](#)
- [Workflows/Properties of a transition/E-mail tab](#)

9 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	January 2020
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	



Functionality	Deprecated as of	Will be removed/ Was removed as of
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	
Windows installation program	2018-06	June 2020
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	
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	



Functionality	Deprecated as of	Will be removed/ Was removed as of
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	June 2020
WebSphere Application Server support for FirstSpirit	2019-05	
Legacy mode for the FirstSpirit server and module development	2019-06	
Java Web Start support for FirstSpirit	2019-10	June 2020
FirstSpirit ContentCreator (old design / old technology)	2019-11	July 2020
Mithras Energy demo project	2020-02	June 2020
Support for Microsoft Internet Explorer for FirstSpirit Web Apps	2020-05	July 2020

10 Overview

ID	Description	Categories
CORE-7678	<p>In e-mails sent by workflows, special placeholders may be used that are automatically replaced by the system based on the context. In the current FirstSpirit release, these placeholders have been expanded to include further configuration options.</p> <p>Further information can be found in chapter “Template development: Workflows: More configuration options for context-based information in e-mails”.</p>	Developer, FirstSpirit Administrator, Release, Workflow
CORE-9572	<p>In the current release, a deadline time can now also be selected for workflows, in addition to the deadline date.</p> <p>Further information can be found in chapter “ContentCreator: Workflows: Selecting a deadline time”.</p>	ContentCreator, Editor, Workflow



ID	Description	Categories
CORE-10832	<p>In the latest FirstSpirit release, the order for displaying transitions on a workflow activity can be configured. The configuration is managed on the workflow in FirstSpirit SiteArchitect (“Templates” / “Workflows”) in the State diagram tab via the new property “Transitions”. The altered order affects the display of the buttons that are shown when a workflow is run through via the dialog box for the corresponding activity.</p> <p>Further information can be found in chapter “SiteArchitect / ContentCreator: Workflow: Changing the order of transitions on an activity”.</p>	ContentCreator, FragmentCreator, SiteArchitect, Template Store, Workflow
CORE-10834	<p>The configuration options for the parameters “useWelcomeFileNames” and “stripWelcomeFilenames”, which are used for the configuration of user-specific path strategies for URL generation, have been extended in the latest FirstSpirit release.</p> <p>Further information can be found in chapter “Module Development, Scripts, API: Improved configuration options for user-specific URLs (AdvancedUrlCreator)”.</p>	Advanced URL, Developer, Generation, Migration, SiteArchitect
CORE-11462	<p>The “FirstSpirit External Synchronization” and “FirstSpirit Content Transport” mechanisms now provide an additional mapping file (<code>Mapping.xml</code>) for exporting database content (schemas, entities), in which the database names of the source project are stored together with FirstSpirit's own unique identifiers (UUIDs).</p> <p>Further information can be found in chapter “External Synchronization / Content Transport: External Synchronization and Content Transport: Improved support for shared access to a database”.</p>	Content Transport, Database, Developer, External synchronization, FirstSpirit API



ID	Description	Categories
CORE-11711	<p>If the same global resources are provided by several modules in different versions, only one of these global resources can be used by all modules. The latest FirstSpirit release ensures that in normal operation, the latest version (i.e., the version with the highest version number) of a global resource is always used. This increases the stability when it comes to resolving dependencies after a module update.</p> <p>Further information can be found in chapter “Module Development, Scripts, API: Global module resources: Improved stability when resolving dependencies”.</p>	Developer, Isolated mode, Module development, Modules
CORE-12038	<p>With the current FirstSpirit release the FirstSpirit session cookie can be extended by the attribute <code>SameSite</code>. The setting <code>SameSite=None</code> may be necessary in individual cases if FirstSpirit web applications are integrated into other web applications (e.g. as an <code>IFrame</code>).</p> <p>Further information can be found in chapter “Administration: The FirstSpirit session cookie now supports the attribute <code>SameSite</code>”.</p>	FirstSpirit Administrator, Security, Server Administrator, ServerMonitoring
CORE-12068	<p>Pop-up dialogs created using the interface <code>RequestOperation</code> (FirstSpirit Developer API, Package <code>de.espirit.firstspirit.ui.operations</code>) can now also be created as warning messages via <code>Enum RequestOperation.Kind</code> (FirstSpirit Developer API, Package <code>de.espirit.firstspirit.ui.operations</code>).</p> <p>Further information can be found in chapter “Module Development, Scripts, API: Creating a pop-up dialog as a warning message”.</p>	ContentCreator, Developer, FirstSpirit API, Module development, ServerManager, SiteArchitect



ID	Description	Categories
CORE-12085	<p>Using the JSON function, the referenced FirstSpirit objects of the input component FS_REFERENCE can now be transferred to a JSON object structure (previously the referenced objects were not rendered). In this process, the object itself is not rendered; the function only renders the data that is required for referencing. No new version of the JSON output format will be published for this change; the changes will be made in the current format version 1.1.</p> <p>Further information can be found in chapter “Module Development, Scripts, API: JSON function: Improved support for FS_REFERENCE”.</p>	Developer, Support for JSON
CORE-12129	An error was rectified that could have meant that the Classloading for a service did not function as expected.	Developer, FirstSpirit Administrator, Modules, Server Administrator
CORE-12171	<p>The vertical alignment of content in tables can now also be defined by the editor in FirstSpirit ContentCreator (CMS_INPUT_DOM / “Inline tables” and CMS_INPUT_DOMTABLE).</p> <p>Further information can be found in chapter “ContentCreator: Tables: Vertical alignment of content in cells (“valign”)”.</p>	ContentCreator, Developer, Editor
CORE-12229	<p>Internal software has been updated in the latest FirstSpirit release.</p> <p>Further information can be found in chapter “System: Updates to integrated third-party software”.</p>	FirstSpirit Administrator, Integrated software
CORE-12245 CXT-12321	<p>When updating the “SpellService” module (file <code>fs-spell.fsm</code>) to a higher version, existing configurations were overwritten in rare cases. This could cause, for example, that self-created dictionaries were removed or not taken into account.</p> <p>In addition, a bug was fixed which caused the FirstSpirit server with “SpellService” module to no longer start after an update (error message in <code>fs-server.log</code> like <code>ERROR ... (de.espirit.firstspirit.server.module.ServiceManager cannot install service, module=SpellService, version=..., componentClass=de.espirit.firstspirit.opt.spell.Sp</code></p>	Modules, Spell Checker



ID	Description	Categories
CORE-12246	An error was rectified which was causing the <code>installed</code> method to be called up for all services when ServiceManager started up. Executing the <code>installed</code> method may have meant that global configuration files were rewritten, for example.	FirstSpirit Administrator, Modules, ServerManager, Services
CORE-12298	A FirstSpirit server is installed via the installation archive <code>fs-install-[version].tar.gz</code> . When executing the commands <code>FS_HOME/bin/fs-server installstart</code> or <code>FS_HOME/bin/fs-server install</code> (under Linux operating systems) an error could occur because the <code>run</code> folder was not available. This folder is now included in the installation archive.	Server Administrator
CXT-864	The Fragment DAP report now features filtering fragments by category. Further information can be found in chapter “FirstSpirit Content Experience Tools (CXT): Fragment DAP: filter fragments in report by category”.	Data Access Plug-In, Editor, FirstSpirit Content Experience Tools (CXT), Reports
CXT-1243	FragmentCreator: Revision of the design (input fields) Further information can be found in chapter “FirstSpirit Content Experience Tools (CXT): FragmentCreator: Revision of the design (input fields)”.	Developer, Editor, FirstSpirit Content Experience Tools (CXT), FragmentCreator, Input Components
CXT-1268 CXT-1473	In the current release, MicroApps can now be integrated directly into HTML pages using the MicroApps API (“widget”). Further information can be found in chapter “FirstSpirit Content Experience Tools (CXT): Extension of MicroApps API: Embedding of MicroApps into a page (“widget”)”.	Developer, FirstSpirit API, FirstSpirit Content Experience Tools (CXT), FragmentCreator, Module development
CXT-1315	Browser compatibilities Further information can be found in chapter “Administration: Browser compatibilities”.	ContentCreator, Developer, Editor, FirstSpirit Administrator, FirstSpirit Content Experience Tools (CXT), FragmentCreator



ID	Description	Categories
CXT-1339	Nested frames are now prevented in the new ContentCreator: Instead of another instance of ContentCreator being opened in an existing ContentCreator window (due to a corresponding template configuration in the project), an empty page is now displayed. (Error message in the browser console: (index):35 Skipping startup of nested ContentCreator, please contact your administrator.)	ContentCreator, Developer, Editor
CXT-1413	In rare cases, data could not be edited because of timing problems. Instead, a loading animation was displayed.	ContentCreator, Editor
CXT-1465	Workflows can be started and advanced with the flyout menu via the element state in the right-hand menu bar. Due to a timing problem, an incomplete or outdated view was sometimes displayed. The available workflow actions are now displayed directly, without the need to manually update the page.	ContentCreator, Editor
CXT-1466	No datasets could be created or edited via FS_INDEX with <i>DatasetDataAccessPlugin</i> if this input component was used in a metadata form. (Error message: ...java.lang.IllegalArgumentException: Unknown language: §...)	Content Store, ContentCreator, Data Access Plug-In, Developer, Editor, Input Components, Template Development
CXT-1482	For security reasons, access to the error page for the MicroApp Framework introduced in FirstSpirit 2020-04 (accessible via ~/status) is now limited – as intended – solely to FirstSpirit administrators. Furthermore, the error pages now contain more information on the cause of the error.	Debugging, Developer, FirstSpirit Administrator, FirstSpirit Content Experience Tools (CXT), Security
CXT-1490	In the new ContentCreator, the user prompting/UX for the input elements “check box” (CMS_INPUT_CHECKBOX), “radio button” (CMS_INPUT_RADIOBUTTON) and “toggle” (CMS_INPUT_TOGGLE) have been improved. Further information can be found in chapter “ContentCreator: User prompting/UX: Display of check boxes, radio buttons and toggles”.	ContentCreator, Developer, Editor, Input Components



ID	Description	Categories
CXT-1525	FirstSpirit Content Experience Tools: Latest module versions Further information can be found in chapter “FirstSpirit Content Experience Tools (CXT): Latest module versions”.	Developer, FirstSpirit Administrator, FirstSpirit Content Experience Tools (CXT), FragmentCreator, Modules
CXT-1528 CXT-1500	Temporarily, when using the “FirstSpirit CXT FragmentCreator - CaaS Integration” module when releasing fragments, the content was no longer transferred to live CaaS instances, but only to preview CaaS instances.	Developer, FirstSpirit Content as a Service (CaaS), FragmentCreator, Release

11 Categories

11.1 Advanced URL

ID	Description
CORE-10834	The configuration options for the parameters “useWelcomeFileNames” and “stripWelcomeFileNames”, which are used for the configuration of user-specific path strategies for URL generation, have been extended in the latest FirstSpirit release. Further information can be found in chapter “Module Development, Scripts, API: Improved configuration options for user-specific URLs (AdvancedUrlCreator)”.

11.2 Workflow

ID	Description
CORE-7678	In e-mails sent by workflows, special placeholders may be used that are automatically replaced by the system based on the context. In the current FirstSpirit release, these placeholders have been expanded to include further configuration options. Further information can be found in chapter “Template development: Workflows: More configuration options for context-based information in e-mails”.



ID	Description
CORE-9572	<p>In the current release, a deadline time can now also be selected for workflows, in addition to the deadline date.</p> <p>Further information can be found in chapter “ContentCreator: Workflows: Selecting a deadline time”.</p>
CORE-10832	<p>In the latest FirstSpirit release, the order for displaying transitions on a workflow activity can be configured. The configuration is managed on the workflow in FirstSpirit SiteArchitect (“Templates” / “Workflows”) in the State diagram tab via the new property “Transitions”. The altered order affects the display of the buttons that are shown when a workflow is run through via the dialog box for the corresponding activity.</p> <p>Further information can be found in chapter “SiteArchitect / ContentCreator: Workflow: Changing the order of transitions on an activity”.</p>

11.3 Content Transport

ID	Description
CORE-11462	<p>The “FirstSpirit External Synchronization” and “FirstSpirit Content Transport” mechanisms now provide an additional mapping file (<code>Mapping.xml</code>) for exporting database content (schemas, entities), in which the database names of the source project are stored together with FirstSpirit’s own unique identifiers (UUIDs).</p> <p>Further information can be found in chapter “External Synchronization / Content Transport: External Synchronization and Content Transport: Improved support for shared access to a database”.</p>

11.4 ContentCreator

ID	Description
CORE-9572	<p>In the current release, a deadline time can now also be selected for workflows, in addition to the deadline date.</p>



ID	Description
	Further information can be found in chapter “ContentCreator: Workflows: Selecting a deadline time”.
CORE-10832	<p>In the latest FirstSpirit release, the order for displaying transitions on a workflow activity can be configured. The configuration is managed on the workflow in FirstSpirit SiteArchitect (“Templates” / “Workflows”) in the State diagram tab via the new property “Transitions”. The altered order affects the display of the buttons that are shown when a workflow is run through via the dialog box for the corresponding activity.</p> <p>Further information can be found in chapter “SiteArchitect / ContentCreator: Workflow: Changing the order of transitions on an activity”.</p>
CORE-12068	<p>Pop-up dialogs created using the interface <code>RequestOperation</code> (FirstSpirit Developer API, Package <code>de.espirit.firstspirit.ui.operations</code>) can now also be created as warning messages via <code>Enum RequestOperation.Kind</code> (FirstSpirit Developer API, Package <code>de.espirit.firstspirit.ui.operations</code>).</p> <p>Further information can be found in chapter “Module Development, Scripts, API: Creating a pop-up dialog as a warning message”.</p>
CORE-12171	<p>The vertical alignment of content in tables can now also be defined by the editor in FirstSpirit ContentCreator (CMS_INPUT_DOM / “Inline tables” and CMS_INPUT_DOMTABLE).</p> <p>Further information can be found in chapter “ContentCreator: Tables: Vertical alignment of content in cells (“valign”)”.</p>
CXT-1315	<p>Browser compatibilities</p> <p>Further information can be found in chapter “Administration: Browser compatibilities”.</p>
CXT-1339	<p>Nested frames are now prevented in the new ContentCreator: Instead of another instance of ContentCreator being opened in an existing ContentCreator window (due to a corresponding template configuration in the project), an empty page is now displayed.</p> <p>(Error message in the browser console: <code>(index):35 Skipping startup of nested ContentCreator, please contact your administrator.</code>)</p>
CXT-1413	In rare cases, data could not be edited because of timing problems. Instead, a loading animation was displayed.
CXT-1465	Workflows can be started and advanced with the flyout menu via the element state in the right-hand menu bar. Due to a timing problem, an incomplete or outdated view was sometimes



ID	Description
	displayed. The available workflow actions are now displayed directly, without the need to manually update the page.
CXT-1466	No datasets could be created or edited via FS_INDEX with <i>DatasetDataAccessPlugin</i> if this input component was used in a metadata form. (Error message: ...java.lang.IllegalArgumentException: Unknown language: §...)
CXT-1490	In the new ContentCreator, the user prompting/UX for the input elements “check box” (CMS_INPUT_CHECKBOX), “radio button” (CMS_INPUT_RADIOBUTTON) and “toggle” (CMS_INPUT_TOGGLE) have been improved. Further information can be found in chapter “ContentCreator: User prompting/UX: Display of check boxes, radio buttons and toggles”.

11.5 Data Access Plug-In

ID	Description
CXT-864	The Fragment DAP report now features filtering fragments by category. Further information can be found in chapter “FirstSpirit Content Experience Tools (CXT): Fragment DAP: filter fragments in report by category”.
CXT-1466	No datasets could be created or edited via FS_INDEX with <i>DatasetDataAccessPlugin</i> if this input component was used in a metadata form. (Error message: ...java.lang.IllegalArgumentException: Unknown language: §...)

11.6 Database

ID	Description
CORE-11462	The “FirstSpirit External Synchronization” and “FirstSpirit Content Transport” mechanisms now provide an additional mapping file (<i>Mapping.xml</i>) for exporting database content (schemas, entities), in which the database names of the source project are stored together with FirstSpirit’s own unique identifiers (UUIDs).



ID	Description
	Further information can be found in chapter “External Synchronization / Content Transport: External Synchronization and Content Transport: Improved support for shared access to a database”.

11.7 Content Store

ID	Description
CXT-1466	No datasets could be created or edited via FS_INDEX with <i>DatasetDataAccessPlugin</i> if this input component was used in a metadata form. (Error message: ... <code>java.lang.IllegalArgumentException: Unknown language: §...</code> ...)

11.8 Debugging

ID	Description
CXT-1482	For security reasons, access to the error page for the MicroApp Framework introduced in FirstSpirit 2020-04 (accessible via <code>~/status</code>) is now limited – as intended – solely to FirstSpirit administrators. Furthermore, the error pages now contain more information on the cause of the error.

11.9 Services

ID	Description
CORE-12246	An error was rectified which was causing the <code>installed</code> method to be called up for all services when <code>ServiceManager</code> started up. Executing the <code>installed</code> method may have meant that global configuration files were rewritten, for example.



11.10 Input Components

ID	Description
CXT-1243	<p>FragmentCreator: Revision of the design (input fields)</p> <p>Further information can be found in chapter “FirstSpirit Content Experience Tools (CXT): FragmentCreator: Revision of the design (input fields)”.</p>
CXT-1466	<p>No datasets could be created or edited via FS_INDEX with <i>DatasetDataAccessPlugin</i> if this input component was used in a metadata form.</p> <p>(Error message: ...java.lang.IllegalArgumentException: Unknown language: §...)</p>
CXT-1490	<p>In the new ContentCreator, the user prompting/UX for the input elements “check box” (CMS_INPUT_CHECKBOX), “radio button” (CMS_INPUT_RADIOBUTTON) and “toggle” (CMS_INPUT_TOGGLE) have been improved.</p> <p>Further information can be found in chapter “ContentCreator: User prompting/UX: Display of check boxes, radio buttons and toggles”.</p>

11.11 Developer

ID	Description
CORE-7678	<p>In e-mails sent by workflows, special placeholders may be used that are automatically replaced by the system based on the context. In the current FirstSpirit release, these placeholders have been expanded to include further configuration options.</p> <p>Further information can be found in chapter “Template development: Workflows: More configuration options for context-based information in e-mails”.</p>
CORE-10834	<p>The configuration options for the parameters “useWelcomeFileNames” and “stripWelcomeFileNames”, which are used for the configuration of user-specific path strategies for URL generation, have been extended in the latest FirstSpirit release.</p> <p>Further information can be found in chapter “Module Development, Scripts, API: Improved configuration options for user-specific URLs (AdvancedUrlCreator)”.</p>
CORE-11462	<p>The “FirstSpirit External Synchronization” and “FirstSpirit Content Transport” mechanisms now provide an additional mapping file (<i>Mapping.xml</i>) for exporting database content (schemas,</p>



ID	Description
	<p>entities), in which the database names of the source project are stored together with FirstSpirit's own unique identifiers (UUIDs).</p> <p>Further information can be found in chapter “External Synchronization / Content Transport: External Synchronization and Content Transport: Improved support for shared access to a database”.</p>
CORE-11711	<p>If the same global resources are provided by several modules in different versions, only one of these global resources can be used by all modules. The latest FirstSpirit release ensures that in normal operation, the latest version (i.e., the version with the highest version number) of a global resource is always used. This increases the stability when it comes to resolving dependencies after a module update.</p> <p>Further information can be found in chapter “Module Development, Scripts, API: Global module resources: Improved stability when resolving dependencies”.</p>
CORE-12068	<p>Pop-up dialogs created using the interface <code>RequestOperation</code> (FirstSpirit Developer API, Package <code>de.espirit.firstspirit.ui.operations</code>) can now also be created as warning messages via Enum <code>RequestOperation.Kind</code> (FirstSpirit Developer API, Package <code>de.espirit.firstspirit.ui.operations</code>).</p> <p>Further information can be found in chapter “Module Development, Scripts, API: Creating a pop-up dialog as a warning message”.</p>
CORE-12085	<p>Using the JSON function, the referenced FirstSpirit objects of the input component <code>FS_REFERENCE</code> can now be transferred to a JSON object structure (previously the referenced objects were not rendered). In this process, the object itself is not rendered; the function only renders the data that is required for referencing. No new version of the JSON output format will be published for this change; the changes will be made in the current format version 1.1.</p> <p>Further information can be found in chapter “Module Development, Scripts, API: JSON function: Improved support for <code>FS_REFERENCE</code>”.</p>
CORE-12129	<p>An error was rectified that could have meant that the Classloading for a service did not function as expected.</p>
CORE-12171	<p>The vertical alignment of content in tables can now also be defined by the editor in FirstSpirit ContentCreator (<code>CMS_INPUT_DOM</code> / “Inline tables” and <code>CMS_INPUT_DOMTABLE</code>).</p> <p>Further information can be found in chapter “ContentCreator: Tables: Vertical alignment of content in cells (“valign”)”.</p>



ID	Description
CXT-1243	<p>FragmentCreator: Revision of the design (input fields)</p> <p>Further information can be found in chapter “FirstSpirit Content Experience Tools (CXT): FragmentCreator: Revision of the design (input fields)”.</p>
CXT-1268 CXT-1473	<p>In the current release, MicroApps can now be integrated directly into HTML pages using the MicroApps API (“widget”).</p> <p>Further information can be found in chapter “FirstSpirit Content Experience Tools (CXT): Extension of MicroApps API: Embedding of MicroApps into a page (“widget”)”.</p>
CXT-1315	<p>Browser compatibilities</p> <p>Further information can be found in chapter “Administration: Browser compatibilities”.</p>
CXT-1339	<p>Nested frames are now prevented in the new ContentCreator: Instead of another instance of ContentCreator being opened in an existing ContentCreator window (due to a corresponding template configuration in the project), an empty page is now displayed. (Error message in the browser console: <code>(index):35 Skipping startup of nested ContentCreator, please contact your administrator.</code>)</p>
CXT-1466	<p>No datasets could be created or edited via FS_INDEX with <i>DatasetDataAccessPlugin</i> if this input component was used in a metadata form. (Error message: <code>...java.lang.IllegalArgumentException: Unknown language: §...</code>)</p>
CXT-1482	<p>For security reasons, access to the error page for the MicroApp Framework introduced in FirstSpirit 2020-04 (accessible via <code>~/status</code>) is now limited – as intended – solely to FirstSpirit administrators. Furthermore, the error pages now contain more information on the cause of the error.</p>
CXT-1490	<p>In the new ContentCreator, the user prompting/UX for the input elements “check box” (CMS_INPUT_CHECKBOX), “radio button” (CMS_INPUT_RADIOBUTTON) and “toggle” (CMS_INPUT_TOGGLE) have been improved.</p> <p>Further information can be found in chapter “ContentCreator: User prompting/UX: Display of check boxes, radio buttons and toggles”.</p>
CXT-1525	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-1528 CXT-1500	Temporarily, when using the “FirstSpirit CXT FragmentCreator - CaaS Integration” module when releasing fragments, the content was no longer transferred to live CaaS instances, but only to preview CaaS instances.

11.12 External synchronization

ID	Description
CORE-11462	<p>The “FirstSpirit External Synchronization” and “FirstSpirit Content Transport” mechanisms now provide an additional mapping file (<code>Mapping.xml</code>) for exporting database content (schemas, entities), in which the database names of the source project are stored together with FirstSpirit's own unique identifiers (UUIDs).</p> <p>Further information can be found in chapter “External Synchronization / Content Transport: External Synchronization and Content Transport: Improved support for shared access to a database”.</p>

11.13 FirstSpirit Content as a Service (CaaS)

ID	Description
CXT-1528 CXT-1500	Temporarily, when using the “FirstSpirit CXT FragmentCreator - CaaS Integration” module when releasing fragments, the content was no longer transferred to live CaaS instances, but only to preview CaaS instances.

11.14 FirstSpirit Content Experience Tools (CXT)

ID	Description
CXT-864	<p>The Fragment DAP report now features filtering fragments by category.</p> <p>Further information can be found in chapter “FirstSpirit Content Experience Tools (CXT): Fragment DAP: filter fragments in report by category”.</p>



ID	Description
CXT-1243	<p>FragmentCreator: Revision of the design (input fields)</p> <p>Further information can be found in chapter “FirstSpirit Content Experience Tools (CXT): FragmentCreator: Revision of the design (input fields)”.</p>
CXT-1268 CXT-1473	<p>In the current release, MicroApps can now be integrated directly into HTML pages using the MicroApps API (“widget”).</p> <p>Further information can be found in chapter “FirstSpirit Content Experience Tools (CXT): Extension of MicroApps API: Embedding of MicroApps into a page (“widget”)”.</p>
CXT-1315	<p>Browser compatibilities</p> <p>Further information can be found in chapter “Administration: Browser compatibilities”.</p>
CXT-1482	<p>For security reasons, access to the error page for the MicroApp Framework introduced in FirstSpirit 2020-04 (accessible via <code>~/status</code>) is now limited – as intended – solely to FirstSpirit administrators. Furthermore, the error pages now contain more information on the cause of the error.</p>
CXT-1525	<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>

11.15 FirstSpirit Administrator

ID	Description
CORE-7678	<p>In e-mails sent by workflows, special placeholders may be used that are automatically replaced by the system based on the context. In the current FirstSpirit release, these placeholders have been expanded to include further configuration options.</p> <p>Further information can be found in chapter “Template development: Workflows: More configuration options for context-based information in e-mails”.</p>
CORE-12038	<p>With the current FirstSpirit release the FirstSpirit session cookie can be extended by the attribute <code>SameSite</code>. The setting <code>SameSite=None</code> may be necessary in individual cases if FirstSpirit web applications are integrated into other web applications (e.g. as an <code>IFrame</code>).</p>



ID	Description
	Further information can be found in chapter “Administration: The FirstSpirit session cookie now supports the attribute SameSite”.
CORE-12129	An error was rectified that could have meant that the Classloading for a service did not function as expected.
CORE-12229	Internal software has been updated in the latest FirstSpirit release. Further information can be found in chapter “System: Updates to integrated third-party software”.
CORE-12246	An error was rectified which was causing the <code>installed</code> method to be called up for all services when <code>ServiceManager</code> started up. Executing the <code>installed</code> method may have meant that global configuration files were rewritten, for example.
CXT-1315	Browser compatibilities Further information can be found in chapter “Administration: Browser compatibilities”.
CXT-1482	For security reasons, access to the error page for the MicroApp Framework introduced in FirstSpirit 2020-04 (accessible via <code>~/status</code>) is now limited – as intended – solely to FirstSpirit administrators. Furthermore, the error pages now contain more information on the cause of the error.
CXT-1525	FirstSpirit Content Experience Tools: Latest module versions Further information can be found in chapter “FirstSpirit Content Experience Tools (CXT): Latest module versions”.

11.16 FirstSpirit API

ID	Description
CORE-11462	The “FirstSpirit External Synchronization” and “FirstSpirit Content Transport” mechanisms now provide an additional mapping file (<code>Mapping.xml</code>) for exporting database content (schemas, entities), in which the database names of the source project are stored together with FirstSpirit's own unique identifiers (UUIDs). Further information can be found in chapter “External Synchronization / Content Transport: External Synchronization and Content Transport: Improved support for shared access to a database”.



ID	Description
CORE-12068	<p>Pop-up dialogs created using the interface <code>RequestOperation</code> (FirstSpirit Developer API, Package <code>de.espirit.firstspirit.ui.operations</code>) can now also be created as warning messages via Enum <code>RequestOperation.Kind</code> (FirstSpirit Developer API, Package <code>de.espirit.firstspirit.ui.operations</code>).</p> <p>Further information can be found in chapter “Module Development, Scripts, API: Creating a pop-up dialog as a warning message”.</p>
CXT-1268 CXT-1473	<p>In the current release, MicroApps can now be integrated directly into HTML pages using the MicroApps API (“widget”).</p> <p>Further information can be found in chapter “FirstSpirit Content Experience Tools (CXT): Extension of MicroApps API: Embedding of MicroApps into a page (“widget”)”.</p>

11.17 FragmentCreator

ID	Description
CORE-10832	<p>In the latest FirstSpirit release, the order for displaying transitions on a workflow activity can be configured. The configuration is managed on the workflow in FirstSpirit SiteArchitect (“Templates” / “Workflows”) in the State diagram tab via the new property “Transitions”. The altered order affects the display of the buttons that are shown when a workflow is run through via the dialog box for the corresponding activity.</p> <p>Further information can be found in chapter “SiteArchitect / ContentCreator: Workflow: Changing the order of transitions on an activity”.</p>
CXT-1243	<p>FragmentCreator: Revision of the design (input fields)</p> <p>Further information can be found in chapter “FirstSpirit Content Experience Tools (CXT): FragmentCreator: Revision of the design (input fields)”.</p>
CXT-1268 CXT-1473	<p>In the current release, MicroApps can now be integrated directly into HTML pages using the MicroApps API (“widget”).</p> <p>Further information can be found in chapter “FirstSpirit Content Experience Tools (CXT): Extension of MicroApps API: Embedding of MicroApps into a page (“widget”)”.</p>
CXT-1315	Browser compatibilities



ID	Description
	Further information can be found in chapter “Administration: Browser compatibilities”.
CXT-1525	FirstSpirit Content Experience Tools: Latest module versions
	Further information can be found in chapter “FirstSpirit Content Experience Tools (CXT): Latest module versions”.
CXT-1528	Temporarily, when using the “FirstSpirit CXT FragmentCreator - CaaS Integration” module when releasing fragments, the content was no longer transferred to live CaaS instances, but only to preview CaaS instances.
CXT-1500	

11.18 Release

ID	Description
CORE-7678	In e-mails sent by workflows, special placeholders may be used that are automatically replaced by the system based on the context. In the current FirstSpirit release, these placeholders have been expanded to include further configuration options.
	Further information can be found in chapter “Template development: Workflows: More configuration options for context-based information in e-mails”.
CXT-1528	Temporarily, when using the “FirstSpirit CXT FragmentCreator - CaaS Integration” module when releasing fragments, the content was no longer transferred to live CaaS instances, but only to preview CaaS instances.
CXT-1500	

11.19 Generation

ID	Description
CORE-10834	The configuration options for the parameters “useWelcomeFileNames” and “stripWelcomeFileNames”, which are used for the configuration of user-specific path strategies for URL generation, have been extended in the latest FirstSpirit release.
	Further information can be found in chapter “Module Development, Scripts, API: Improved configuration options for user-specific URLs (AdvancedUrlCreator)”.



11.20 Integrated software

ID	Description
CORE-12229	Internal software has been updated in the latest FirstSpirit release. Further information can be found in chapter “System: Updates to integrated third-party software”.

11.21 Isolated mode

ID	Description
CORE-11711	If the same global resources are provided by several modules in different versions, only one of these global resources can be used by all modules. The latest FirstSpirit release ensures that in normal operation, the latest version (i.e., the version with the highest version number) of a global resource is always used. This increases the stability when it comes to resolving dependencies after a module update. Further information can be found in chapter “Module Development, Scripts, API: Global module resources: Improved stability when resolving dependencies”.

11.22 Support for JSON

ID	Description
CORE-12085	Using the JSON function, the referenced FirstSpirit objects of the input component FS_REFERENCE can now be transferred to a JSON object structure (previously the referenced objects were not rendered). In this process, the object itself is not rendered; the function only renders the data that is required for referencing. No new version of the JSON output format will be published for this change; the changes will be made in the current format version 1.1. Further information can be found in chapter “Module Development, Scripts, API: JSON function: Improved support for FS_REFERENCE”.



11.23 Migration

ID	Description
CORE-10834	<p>The configuration options for the parameters “useWelcomeFileNames” and “stripWelcomeFileNames”, which are used for the configuration of user-specific path strategies for URL generation, have been extended in the latest FirstSpirit release.</p> <p>Further information can be found in chapter “Module Development, Scripts, API: Improved configuration options for user-specific URLs (AdvancedUrlCreator)”.</p>

11.24 Module development

ID	Description
CORE-11711	<p>If the same global resources are provided by several modules in different versions, only one of these global resources can be used by all modules. The latest FirstSpirit release ensures that in normal operation, the latest version (i.e., the version with the highest version number) of a global resource is always used. This increases the stability when it comes to resolving dependencies after a module update.</p> <p>Further information can be found in chapter “Module Development, Scripts, API: Global module resources: Improved stability when resolving dependencies”.</p>
CORE-12068	<p>Pop-up dialogs created using the interface <code>RequestOperation</code> (FirstSpirit Developer API, Package <code>de.espirit.firstspirit.ui.operations</code>) can now also be created as warning messages via Enum <code>RequestOperation.Kind</code> (FirstSpirit Developer API, Package <code>de.espirit.firstspirit.ui.operations</code>).</p> <p>Further information can be found in chapter “Module Development, Scripts, API: Creating a pop-up dialog as a warning message”.</p>
CXT-1268 CXT-1473	<p>In the current release, MicroApps can now be integrated directly into HTML pages using the MicroApps API (“widget”).</p> <p>Further information can be found in chapter “FirstSpirit Content Experience Tools (CXT): Extension of MicroApps API: Embedding of MicroApps into a page (“widget”)”.</p>



11.25 Modules

ID	Description
CORE-11711	<p>If the same global resources are provided by several modules in different versions, only one of these global resources can be used by all modules. The latest FirstSpirit release ensures that in normal operation, the latest version (i.e., the version with the highest version number) of a global resource is always used. This increases the stability when it comes to resolving dependencies after a module update.</p> <p>Further information can be found in chapter “Module Development, Scripts, API: Global module resources: Improved stability when resolving dependencies”.</p>
CORE-12129	An error was rectified that could have meant that the Classloading for a service did not function as expected.
CORE-12245 CXT-12321	<p>When updating the “SpellService” module (file <code>fs-spell.fsm</code>) to a higher version, existing configurations were overwritten in rare cases. This could cause, for example, that self-created dictionaries were removed or not taken into account.</p> <p>In addition, a bug was fixed which caused the FirstSpirit server with “SpellService” module to no longer start after an update (error message in <code>fs-server.log</code> like <code>ERROR ... (de.espirit.firstspirit.server.module.ServiceManagerImpl): cannot install service, module=SpellService, version=..., componentClass=de.espirit.firstspirit.opt.spell.SpellServiceImpl</code>).</p>
CORE-12246	An error was rectified which was causing the <code>installed</code> method to be called up for all services when <code>ServiceManager</code> started up. Executing the <code>installed</code> method may have meant that global configuration files were rewritten, for example.
CXT-1525	<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>

11.26 Spell Checker

ID	Description
CORE-12245 CXT-12321	<p>When updating the “SpellService” module (file <code>fs-spell.fsm</code>) to a higher version, existing configurations were overwritten in rare cases. This could cause, for example, that self-created dictionaries were removed or not taken into account.</p>



ID	Description
	In addition, a bug was fixed which caused the FirstSpirit server with “SpellService” module to no longer start after an update (error message in fs-server.log like ERROR ... (de.espirit.firstspirit.server.module.ServiceManagerImpl): cannot install service, module=SpellService, version=..., componentClass=de.espirit.firstspirit.opt.spell.SpellServiceImpl).

11.27 Editor

ID	Description
CORE-9572	<p>In the current release, a deadline time can now also be selected for workflows, in addition to the deadline date.</p> <p>Further information can be found in chapter “ContentCreator: Workflows: Selecting a deadline time”.</p>
CORE-12171	<p>The vertical alignment of content in tables can now also be defined by the editor in FirstSpirit ContentCreator (CMS_INPUT_DOM / “Inline tables” and CMS_INPUT_DOMTABLE).</p> <p>Further information can be found in chapter “ContentCreator: Tables: Vertical alignment of content in cells (“valign”)”.</p>
CXT-864	<p>The Fragment DAP report now features filtering fragments by category.</p> <p>Further information can be found in chapter “FirstSpirit Content Experience Tools (CXT): Fragment DAP: filter fragments in report by category”.</p>
CXT-1243	<p>FragmentCreator: Revision of the design (input fields)</p> <p>Further information can be found in chapter “FirstSpirit Content Experience Tools (CXT): FragmentCreator: Revision of the design (input fields)”.</p>
CXT-1315	<p>Browser compatibilities</p> <p>Further information can be found in chapter “Administration: Browser compatibilities”.</p>
CXT-1339	Nested frames are now prevented in the new ContentCreator: Instead of another instance of ContentCreator being opened in an existing ContentCreator window (due to a corresponding template configuration in the project), an empty page is now displayed.



ID	Description
	(Error message in the browser console: (index):35 Skipping startup of nested ContentCreator, please contact your administrator.)
CXT-1413	In rare cases, data could not be edited because of timing problems. Instead, a loading animation was displayed.
CXT-1465	Workflows can be started and advanced with the flyout menu via the element state in the right-hand menu bar. Due to a timing problem, an incomplete or outdated view was sometimes displayed. The available workflow actions are now displayed directly, without the need to manually update the page.
CXT-1466	No datasets could be created or edited via FS_INDEX with <i>DatasetDataAccessPlugin</i> if this input component was used in a metadata form. (Error message: ...java.lang.IllegalArgumentException: Unknown language: §...)
CXT-1490	In the new ContentCreator, the user prompting/UX for the input elements “check box” (CMS_INPUT_CHECKBOX), “radio button” (CMS_INPUT_RADIOBUTTON) and “toggle” (CMS_INPUT_TOGGLE) have been improved. Further information can be found in chapter “ContentCreator: User prompting/UX: Display of check boxes, radio buttons and toggles”.

11.28 Reports

ID	Description
CXT-864	The Fragment DAP report now features filtering fragments by category. Further information can be found in chapter “FirstSpirit Content Experience Tools (CXT): Fragment DAP: filter fragments in report by category”.



11.29 Server Administrator

ID	Description
CORE-12038	<p>With the current FirstSpirit release the FirstSpirit session cookie can be extended by the attribute <code>SameSite</code>. The setting <code>SameSite=None</code> may be necessary in individual cases if FirstSpirit web applications are integrated into other web applications (e.g. as an <code>IFrame</code>).</p> <p>Further information can be found in chapter “Administration: The FirstSpirit session cookie now supports the attribute <code>SameSite</code>”.</p>
CORE-12129	An error was rectified that could have meant that the Classloading for a service did not function as expected.
CORE-12298	<p>A FirstSpirit server is installed via the installation archive <code>fs-install-[version].tar.gz</code>. When executing the commands <code>FS_HOME/bin/fs-server installstart</code> or <code>FS_HOME/bin/fs-server install</code> (under Linux operating systems) an error could occur because the <code>run</code> folder was not available. This folder is now included in the installation archive.</p>

11.30 ServerManager

ID	Description
CORE-12068	<p>Pop-up dialogs created using the interface <code>RequestOperation</code> (FirstSpirit Developer API, Package <code>de.espirit.firstspirit.ui.operations</code>) can now also be created as warning messages via <code>Enum RequestOperation.Kind</code> (FirstSpirit Developer API, Package <code>de.espirit.firstspirit.ui.operations</code>).</p> <p>Further information can be found in chapter “Module Development, Scripts, API: Creating a pop-up dialog as a warning message”.</p>
CORE-12246	An error was rectified which was causing the <code>installed</code> method to be called up for all services when <code>ServiceManager</code> started up. Executing the <code>installed</code> method may have meant that global configuration files were rewritten, for example.



11.31 ServerMonitoring

ID	Description
CORE-12038	<p>With the current FirstSpirit release the FirstSpirit session cookie can be extended by the attribute <code>SameSite</code>. The setting <code>SameSite=None</code> may be necessary in individual cases if FirstSpirit web applications are integrated into other web applications (e.g. as an <code>IFrame</code>).</p> <p>Further information can be found in chapter “Administration: The FirstSpirit session cookie now supports the attribute <code>SameSite</code>”.</p>

11.32 Security

ID	Description
CORE-12038	<p>With the current FirstSpirit release the FirstSpirit session cookie can be extended by the attribute <code>SameSite</code>. The setting <code>SameSite=None</code> may be necessary in individual cases if FirstSpirit web applications are integrated into other web applications (e.g. as an <code>IFrame</code>).</p> <p>Further information can be found in chapter “Administration: The FirstSpirit session cookie now supports the attribute <code>SameSite</code>”.</p>
CXT-1482	<p>For security reasons, access to the error page for the MicroApp Framework introduced in FirstSpirit 2020-04 (accessible via <code>~/status</code>) is now limited – as intended – solely to FirstSpirit administrators. Furthermore, the error pages now contain more information on the cause of the error.</p>

11.33 SiteArchitect

ID	Description
CORE-10832	<p>In the latest FirstSpirit release, the order for displaying transitions on a workflow activity can be configured. The configuration is managed on the workflow in FirstSpirit SiteArchitect (“Templates” / “Workflows”) in the State diagram tab via the new property “Transitions”. The altered order affects the display of the buttons that are shown when a workflow is run through via the dialog box for the corresponding activity.</p>



ID	Description
	Further information can be found in chapter “SiteArchitect / ContentCreator: Workflow: Changing the order of transitions on an activity”.
CORE-10834	<p>The configuration options for the parameters “useWelcomeFileNames” and “stripWelcomeFileNames”, which are used for the configuration of user-specific path strategies for URL generation, have been extended in the latest FirstSpirit release.</p> <p>Further information can be found in chapter “Module Development, Scripts, API: Improved configuration options for user-specific URLs (AdvancedUrlCreator)”.</p>
CORE-12068	<p>Pop-up dialogs created using the interface <code>RequestOperation</code> (FirstSpirit Developer API, Package <code>de.espirit.firstspirit.ui.operations</code>) can now also be created as warning messages via Enum <code>RequestOperation.Kind</code> (FirstSpirit Developer API, Package <code>de.espirit.firstspirit.ui.operations</code>).</p> <p>Further information can be found in chapter “Module Development, Scripts, API: Creating a pop-up dialog as a warning message”.</p>

11.34 Template Store

ID	Description
CORE-10832	<p>In the latest FirstSpirit release, the order for displaying transitions on a workflow activity can be configured. The configuration is managed on the workflow in FirstSpirit SiteArchitect (“Templates” / “Workflows”) in the State diagram tab via the new property “Transitions”. The altered order affects the display of the buttons that are shown when a workflow is run through via the dialog box for the corresponding activity.</p> <p>Further information can be found in chapter “SiteArchitect / ContentCreator: Workflow: Changing the order of transitions on an activity”.</p>

11.35 Template Development

ID	Description
CXT-1466	No datasets could be created or edited via FS_INDEX with <i>DatasetDataAccessPlugin</i> if this input component was used in a metadata form.



ID	Description
	(Error message: ...java.lang.IllegalArgumentException: Unknown language: §...)

