FirstSpirit™
Unlock Your Content

Release Notes
FirstSpirit™ 2019-12

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e-Spirit

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1   Administration

1.1   Configuring the delivery of content via a redirect (fs-server.conf)

In the latest version of FirstSpirit, the delivery of content via a redirect can be configured.
This new configuration option should be utilized if the application server used by FirstSpirit does not have access to the web server via which the content is delivered.

The delivery of content is configured using the following parameters in the `fs-server.conf` configuration file:

- `preview.externalDelivery`
  List of file extensions (e.g., PHP or ASP) that are to be delivered by an external web server and not by the servlet engine.

- `preview.externalDeliveryURL`
  URL of the external web server.

- NEW: `preview.externalDeliveryRedirect`
  Delivery of content via a redirect (`true`) or via include (default: `false`).

Previous behavior:

Previously (and still now, in the default setting `preview.externalDeliveryRedirect=false`), the content of an external web server was loaded, included, and delivered by the servlet engine (e.g., Apache Tomcat) configured in FirstSpirit.

Configuration (example):

```
# external preview
preview.externalDelivery=php
preview.externalDeliveryURL=http://fs5.yourdomain.net:80
```

New behavior:

In the latest version of FirstSpirit, the `preview.externalDeliveryRedirect=true` parameter (default value: `false`) can be used to configure FirstSpirit to perform a redirect (HTTP status 302) to

the external URL, rather than delivering the content, so the browser on the client PC can load the page directly from there.

Configuration (example):

```
# external preview
preview.externalDelivery=php
preview.externalDeliveryURL=http://fs5.yourdomain.net:80
# Redirect browser to external delivery URL instead of requesting the external
# delivery URL and including the response.
preview.externalDeliveryRedirect=true
```

Additional documentation:

- For the fs-server.conf configuration file

- For the description of the preview.externalDelivery* parameter

1.2   Support for PostgreSQL 10.x and PostgreSQL 11.x

As of the current FirstSpirit release, the **recommended PostgreSQL database version (reference)** for use with the FirstSpirit Server changes to:

- PostgreSQL 11 (previously: PostgreSQL 9.4)

Additionally **PostgreSQL 10.x** and **PostgreSQL 11.x** have been added to the list of **compatible databases**.

A complete list of the supported databases for the FirstSpirit Server can be found in Technical requirements and recommendations (Documentation for administrators).

1.3   Improved logging when starting the JettyService

"Eclipse Jetty", the open-source product integrated in FirstSpirit, provides a web server and a JSP/ servlet engine which run as part of the FirstSpirit Server in the same VM. The `fs-jetty.fsm` module must be installed on the FirstSpirit Server and the associated "JettyService" service started in the server properties of the ServerManager.

For better error analysis, the latest version of FirstSpirit now creates a log if problems occur when starting the "JettyService" (in file _fs-server.log_). The underlying exception will also be thrown in the event of an error.

Example (log outputs if the HTTP port is set to a port that is already in use):

```
INFO (...)(de.espirit.firstspirit.server.AbstractManagerHost):
Starting JettyService ...
INFO (...) (de.espirit.firstspirit.modules.jetty.JettyServiceImpl):
Starting Jetty server on unencrypted port 9000...
ERROR (...) (de.espirit.firstspirit.modules.jetty.JettyServiceImpl):
Jetty server could not be started - (...).JettyServiceException:
Unable to start server - java.io.IOException: Failed to bind to 0.0.0.0/0.0.0.0:9000
FSVersion=5.2_DEV.191200.a15e515;JDK=11.0.5 64bit AdoptOpenJDK; (...)
INFO (...) (de.espirit.firstspirit.server.AbstractManagerHost):
JettyService started successfully in 166ms
FATAL (...) (de.espirit.firstspirit.server.AbstractManagerHost):
manager not started: 'JettyService' (class com.sun.proxy.$Proxy27)
```

1.4 Using wildcards to configure redirect URLs (fs-server.conf)

Redirections in the client-server communication are restricted by the FirstSpirit server for security reasons. Using the optional parameter `allowedRedirectHosts` in the configuration file `fs-server.conf` URLs can be defined to which a redirect is to be allowed. If an HTTP error 403 with the error cause "Forbidden request host:" occurs during access to FirstSpirit, one should check whether access to the FirstSpirit server with the specified host name is to be permitted in the URL and, if necessary, the corresponding host name is to be added to the `allowedRedirectHosts` parameter in the `fs-server.conf` file. Example:

```
allowedRedirectHosts=localhost,firstspirit,firstspirit.example.com,192.1.1.1
```

New functionality

Now the use of wild-card characters is possible. These wild-cards can be used for the top subdomain as well as within a subdomain.

Examples for possible wild-cards:

```
*.example.com
```

```
first*.example.com
```

```
*spirit.example.com
```

```
f*spirit.example.com
```

```
firstspirit.*xample.com
```

Not allowed are:

- Wild-cards in IP addresses

- multiple wild-cards inside a single definition

- replacing a whole domain with a wildcard

Examples for prohibited definitions:

```
*.168.1.1
```

```
f*spir*.example.com
```

```
firstspirit.*.com
```

```
*.com
```

```
*
```

For further information on the parameter `allowedRedirectHosts` see Documentation for Administrators.

2 General

2.1 JSON support in FirstSpirit

JSON (JavaScript Object Notation) is a lightweight data-interchange format (see also json.org and FirstSpirit Documentation - JSON).

FirstSpirit now has its own JSON channel. The JSON system presentation channel is now available on every FirstSpirit server and should be used for the output of JSON.

json() function

The current FirstSpirit release introduces the json() function. The json() function will transform any FirstSpirit element into a JSON object structure.

This JSON object structure can then be rendered to the JSON channel using a `$CMS_VALUE(...)$` statement. The most basic use case would render an FirstSpirit page as a JSON document:

```
$CMS_VALUE(json(#this))$
```

In this statement the current page `#this` is passed to the json() function, which transforms the page into the JSON object structure. JSON object structure is then rendered to the JSON channel using the surrounding `$CMS_VALUE(...)$` statement.

Output example of a FirstSpirit page reference (simplified):

```
{
  "fsType":"PageRef",
  "name":"order_page",
  "formData":{
    "page_formfield1":{},
    "page_formfield2":{}
  },
  "children":[
    {
      "fsType":"Body",
      "name":"body_1",
      "children":[
        {
          "fsType":"SectionReference",
          "name":"section_1",
          "formData":{
            "cms_formfield11":{},
            "cms_formfield12":{}
          }
        },
        {
          "fsType":"SectionReference",
          "name":"section_2",
          "formData":{
            "cms_formfield21":{},
            "cms_formfield22":{}
          }
        }
      ]
    }
  ]
}
```

The default JSON output format includes:

- the page reference itself

- the page reference attribute "children" contains the content areas ("bodies") in a JSON array

- each "body" in the JSON array is a JSON object which in turn has a "children" attribute that includes the associated paragraph objects ("Sections")

- each JSON object in the JSON object structure has standard attributes (e.g. "fsType") as well as other type-specific attributes

- elements with a form (for example, pages and sections have a "formData" attribute

- the "formData" attribute is a JSON object and contains the form data as key-value pairs where:
  - the name of the input component is the JSON key

  - the value is a JSON object representing the form component.

Configuration Options

The JSON output may be configured to support specific usecases. The configuration is done via the system object `#global.json`:

```
$CMS_SET(#global.json.prettyPrinting, true)$
```

In the above example, the prettyPrinting option is enabled. With the prettyPrinting option enabled JSON output is rendered in a structured, human-readable form. For an overview of the configuration options see *Enhanced JSON support / Configuration* (→*FirstSpirit Online Documentation*).

JSON API

The json() function returns an object from the FirstSpirit JSON API. Often this is a JsonObject or JsonArray object instance. Using the API provided by these instances, individual attributes of the JSON output may be modified **before** it is written to the JSON output channel:

```
$CMS_VALUE(json(#this).removeKey("formData"))$
```

In the above example, the "formData" attribute is removed from the JSON object resulting in a JSON output where the form data is omitted.

FirstSpirit Developer API:

- de.espirit.firstspirit.generate.functions.json

- de.espirit.firstspirit.json

3   ContentCreator

3.1   ContentCreator re-design: Current time scheduling

The design of the FirstSpirit ContentCreator is currently being revised. In principle, the new design does not involve any functional changes for editors. However, the user guidance at some central points has been additionally optimized.
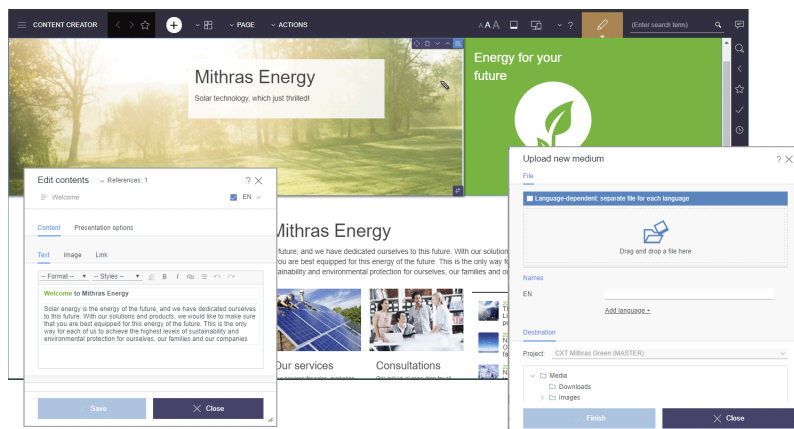
At the same time, the development of ContentCreator and of MicroApp Framework (FragmentCreator, MicroApps...) will be placed on a common technological basis, so that functionalities implemented in the future will be directly available for both ContentCreator and CXT.

As of FirstSpirit 2019-10, the revised ContentCreator is in its ramp-up phase and is available for testing to selected customers and partners. Feedback from this phase is included immediately in the development process.

The further time schedule is as follows:

- *FirstSpirit 2020-01*: Official release of the revised ContentCreator. You can easily switch between old and new ContentCreator using a checkbox in FirstSpirit ServerManager.

- *FirstSpirit 2020-02/03*: The revised ContentCreator is used by default for all projects (first for cloud customers, then also for on-premise customers). If necessary, you can switch back to the "old" ContentCreator by deactivating the checkbox.

- *FirstSpirit 2020-07*: Removal of the "old" ContentCreator. Then all customers will only have access to the revised ContentCreator.

The user documentation for the ContentCreator is currently being revised and adapted to the new design. Since FirstSpirit 2019-11, the presentation in the documentation already partially corresponds to the future interface and may differ from the ContentCreator you are using.

Note on migration: In principle, switching to the revised ContentCreator does not involve any migration effort. Only in very rare cases can compatibility problems with customer-specific modules occur. Early testing of the revised ContentCreator on customer-specific development instances is therefore recommended so that such problems can be resolved at short notice, if necessary with the support of e-Spirit.

4   Input components

4.1   Changing the log level when indicating an old data format

In the latest version of FirstSpirit, the log level of the message indicating that data has been detected in an old data format has been changed from *WARN* to *DEBUG*.

The name of the input component has also been added to the message to make it easier to identify in the project:

```
DEBUG 25.11.2019 15:18:37.236 {g-sec=982711,g-node=982709}
    (de.espirit.firstspirit.client.access.editor.lists.IndexEditorValueImpl):
    Loading FS_INDEX data for editor named 'test' from legacy persistency.
```

This message is output when the old data format is accessed to generate the preview.

Background: This message occurs only rarely. It only relates to data that was last saved with an outdated FirstSpirit version and in an input component that has already been removed (e.g., CMS_INPUT_CONTENTLIST – deprecated with FirstSpirit 5.0). This data may still be available in the old data format.

> **!** There are no plans to discontinue support for the old format. There is therefore no need to make manual modifications in the projects.

To remove the old data formats from a project:

- either save the input component again with the modified data or

- rewrite the FormData object

Example BeanShell script:

```
e.setLock(true);
fs = e.getFormData();
e.save("Remove old persistence format");
e.release();
e.setLock(false);
```

4.2   Error corrected when migrating data from FS_LIST (type SERVICE)

As announced before FirstSpirit support of the FS_LIST input component is planned to be discontinued from January 2020 on. e-Spirit recommends developers and end users to switch to alternative FirstSpirit input components, e.g. FS_INDEX, at an early stage.

With the current FirstSpirit version an error was corrected that prevented the data stored by an FS_LIST (type SERVICE) input component from being read by an FS_INDEX input component (with DataAccessPlugin), even if the DataAccessPlugin used there was compatible with the stored data of the service in the FS_LIST.

Note on migration (with data):

A service written for use with FS_LIST must be replaced by a DataAccessPlugin that provides the appropriate functionality for FS_LIST.

For the DataAccessPlugin to be able to process the old data format (of the service), the `DataAccessSession.getData(...)` methods must be able to handle the identifiers of the previous service. These are passed as a string or list of strings. The individual strings each correspond to one identifier.

Example: FS_LIST (type SERVICE) contains the IDs `22`, `333` and `4444`.

These are automatically converted into a list of strings by FirstSpirit before calling the DataAccessPlugin respectively its getData method: `["22","333","4444"]`

> **!** After the conversion to the new input components, a return to FS_LIST - even after a possible server downgrade - is no longer possible.

Please contact e-Spirit Technical Support if you have questions or feedback on the migration of FS_LIST.

Further documentation:

- A migration guide for existing projects is povided via the FirstSpirit Documentation.

- A description of the Data Access infrastructure, which enables module developers to integrate external data sources into FirstSpirit, is provided via the FirstSpirit Documentation.

- FirstSpirit Developer API: interface DataAccessPlugin and interface DataAccessSession

4.3 FS_LIST: Ramp-down phase: Deprecation warnings

With FirstSpirit 2019-12, the ramp-down phase for the FS_LIST input component is extended by additional use cases. A **Deprecation warning** can now also occur in projects that were still running without warnings in FirstSpirit 2019-11. The component remains fully functional with FirstSpirit 2019-12 and can still be used.
Before updating to FirstSpirit 2020-01 or higher, all FS_LIST uses must be converted to one of the successor components.

Overview: steps of the ramp down phase for the FS_LIST input component

In order to make the phasing out of FS_LIST as low-risk as possible, the removal is carried out in several steps:

1. (Done) With FirstSpirit version 5.2R3 the input component FS_LIST, for creating and maintaining lists, has been deprecated.

2. (Done) With FirstSpirit 2019-11 in all projects, when generating or previewing data from the FS_LIST input component a **deprecation warning** will be logged. The component remains fully functional, though, and can still be used.

3. <u>**Next step:**</u> With FirstSpirit 2020-01 the input component is **deactivated by default** in all projects. The component can no longer be used from this point on. That means:
   - forms with FS_LIST can no longer be edited and

   - the expected output will no longer be generated.

4. In order to minimize the risk of production problems, particularly for customers with longer update cycles, during a six months transition period it will be possible to temporarily re-active FS_LIST. In order to do so please contact e-Spirit Technical Support.

5. **With FirstSpirit 2020-07** the input component will be **removed** from FirstSpirit, and can no longer be used in any project from that moment on.

Migration: switch to alternative FirstSpirit input components

> **!** e-Spirit recommends developers and end users to switch to alternative FirstSpirit input components at an early stage.
> Before updating to FirstSpirit 2020-01 or higher, all FS_LIST uses must be converted to one of the successor components.

As replacements the input components FS_CATALOG, FS_INDEX, and CMS_INPUT_SECTIONLIST are available, likewise providing functionality for the bundling of contents and thus largely taking over the FS_LIST use cases.

   - FS_LIST, type DATABASE can be replaced by an FS_INDEX input component.

   - FS_LIST, type INLINE can be replaced by an FS_CATALOG input component.

   - FS_LIST with tag MEDIAMODE can be replaced by an FS_INDEX input component, when using the `DatasetDataAccessPlugin` (tag `SOURCE`), which is delivered with FirstSpirit by default.

   - FS_LIST, type PAGE can be replaced by the input component CMS_INPUT_SECTIONLIST.

- FS_LIST, type SERVICE can be replaced by an FS_INDEX input component, when using a corresponding data access plug-in.

A detailed guide for the transition of existing projects is provided via the FirstSpirit Documentation.

> **!** After the transition to the new input components a return to FS_LIST is not possible - not even after a server downgrade.

Please contact e-Spirit Technical Support if you have questions or feedback regarding the migration away from FS_LIST.

5   FirstSpirit Content Experience Tools (CXT)

5.1   Latest module versions

FirstSpirit 2019-12 supports the following module versions for "FirstSpirit Content Experience Tools":

Module / file name	Version number
FirstSpirit CXT DAP Bridge	1.23
`dataservice-[version].fsm`	
FirstSpirit CXT FragmentCreator	1.31
`fragment-creator-[version].fsm`	
FirstSpirit Fragment DAP	1.20
`fragmentdap-[version].fsm`	
FirstSpirit Media DAP	1.20
`mediadap-[version].fsm`	
FirstSpirit Markdown Editor	1.17*
`markdown-editor-[version].fsm`	
FirstSpirit Tagging Editor	1.17
`tagging-editor-[version].fsm`	
FirstSpirit CXT FragmentCreator - CaaS Integration	1.15
`caas-integration-[version].fsm`	

* The module "FirstSpirit Markdown Editor" requires from version 1.17 FirstSpirit 2019-12 or higher.

5.2   DataAccessPlugin: Identifying the client language

The UI language (also "Locale") is set via a corresponding combobox on the FirstSpirit start page. Which one is selected there can now be determined when using *DataAccessPlugins* via `de.espirit.firstspirit.agency.LocalizationAgent` by means of the `getLocale()` method.

Fallback are the browser settings. However, only the first language is taken into account.

5.3   Hiding input components: "hidden" parameter

With the current release, the `hidden` parameter can be used for input components.

If

```
hidden="YES"
```

is specified in the form for a fragment, the input component will be hidden for the editor. This means that the component can be used for non-editorial operational scenarios, for example.

Input components are visible for the editor by default as follows:

```
hidden="NO"
```

5.4   FragmentCreator: Design revision

As part of the revision and consolidation of the technical basis for FirstSpirit ContentCreator and FragmentCreator, the graphical user interface of FragmentCreator is currently also being revised and adapted to the design principles of ContentCreator. As a result, editors not only benefit from a higher recognition effect, but e-Spirit can also make even better use of developmental synergies.

The design update does not involve any functional changes for editors or developers. All functions are still available in familiar places. Also, it drives no additional effort for developers and operations.

Introducing the first design changes in the current FirstSpirit release affects the menu bar and dialogs, for example for creating fragments, uploading media and editing workflows.
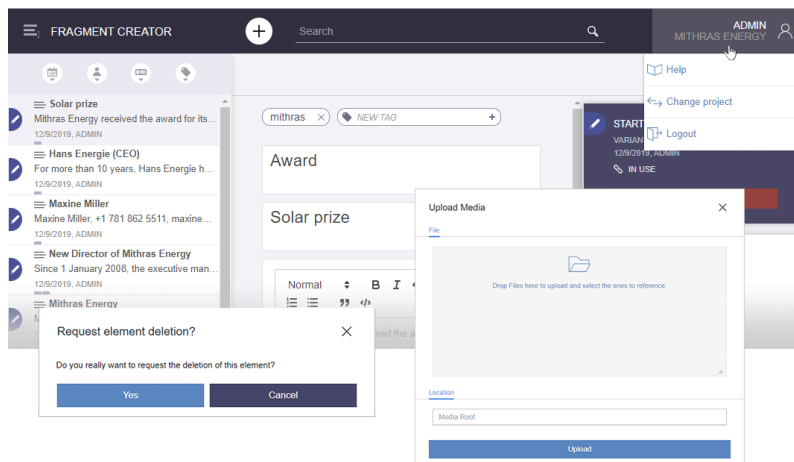
As of the current FirstSpirit version, the design overhaul is not yet completed and will be pursued over future releases. Documentation will be revised incrementally. Thus, screenshots in documentation may not yet reflect the current design.

5.5 FS_INDEX: "Create fragment" button now shows the relevant category

The FS_INDEX input component not only allows fragments from other projects to be selected and referenced, it also enables new fragments to be created. The CATEGORY tag must be specified for this purpose.

Example:

```
<FS_INDEX name="contact" useLanguages="no">
    <LANGINFOS>
      <LANGINFO lang="*" label="Contact"/>
      <LANGINFO lang="DE" label="Ansprechpartner"/>
    </LANGINFOS>
    <SOURCE name="FirstSpiritFragmentAccess/FSFAConnector">
      <PROJECT remote="fragments">
        <CATEGORY uid="news"/>
      </PROJECT>
    </SOURCE>
</FS_INDEX>
```

The value of the uid attribute is the reference name of the required page template (in the remote project).

A button is displayed, which can be used to create the new fragments with the specified page template ("category"). (Precondition: only **one** `CATEGORY` may be configured.)

The button label now relates automatically to the category or the fragment type: instead of the previous label "CREATE FRAGMENT", the category is now named within the label, e.g., "CREATE 'NEWS'":
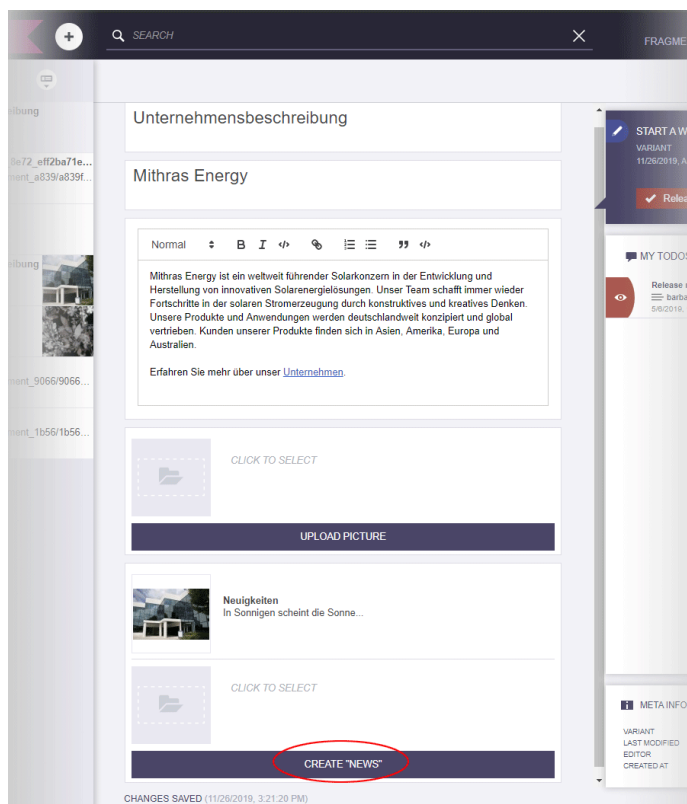
In this example, "NEWS" is the language-dependent display name of the corresponding page template.

5.6   MicroApps API: Creating special variants ("variant dimensions")

With the current release, special variants can be created using the MicroApps API. The calls:

```
CreateFragment
EditFragment
```

have been extended for this purpose:

The new `VariantCreation` action makes it possible to define the dimensions for which the variant is to be created.

All dimensions of the desired variant must be specified via `variantToCreate` using curly brackets, for example:

```
{ language: ["DE"], device: ["Mobile"], season: ["autumn"] }
```

It is also possible to specify the UUID of an existing variant that is to be used as a master copy via `source`. The new variant is then filled with the content of the variant defined via `source`.

Example:

```
... source: "4211cee7_f356_40e6_867a_c710c5720de8" ...
```

CreateFragment

A new fragment is created with the desired variant and this is shown as being already open in the MicroApp.

Example call:

```
let context = {
 projectId: 236,
 category: "teaser",
 command: "CreateFragment",
 variantCreation: {
     variantToCreate: { language: ["DE"], device: ["Mobile"], season: ["autumn"] },
     source: "4211cee7_f356_40e6_867a_c710c5720de8"
  }
};
CxtMicroApps.requestMicroApp("firstspirit-fragments-edit",context);
```

EditFragment

A variant is created in the defined dimensions for an existing fragment and this is shown as being already open in the MicroApp.

Example call:

```
let context = {
 projectId: 236,
 command: "EditFragment",
 fragmentId: "6baaf8a3_d04c_465e_acac_6c7d115b3147",
 variantCreation: {
      variantToCreate: { language: ["DE"], device: ["Mobile"], season: ["autumn"] }
  }
};
CxtMicroApps.requestMicroApp("firstspirit-fragments-edit",context);
```
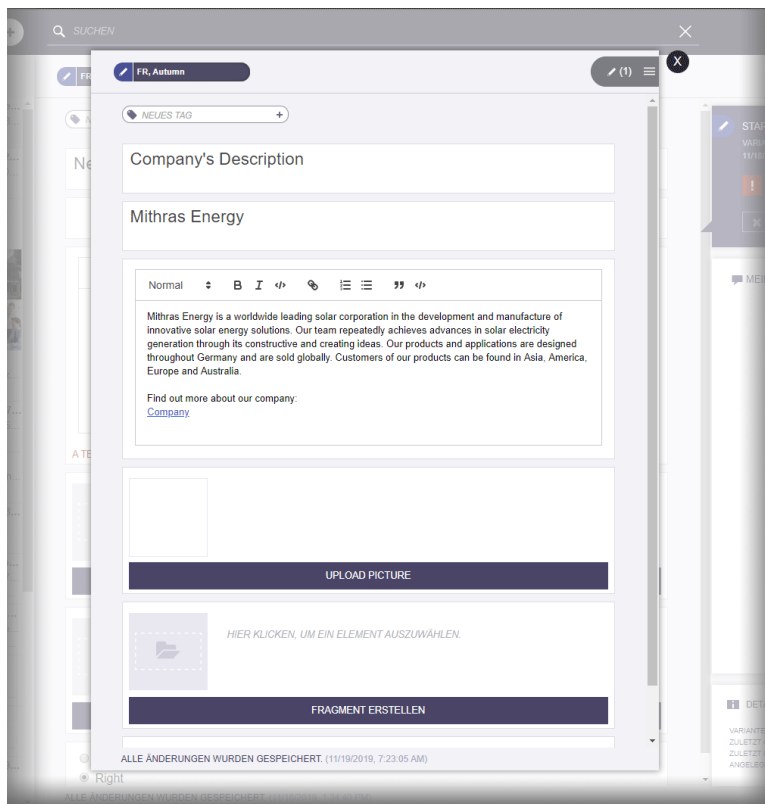

If some dimensions were not specified or invalid values were defined, this is recorded accordingly in the web server log and neither a fragment nor a variant is created.
Error messages:
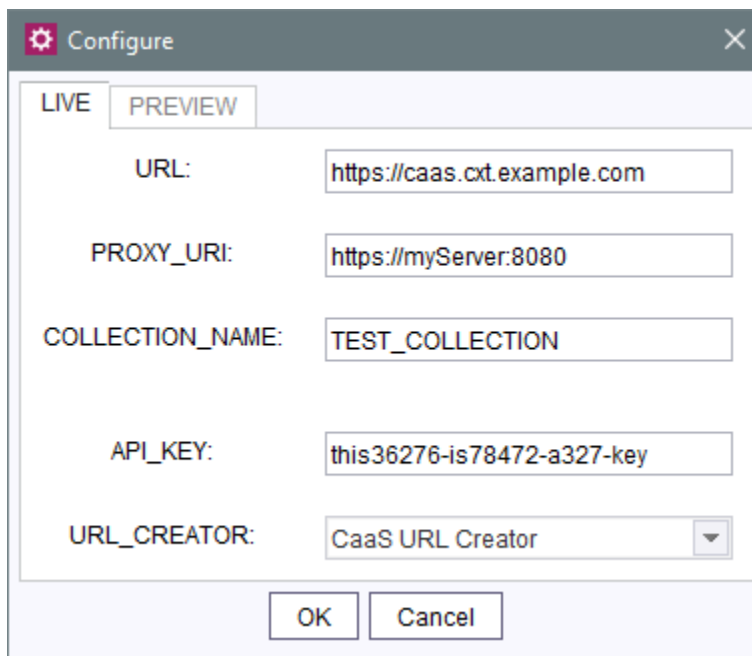
```
de.espirit.cxt.services.connectors.firstspirit.fragments.
    FragmentOperationFailedException: Missing value for edition 'season'
de.espirit.cxt.services.connectors.firstspirit.fragments.
    FragmentOperationFailedException: Invalid value for 'language': ES
```

5.7 "CaaS Integration" module: Specification of a proxy

The "FirstSpirit CXT FragmentCreator – CaaS Integration" module can be used to deliver the content of a fragment project via the universal FirstSpirit CaaS interface and retrieve it from any front-end system (conventional websites, mobile apps, web shops, digital signage, social media, single-page applications, portals) by means of the pull strategy.

The configuration is carried out using the "CXT CaaS Integration Configuration" project component. In the latest FirstSpirit release, a proxy can now also be defined for establishing the CaaS connection. This can be set in the FirstSpirit ServerManager, under "Project settings" / "Project components" / "CXT CaaS Integration Configuration", in the new field "PROXY_URI":

If the field is empty or if spaces are entered, no proxy will be used.

If a proxy is entered, this will be recorded in the log file of the FirstSpirit Server accordingly if the log level is *DEBUG*:

```
DEBUG 12.11.2019 11:35:30.270 {g-node=23943} (com.espirit.caas.adapter.processors.
    AsyncRequestToolkit): Proxy configuration: 'https://myServer:8080'
```

5.8 "CaaS Integration" module: Creating Preview URLs

The contents of a fragment project can be delivered via the universal FirstSpirit CaaS interface via the module "FirstSpirit CXT FragmentCreator - CaaS Integration" and pulled from any front end (classic websites, mobile apps, web shops, digital signage, social media, single-page applications, portals) according to the pull principle.

If a fragment project is to make its content available via FirstSpirit CaaS, the project component "CXT CaaS Integration Configuration" must be configured accordingly.

As of the current release, the newly implemented URL Creator "Preview URLs" is used for generating URLs:
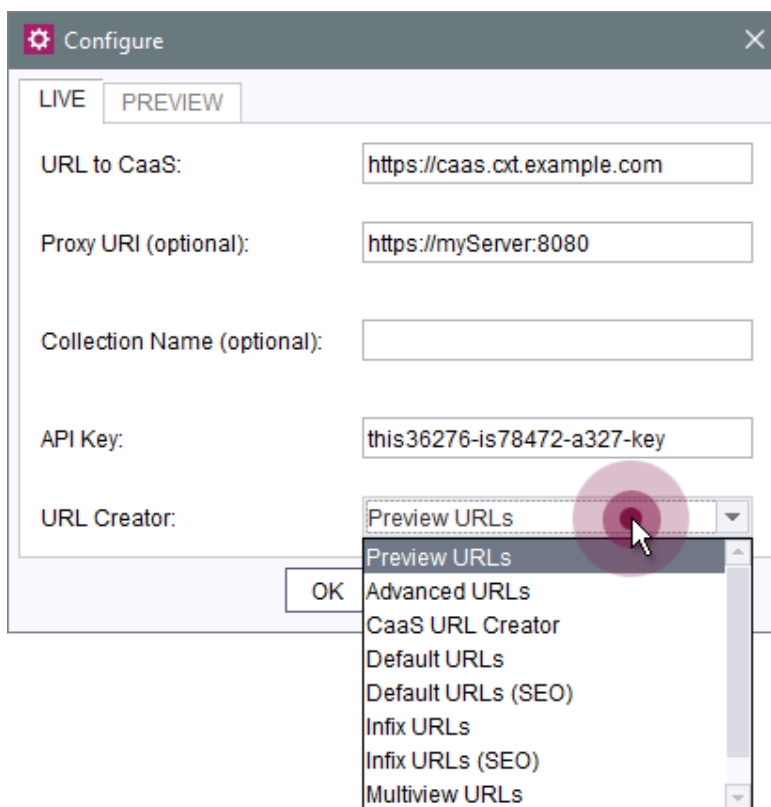
This will be used to generate URLs for the preview, for example for images.

When using the "Content as a Service" module, the "CaaS URL Creator" supplied with the module can usually be selected. This generates URLs that meet the special requirements for CaaS URLs. Alternatively, your own URL Creator can also be implemented and selected here.

Update information: Since FirstSpirit 2019-09, the URL Creator "Default URLs" was used as standard setting. When upgrading to FirstSpirit 2019-12, the setting should be checked and adapted if you want to continue using the URL Creator "Default URLs".

For more information

- about how to configure the "FirstSpirit CXT FragmentCreator - CaaS Integration" module: see Documentation for "FirstSpirit Content Experience Tools (CXT)", "Projects / Configure CaaS"

- about how to configure the "Content as a Service" module: see related documentation

- about how to create your own URL Creator: see *FirstSpirit Online Documentation*, "Advanced topics / Generation / Advanced URLs".

5.9   Module "FirstSpirit Markdown Editor": Compatibility

Incompatible changes were made to the relevant API as part of FirstSpirit's release of JSON support as of FirstSpirit 2019-12. As a result, the "FirstSpirit Markdown Editor" module requires at least FirstSpirit 2019-12 from Version 1.17.

5.10   Creating a variant with translated content

Previously, it was only possible to create a variant by copying the variant currently selected or to create a variant without content ("empty").

If a module that utilizes the `TranslationPlugin` (`de.espirit.firstspirit.webedit.plugin.translation` package, FirstSpirit Developer API) is used, an additional option is offered in the dialog with the current release: "Translated variant")".
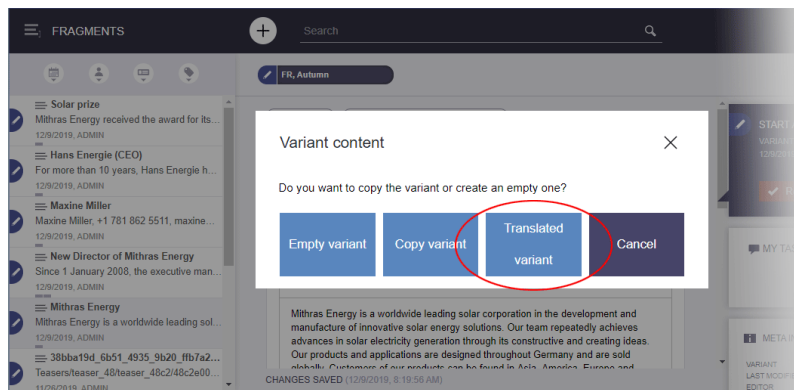
If you click on this option, the desired variant will be created with content that has been translated with the help of the mechanisms of the module connected via the `TranslationPlugin` interface (translation plugin).

6 Media

6.1 Support for the SVG and WebP graphic formats

In the latest FirstSpirit release, FirstSpirit supports the upload of images in SVG format with automatically identifying the MIME type.
In addition, it is now possible to upload images in WebP format in FirstSpirit ContentCreator (in FirstSpirit SiteArchitect, this has been supported since FirstSpirit 2019-11; see the relevant release notes for this).

SVG (Scalable Vector Graphics) is an XML-based vector graphic format. Unlike formats like PNG and JPG, SVG offers scalability without affecting the image quality, which is particularly advantageous for responsive content.

Following successful upload, the images are available in the project's Media Store as Picture type media.

Note: The upload of media (to the Media Store of a project) can be restricted to certain file formats using the "Restrict allowed media types" option. If restrictions have been defined for a project, the SVG or WebP format has to be added to the list of "Permitted extensions" (see Restrict allowed media types).

Previous behavior:

Following successful upload, SVG graphics and WebP images were previously created in the project's Media Store as File type media in ContentCreator. While this media could be used or referenced in FirstSpirit, functionalities such as image cropping or the preview image were not available.

Current behavior:

Following successful upload, SVG graphics and WebP images are created in the project's Media Store as Picture type media.
This media (of type Picture) can be used as follows in SiteArchitect and ContentCreator:

- It can be referenced (e.g., in an input component of type FS_REFERENCE).

- It can be cropped.

- It can be shown in the preview.

Images in these formats can also be uploaded and referenced in FragmentCreator.

Notes:

- Any animation effects are **not** retained when SVG or WebP graphics are cropped in FirstSpirit.

- Cropping and rendering of resolutions turn SVGs into bitmap graphics.

Migration information / compatibility mode "Detect images as file":

For existing media, the type does not switch from File to Picture automatically:
When you update to the latest version of FirstSpirit, the assignment for existing media in the projects will remain for compatibility reasons.
For this, the compatibility setting "Detect images as a file" is automatically set for the SVG format for existing projects with the file extension "svg" (FirstSpirit ServerManager / Project settings / Compatibility):
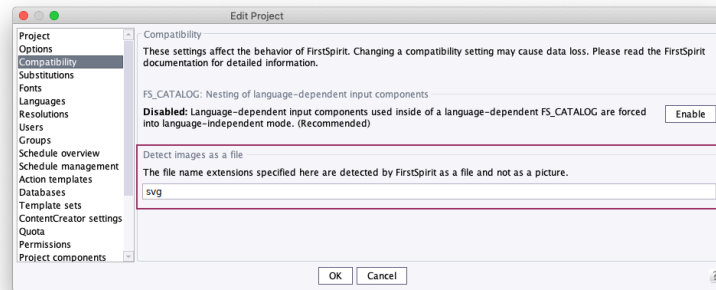
Default settings for SVG graphics for existing projects

The following then applies to the FirstSpirit project:

- Existing SVG graphics are still managed as File type media in this project.

- Newly created SVG graphics are also identified as File type media in this project.

The compatibility setting remains empty for all new FirstSpirit projects (default setting). The following applies here:

- With newly created media, SVG graphics are now automatically identified as Picture type media and a preview image is calculated.

> **!** If the compatibility mode set automatically for SVG graphics is not required for a project, the configuration must be changed here manually.

WebP images are currently identified as Picture type media by default. If they are supposed to be managed as File type media, the file extension "webp" must be added to the "Detect images as a file" field. Additional file extensions can also be added if required. Separate multiple file extensions with commas.

7 SiteArchitect

7.1 Templates: Better marking for input components in deprecated state

Input components set to the "deprecated" state are now marked separately within the form (GOM definition). The opening and closing tag of the input component is crossed out in the form.

Representation of input components in deprecated status

7.2   Templates: Optimizing the schema display in the schema editor

A database schema defines which data is saved in a database and in what form, as well as the relationship between this data. Using the schema editor in FirstSpirit SiteArchitect (Templates – Database schemata – Database schema), it is possible to model database tables with the associated (language-dependent or language-independent) columns.

Previous behavior:

All columns for the selected table are listed in both the schema editor and the Properties view. This display becomes quickly unclear, particularly with projects with many project languages (and many database tables) and could not be adjusted so far.

New behavior:

It is now possible to adjust the view in the editor via the "Customize layout" icon in the top right (in Templates – Database schemata – Database schema – Schema editor).
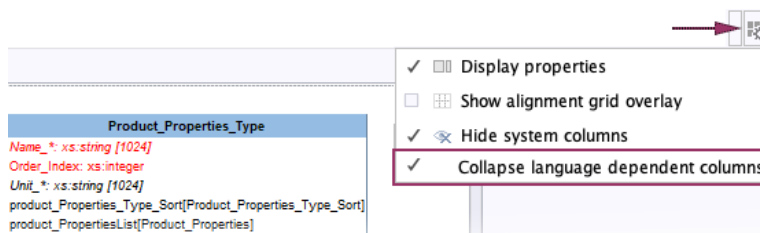
Setting: Collapse language-dependent columns (templates / schema editor)

If the "Collapse language-dependent columns" setting is activated (default: not activated), the following will occur in the schema editor and the Properties view:

■   all language-dependent table columns will be collapsed into one entry (if a language-dependent column is available for all project languages).

If there is not a language-dependent column for all project languages, e.g., just for DE and not for EN, this column will not be collapsed. This prevents the setting from hiding the lack of language-dependent columns.

- "*" will be used in the collapsed display instead of the language code (e.g., "EN").

- collapsed columns will be shown in italics.
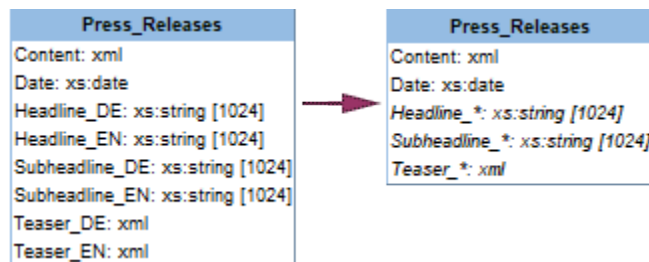
Displaying language-dependent columns: Default (left) and collapsed (right)

> ! This setting is not saved permanently and is only retained for the duration of the current user session.

Additional documentation

- on the schema editor: see docs.e-spirit.com

8 SiteArchitect / ServerManager

8.1 "FirstSpirit Launcher JRE" module: update to Java versions

The FirstSpirit desktop apps (FirstSpirit SiteArchitect and ServerManager) are started and updated ("roll-out") via the FirstSpirit Launcher.

The "FirstSpirit Launcher JRE" module enables customers and partners to easily switch between different Java versions to operate the FirstSpirit desktop apps.

The Java versions included in the "FirstSpirit Launcher JRE" module were updated in the latest FirstSpirit release:

In addition to the version supplied with the FirstSpirit Launcher, **AdoptOpenJDK 11.0.5 (default)**, the following Java variants are currently available:

- AdoptOpenJDK 13.0.1

- AdoptOpenJDK 8u232 (outdated)

For more information, see the documentation for the FirstSpirit Launcher JRE module.

9   System

9.1   Update of internally used software

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

- **Java** (JRE which is used to operate the FirstSpirit Launcher)
  Update from AdoptOpenJDK 11.0.4 to AdoptOpenJDK 11.0.5

- **Spring Boot** (used for FirstSpirit Content Experience Tools (CXT))
  Update from version 2.1.7 to version 2.2.1

- **Eclipse Jetty** (contained in the module `fs-jetty.fsm` / "FirstSpirit Jetty Service")
  Update from version 9.4.21 to version 9.4.23

> **!** As before, use of Eclipse Jetty for production purposes is not recommended!

10   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
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.MaintenanceModeInfo)	2018-07	
FirstSpirit Developer API: getStartingTimeOfStageAsDate (de.espirit.firstspirit.server.MaintenanceModeInfo)	2018-07	
FirstSpirit Access API: getSelectedWebserverConfiguration (de.espirit.firstspirit.access.serverConfiguration)	2018-10	
FirstSpirit Access API: setSelectedWebserverConfiguration (de.espirit.firstspirit.access.serverConfiguration)	2018-10	
FirstSpirit Access API: getSelectedWebServer (de.espirit.firstspirit.access.project.Project)	2018-10	
FirstSpirit Access API: setSelectedWebServer (de.espirit.firstspirit.access.project.Project)	2018-10	

Functionality	Deprecated as of	Will be removed/ Was removed as of
FirstSpirit Developer API: getLostAndFoundStoreNodes(); (de.espirit.firstspirit.feature.FeatureInstallResult)	2018-10	
FirstSpirit Developer API: getDeletedStoreNodes(); (de.espirit.firstspirit.feature.FeatureInstallResult)	2018-10	
FirstSpirit Access API: de.espirit.firstspirit.access.store.Previewable	2019-01	
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

11   Overview

ID	Description	Categories
CORE-3136	With the current FirstSpirit release, the display of database tables can be collapsed in the schema editor for language-dependent columns. The simplified display ensures better legibility, particularly in projects with many project languages (and many database tables). Further information can be found in chapter "SiteArchitect: Templates: Optimizing the schema display in the schema editor".	Database, Developer, SiteArchitect, Template Store
CORE-5135 CORE-8414 CORE-11405	In the latest FirstSpirit release, FirstSpirit supports the upload of images in SVG format with automatically identifying the MIME type. Further information can be found in chapter "Media: Support for the SVG and WebP graphic formats".	ContentCreator, Editor, FragmentCreator, Media, Media Store, SiteArchitect

ID	Description	Categories
CORE-10539	For the input components CMS_INPUT_DOM and CMS_INPUT_DOMTABLE, the evaluation of the `listConfig` parameter (editing list properties) has been improved.	ContentCreator, Input Components
CORE-10806	If connections to the FirstSpirit server become invalid, an automatic re-registration is now performed (if SSO is used): Previously, if an invalid session was answered with a 500 error message in the browser in some cases (`java.lang.SecurityException: Not authorized`), a new login via the start page could only take place after deleting a corresponding cookie (e.g. by terminating all browser instances). Now a new login is performed automatically (or the login dialog is displayed if no SSO is used), the cookie no longer needs to be removed.	Sessions
CORE-11088	In the latest version of FirstSpirit, the delivery of content via a redirect can be configured (using the `preview.externalDeliveryRedirect` parameter). This new configuration option should be utilized if the application server used by FirstSpirit does not have access to the web server via which the content is delivered. Further information can be found in chapter "Administration: Configuring the delivery of content via a redirect (fs-server.conf)".	FirstSpirit Administrator, Preview, Web server
CORE-11138	An error could occur when another user called a link to the page preview.	ContentCreator
CORE-11171	In the latest version of FirstSpirit, the log level of the message indicating that data has been detected in an old data format has been changed from *WARN* to *DEBUG*. There are no plans to discontinue support for the old format. There is therefore no need to make manual modifications in the projects. Further information can be found in chapter "Input components: Changing the log level when indicating an old data format".	ContentCreator, Developer, Input Components, Migration, SiteArchitect, Template Development

ID	Description	Categories
CORE-11253	As of the current FirstSpirit release, the recommended PostgreSQL database version (reference) for use with the FirstSpirit Server changes to PostgreSQL 11 (previously: PostgreSQL 9.4). Additionally PostgreSQL 10.x and PostgreSQL 11.x have been added to the list of compatible databases. Further information can be found in chapter "Administration: Support for PostgreSQL 10.x and PostgreSQL 11.x".	Database, FirstSpirit Administrator
CORE-11453	When using the "LiveEdit" functionality, it was possible that the page could not be edited after starting a workflow.	ContentCreator, Developer, Editor, LiveEdit, Workflow
CORE-11499	Malfunctions occurred when exporting the project properties, which include a metadata configuration for the ContentCreator.	Advanced URL, ContentCreator, External synchronization, Metadata
CORE-11501	The Java versions included in the "FirstSpirit Launcher JRE" module were updated in the latest FirstSpirit release. Further information can be found in chapter "SiteArchitect / ServerManager: "FirstSpirit Launcher JRE" module: update to Java versions".	Java, Launcher
CORE-11520	The FirstSpirit product documentation is made available via https://docs.e-spirit.com/. The presentation of the documentation on the page has been improved: ■ The documentations are additionally sorted in alphabetical order. ■ Some documents are offered for different versions. In this case, a combobox is displayed for selecting the desired version. This combobox now always displays the current version as the first entry. Older versions are displayed in descending order below the current version.	Developer, Editor, FirstSpirit Administrator, Modules

ID	Description	Categories
CORE-11529	**With FirstSpirit 2019-12**, the ramp-down phase for the FS_LIST input component is extended by additional use cases. A **Deprecation warning** can now also occur in projects that were still running without warnings in FirstSpirit 2019-11. The component remains fully functional with FirstSpirit 2019-12 and can still be used. **Before updating to FirstSpirit 2020-01 or higher, all FS_LIST uses must be converted to one of the successor components.** Further information can be found in chapter "Input components: FS_LIST: Ramp-down phase: Deprecation warnings".	ContentCreator, Developer, Input Components, Migration, SiteArchitect, Template Development
CORE-11550	Redirections in the client-server communication are restricted by the FirstSpirit server for security reasons. Using the optional parameter `allowedRedirectHosts` in the configuration file `fs-server.conf` URLs can be defined to which a redirect is to be allowed. Now the use of "wild-card" character is possible in the configuration. Further information can be found in chapter "Administration: Using wildcards to configure redirect URLs (fs-server.conf)".	FirstSpirit Administrator, Server Administrator
CORE-11567	For better error analysis, the latest version of FirstSpirit now creates a log if problems occur when starting the JettyService (in file fs-server.log). The underlying exception will also be thrown in the event of an error. Further information can be found in chapter "Administration: Improved logging when starting the JettyService".	FirstSpirit Jetty Web Server, Integrated software, Server Administrator, Services
CORE-11581	Fixed a bug that could cause instances of internal classes not to be removed when using ContentCreator when the underlying session was closed.	ContentCreator, FirstSpirit Administrator, Sessions
CORE-11583	Input components set to the "deprecated" state are now marked separately within the form (GOM definition). The opening and closing tag of the input component is crossed out in the form. Further information can be found in chapter "SiteArchitect: Templates: Better marking for input components in deprecated state".	SiteArchitect, Template Development, Template Store

ID	Description	Categories
CORE-11584	Log level for OutOfMemory errors on the server has been changed from `ERROR` to `FATAL`.	Server Administrator
CORE-11595	An error was fixed which could cause in rare cases that the transmission of reports could be delayed by one run due to a `java.lang.StackOverflowError` when reporting was activated.	Server Administrator
CORE-11604	An error that prevented an input component migrated from FS_LIST to FS_CATALOG being edited initially in the ContentCreator has been corrected.	ContentCreator, Input Components, Migration, SiteArchitect, Template Development
CORE-11608 CORE-11635 CXT-1099	In the current FirstSpirit release, updated internally used software. Further information can be found in chapter "System: Update of internally used software".	FirstSpirit Administrator, FirstSpirit Content Experience Tools (CXT), FirstSpirit Jetty Web Server, Integrated software, Java
CORE-11622	With the current FirstSpirit version an error was corrected that prevented the data stored by an FS_LIST (type SERVICE) input component from being read by an FS_INDEX input component (with DataAccessPlugin), even if the DataAccessPlugin used there was compatible with the stored data of the service in the FS_LIST. Further information can be found in chapter "Input components: Error corrected when migrating data from FS_LIST (type SERVICE)".	Developer, Input Components, Migration, Template Development
CORE-11632	Releasing the JSON support in FirstSpirit Further information can be found in chapter "General: JSON support in FirstSpirit".	Developer
CXT-194	A display problem of the fragment list, that could also mean that it was not possible to scroll through the list, has been rectified.	Editor, FirstSpirit Content Experience Tools (CXT), FragmentCreator

ID	Description	Categories
CXT-579	"CREATE FRAGMENT" button now shows the relevant category Further information can be found in chapter "FirstSpirit Content Experience Tools (CXT): FS_INDEX: "Create fragment" button now shows the relevant category".	Data Access Plug-In, Developer, Editor, FirstSpirit Content Experience Tools (CXT), FragmentCreator, Input Components, Modules, Template Development
CXT-721	With the current release, special variants can be created using the MicroApps API. Further information can be found in chapter "FirstSpirit Content Experience Tools (CXT): MicroApps API: Creating special variants ("variant dimensions")".	Developer, Editor, FirstSpirit Content Experience Tools (CXT)
CXT-747	Fixed a timing problem when calling multiple MicroApps in parallel that caused only one MicroApp button to be displayed initially.	Developer, FirstSpirit Content Experience Tools (CXT)
CXT-784	With the current release, input components can be hidden for the editor using the `hidden` parameter. Further information can be found in chapter "FirstSpirit Content Experience Tools (CXT): Hiding input components: "hidden" parameter".	Developer, FirstSpirit Content Experience Tools (CXT), FragmentCreator, Input Components
CXT-824	An OutOfMemory error could occur in the Tomcat metaspace, e.g., after uninstalling and redeploying FragmentCreator. The web applications for FirstSpirit Content Experience Tools could then only be deployed after Tomcat was restarted. Error message: `SEVERE [http-nio-127.0.0.1-8080-exec-674] org.apache.tomcat.util.modeler.BaseModelMBean.invc Exception invoking method [check] java.lang.OutOfMemoryError: Metaspace.` This was an error with the Eureka framework. It was rectified in close cooperation with the manufacturer: With the current release, the error message specified no longer appears. In rare cases, the web application will need to be redeployed after the "FragmentCreator" module has been updated.	FirstSpirit Administrator, FirstSpirit Content Experience Tools (CXT), Performance, Web server

ID	Description	Categories
CXT-966	References from *DataAccessPlugins* are now resolved correctly even if the ID of the element contains a slash (/).	Data Access Plug-In, Developer, Editor, FirstSpirit Content Experience Tools (CXT)
CXT-967	The module "FirstSpirit CXT FragmentCreator - CaaS Integration" can now generate Preview URLs again. Further information can be found in chapter "FirstSpirit Content Experience Tools (CXT): "CaaS Integration" module: Creating Preview URLs".	FirstSpirit Administrator, FirstSpirit Content Experience Tools (CXT), FirstSpirit Content as a Service (CaaS), Modules, ServerManager
CXT-998	Specification of a proxy when using the "FirstSpirit CXT FragmentCreator – CaaS Integration" module Further information can be found in chapter "FirstSpirit Content Experience Tools (CXT): "CaaS Integration" module: Specification of a proxy".	FirstSpirit Administrator, FirstSpirit Content Experience Tools (CXT), FirstSpirit Content as a Service (CaaS), ServerManager
CXT-1009	When configured accordingly, variants can also be created with content originating from a translation plugin. Further information can be found in chapter "FirstSpirit Content Experience Tools (CXT): Creating a variant with translated content".	Developer, Editor, FirstSpirit API, FirstSpirit Content Experience Tools (CXT), Languages, Module development
CXT-1013	As of the current FirstSpirit release, the UI language selected by the editor can now be determined when using *DataAccessPlugins*. Further information can be found in chapter "FirstSpirit Content Experience Tools (CXT): DataAccessPlugin: Identifying the client language".	Developer, FirstSpirit Content Experience Tools (CXT)
CXT-1096 CXT-985 CXT-1078	The graphical user interface of FragmentCreator is currently being revised. Further information can be found in chapter "FirstSpirit Content Experience Tools (CXT): FragmentCreator: Design revision".	Editor, FirstSpirit Content Experience Tools (CXT), FragmentCreator

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ID	Description	Categories
CXT-1102	For the input component CMS_INPUT_DATE, the default for the attribute `mode` is now the value *datetime* (`mode="datetime"`) for FragmentCreator (as with the other clients) so that the date and time can now be selected without specifying the attribute.	Developer, FirstSpirit Content Experience Tools (CXT), FragmentCreator, Input Components, Template Development
CXT-1132	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 as a Service (CaaS), FragmentCreator, Modules
CXT-1140	The module "FirstSpirit Markdown Editor" requires at least FirstSpirit 2019-12 from version 1.17. Further information can be found in chapter "FirstSpirit Content Experience Tools (CXT): Module "FirstSpirit Markdown Editor": Compatibility".	Developer, FirstSpirit Content Experience Tools (CXT), FragmentCreator, Input Components, Modules, Support for JSON
CXT-1148	The design and technical basis of the FirstSpirit ContentCreator are currently being revised. The revised ContentCreator will be officially released as of FirstSpirit 2020-01, the "old" ContentCreator will be discontinued as planned as of FirstSpirit 2020-07. Further information can be found in chapter "ContentCreator: ContentCreator re-design: Current time scheduling".	ContentCreator, Developer, Editor, FirstSpirit Administrator
DEVEX-324	With the current FSDevTools release (release 2.5.5), an error has been rectified that prevented the import of projected in which global schedule templates were referenced.	FSDevTools

12   Categories

12.1   Advanced URL

ID	Description
CORE-11499	Malfunctions occurred when exporting the project properties, which include a metadata configuration for the ContentCreator.

12.2   Workflow

ID	Description
CORE-11453	When using the "LiveEdit" functionality, it was possible that the page could not be edited after starting a workflow.

12.3   ContentCreator

ID	Description
CORE-5135 CORE-8414 CORE-11405	In the latest FirstSpirit release, FirstSpirit supports the upload of images in SVG format with automatically identifying the MIME type. Further information can be found in chapter "Media: Support for the SVG and WebP graphic formats".
CORE-10539	For the input components CMS_INPUT_DOM and CMS_INPUT_DOMTABLE, the evaluation of the `listConfig` parameter (editing list properties) has been improved.
CORE-11138	An error could occur when another user called a link to the page preview.
CORE-11171	In the latest version of FirstSpirit, the log level of the message indicating that data has been detected in an old data format has been changed from *WARN* to *DEBUG*. There are no plans to discontinue support for the old format. There is therefore no need to make manual modifications in the projects. Further information can be found in chapter "Input components: Changing the log level when indicating an old data format".

ID	Description
CORE-11453	When using the "LiveEdit" functionality, it was possible that the page could not be edited after starting a workflow.
CORE-11499	Malfunctions occurred when exporting the project properties, which include a metadata configuration for the ContentCreator.
CORE-11529	**With FirstSpirit 2019-12**, the ramp-down phase for the FS_LIST input component is extended by additional use cases. A **Deprecation warning** can now also occur in projects that were still running without warnings in FirstSpirit 2019-11. The component remains fully functional with FirstSpirit 2019-12 and can still be used. **Before updating to FirstSpirit 2020-01 or higher, all FS_LIST uses must be converted to one of the successor components.** Further information can be found in chapter "Input components: FS_LIST: Ramp-down phase: Deprecation warnings".
CORE-11581	Fixed a bug that could cause instances of internal classes not to be removed when using ContentCreator when the underlying session was closed.
CORE-11604	An error that prevented an input component migrated from FS_LIST to FS_CATALOG being edited initially in the ContentCreator has been corrected.
CXT-1148	The design and technical basis of the FirstSpirit ContentCreator are currently being revised. The revised ContentCreator will be officially released as of FirstSpirit 2020-01, the "old" ContentCreator will be discontinued as planned as of FirstSpirit 2020-07. Further information can be found in chapter "ContentCreator: ContentCreator re-design: Current time scheduling".

12.4 Data Access Plug-In

ID	Description
CXT-579	"CREATE FRAGMENT" button now shows the relevant category. Further information can be found in chapter "FirstSpirit Content Experience Tools (CXT): FS_INDEX: "Create fragment" button now shows the relevant category".
CXT-966	References from *DataAccessPlugins* are now resolved correctly even if the ID of the element contains a slash (/).

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12.5   Database

ID	Description
CORE-3136	With the current FirstSpirit release, the display of database tables can be collapsed in the schema editor for language-dependent columns. The simplified display ensures better legibility, particularly in projects with many project languages (and many database tables). Further information can be found in chapter "SiteArchitect: Templates: Optimizing the schema display in the schema editor".
CORE-11253	As of the current FirstSpirit release, the recommended PostgreSQL database version (reference) for use with the FirstSpirit Server changes to PostgreSQL 11 (previously: PostgreSQL 9.4). Additionally PostgreSQL 10.x and PostgreSQL 11.x have been added to the list of compatible databases. Further information can be found in chapter "Administration: Support for PostgreSQL 10.x and PostgreSQL 11.x".

12.6   Services

ID	Description
CORE-11567	For better error analysis, the latest version of FirstSpirit now creates a log if problems occur when starting the JettyService (in file fs-server.log). The underlying exception will also be thrown in the event of an error. Further information can be found in chapter "Administration: Improved logging when starting the JettyService".

12.7   Input Components

ID	Description
CORE-10539	For the input components CMS_INPUT_DOM and CMS_INPUT_DOMTABLE, the evaluation of the `listConfig` parameter (editing list properties) has been improved.
CORE-11171	In the latest version of FirstSpirit, the log level of the message indicating that data has been detected in an old data format has been changed from *WARN* to *DEBUG*. There are no plans to

ID	Description
	discontinue support for the old format. There is therefore no need to make manual modifications in the projects. Further information can be found in chapter "Input components: Changing the log level when indicating an old data format".
CORE-11529	**With FirstSpirit 2019-12**, the ramp-down phase for the FS_LIST input component is extended by additional use cases. A **Deprecation warning** can now also occur in projects that were still running without warnings in FirstSpirit 2019-11. The component remains fully functional with FirstSpirit 2019-12 and can still be used. **Before updating to FirstSpirit 2020-01 or higher, all FS_LIST uses must be converted to one of the successor components.** Further information can be found in chapter "Input components: FS_LIST: Ramp-down phase: Deprecation warnings".
CORE-11604	An error that prevented an input component migrated from FS_LIST to FS_CATALOG being edited initially in the ContentCreator has been corrected.
CORE-11622	With the current FirstSpirit version an error was corrected that prevented the data stored by an FS_LIST (type SERVICE) input component from being read by an FS_INDEX input component (with DataAccessPlugin), even if the DataAccessPlugin used there was compatible with the stored data of the service in the FS_LIST. Further information can be found in chapter "Input components: Error corrected when migrating data from FS_LIST (type SERVICE) ".
CXT-579	"CREATE FRAGMENT" button now shows the relevant category Further information can be found in chapter "FirstSpirit Content Experience Tools (CXT): FS_INDEX: "Create fragment" button now shows the relevant category".
CXT-784	With the current release, input components can be hidden for the editor using the `hidden` parameter. Further information can be found in chapter "FirstSpirit Content Experience Tools (CXT): Hiding input components: "hidden" parameter".
CXT-1102	For the input component CMS_INPUT_DATE, the default for the attribute `mode` is now the value *datetime* (`mode="datetime"`) for FragmentCreator (as with the other clients) so that the date and time can now be selected without specifying the attribute.

ID	Description
CXT-1140	The module "FirstSpirit Markdown Editor" requires at least FirstSpirit 2019-12 from version 1.17. Further information can be found in chapter "FirstSpirit Content Experience Tools (CXT): Module "FirstSpirit Markdown Editor": Compatibility".

12.8   Developer

ID	Description
CORE-3136	With the current FirstSpirit release, the display of database tables can be collapsed in the schema editor for language-dependent columns. The simplified display ensures better legibility, particularly in projects with many project languages (and many database tables). Further information can be found in chapter "SiteArchitect: Templates: Optimizing the schema display in the schema editor".
CORE-11171	In the latest version of FirstSpirit, the log level of the message indicating that data has been detected in an old data format has been changed from *WARN* to *DEBUG*. There are no plans to discontinue support for the old format. There is therefore no need to make manual modifications in the projects. Further information can be found in chapter "Input components: Changing the log level when indicating an old data format".
CORE-11453	When using the "LiveEdit" functionality, it was possible that the page could not be edited after starting a workflow.
CORE-11520	The FirstSpirit product documentation is made available via https://docs.e-spirit.com/. The presentation of the documentation on the page has been improved: ▪ The documentations are additionally sorted in alphabetical order. ▪ Some documents are offered for different versions. In this case, a combobox is displayed for selecting the desired version. This combobox now always displays the current version as the first entry. Older versions are displayed in descending order below the current version.
CORE-11529	**With FirstSpirit 2019-12**, the ramp-down phase for the FS_LIST input component is extended by additional use cases. A **Deprecation warning** can now also occur in projects that were still

ID	Description
	running without warnings in FirstSpirit 2019-11. The component remains fully functional with FirstSpirit 2019-12 and can still be used. **Before updating to FirstSpirit 2020-01 or higher, all FS_LIST uses must be converted to one of the successor components.** Further information can be found in chapter "Input components: FS_LIST: Ramp-down phase: Deprecation warnings".
CORE-11622	With the current FirstSpirit version an error was corrected that prevented the data stored by an FS_LIST (type SERVICE) input component from being read by an FS_INDEX input component (with DataAccessPlugin), even if the DataAccessPlugin used there was compatible with the stored data of the service in the FS_LIST. Further information can be found in chapter "Input components: Error corrected when migrating data from FS_LIST (type SERVICE) ".
CORE-11632	Releasing the JSON support in FirstSpirit Further information can be found in chapter "General: JSON support in FirstSpirit".
CXT-579	"CREATE FRAGMENT" button now shows the relevant category Further information can be found in chapter "FirstSpirit Content Experience Tools (CXT): FS_INDEX: "Create fragment" button now shows the relevant category".
CXT-721	With the current release, special variants can be created using the MicroApps API. Further information can be found in chapter "FirstSpirit Content Experience Tools (CXT): MicroApps API: Creating special variants ("variant dimensions")".
CXT-747	Fixed a timing problem when calling multiple MicroApps in parallel that caused only one MicroApp button to be displayed initially.
CXT-784	With the current release, input components can be hidden for the editor using the `hidden` parameter. Further information can be found in chapter "FirstSpirit Content Experience Tools (CXT): Hiding input components: "hidden" parameter".
CXT-966	References from *DataAccessPlugins* are now resolved correctly even if the ID of the element contains a slash (/).

ID	Description
CXT-1009	When configured accordingly, variants can also be created with content originating from a translation plugin. Further information can be found in chapter "FirstSpirit Content Experience Tools (CXT): Creating a variant with translated content".
CXT-1013	As of the current FirstSpirit release, the UI language selected by the editor can now be determined when using *DataAccessPlugins*. Further information can be found in chapter "FirstSpirit Content Experience Tools (CXT): DataAccessPlugin: Identifying the client language".
CXT-1102	For the input component CMS_INPUT_DATE, the default for the attribute `mode` is now the value *datetime* (`mode="datetime"`) for FragmentCreator (as with the other clients) so that the date and time can now be selected without specifying the attribute.
CXT-1132	FirstSpirit Content Experience Tools: Latest module versions Further information can be found in chapter "FirstSpirit Content Experience Tools (CXT): Latest module versions".
CXT-1140	The module "FirstSpirit Markdown Editor" requires at least FirstSpirit 2019-12 from version 1.17. Further information can be found in chapter "FirstSpirit Content Experience Tools (CXT): Module "FirstSpirit Markdown Editor": Compatibility".
CXT-1148	The design and technical basis of the FirstSpirit ContentCreator are currently being revised. The revised ContentCreator will be officially released as of FirstSpirit 2020-01, the "old" ContentCreator will be discontinued as planned as of FirstSpirit 2020-07. Further information can be found in chapter "ContentCreator: ContentCreator re-design: Current time scheduling".

12.9   External synchronization

ID	Description
CORE-11499	Malfunctions occurred when exporting the project properties, which include a metadata configuration for the ContentCreator.

12.10 FirstSpirit Content as a Service (CaaS)

ID	Description
CXT-967	The module "FirstSpirit CXT FragmentCreator - CaaS Integration" can now generate Preview URLs again. Further information can be found in chapter "FirstSpirit Content Experience Tools (CXT): "CaaS Integration" module: Creating Preview URLs".
CXT-998	Specification of a proxy when using the "FirstSpirit CXT FragmentCreator – CaaS Integration" module Further information can be found in chapter "FirstSpirit Content Experience Tools (CXT): "CaaS Integration" module: Specification of a proxy".
CXT-1132	FirstSpirit Content Experience Tools: Latest module versions Further information can be found in chapter "FirstSpirit Content Experience Tools (CXT): Latest module versions".

12.11 FirstSpirit Content Experience Tools (CXT)

ID	Description
CORE-11608 CORE-11635 CXT-1099	In the current FirstSpirit release, updated internally used software. Further information can be found in chapter "System: Update of internally used software".
CXT-194	A display problem of the fragment list, that could also mean that it was not possible to scroll through the list, has been rectified.
CXT-579	"CREATE FRAGMENT" button now shows the relevant category Further information can be found in chapter "FirstSpirit Content Experience Tools (CXT): FS_INDEX: "Create fragment" button now shows the relevant category".
CXT-721	With the current release, special variants can be created using the MicroApps API. Further information can be found in chapter "FirstSpirit Content Experience Tools (CXT): MicroApps API: Creating special variants ("variant dimensions")".

ID	Description
CXT-747	Fixed a timing problem when calling multiple MicroApps in parallel that caused only one MicroApp button to be displayed initially.
CXT-784	With the current release, input components can be hidden for the editor using the `hidden` parameter. Further information can be found in chapter "FirstSpirit Content Experience Tools (CXT): Hiding input components: "hidden" parameter".
CXT-824	An OutOfMemory error could occur in the Tomcat metaspace, e.g., after uninstalling and redeploying FragmentCreator. The web applications for FirstSpirit Content Experience Tools could then only be deployed after Tomcat was restarted. Error message: `SEVERE [http-nio-127.0.0.1-8080-exec-674] org.apache.tomcat.util.modeler.BaseModelMBean.invoke Exception invoking method [check] java.lang.OutOfMemoryError: Metaspace`. This was an error with the Eureka framework. It was rectified in close cooperation with the manufacturer: With the current release, the error message specified no longer appears. In rare cases, the web application will need to be redeployed after the "FragmentCreator" module has been updated.
CXT-966	References from *DataAccessPlugins* are now resolved correctly even if the ID of the element contains a slash (/).
CXT-967	The module "FirstSpirit CXT FragmentCreator - CaaS Integration" can now generate Preview URLs again. Further information can be found in chapter "FirstSpirit Content Experience Tools (CXT): "CaaS Integration" module: Creating Preview URLs".
CXT-998	Specification of a proxy when using the "FirstSpirit CXT FragmentCreator – CaaS Integration" module Further information can be found in chapter "FirstSpirit Content Experience Tools (CXT): "CaaS Integration" module: Specification of a proxy".
CXT-1009	When configured accordingly, variants can also be created with content originating from a translation plugin. Further information can be found in chapter "FirstSpirit Content Experience Tools (CXT): Creating a variant with translated content".

ID	Description
CXT-1013	As of the current FirstSpirit release, the UI language selected by the editor can now be determined when using *DataAccessPlugins*. Further information can be found in chapter "FirstSpirit Content Experience Tools (CXT): DataAccessPlugin: Identifying the client language".
CXT-1096 CXT-985 CXT-1078	The graphical user interface of FragmentCreator is currently being revised. Further information can be found in chapter "FirstSpirit Content Experience Tools (CXT): FragmentCreator: Design revision".
CXT-1102	For the input component CMS_INPUT_DATE, the default for the attribute `mode` is now the value *datetime* (`mode="datetime"`) for FragmentCreator (as with the other clients) so that the date and time can now be selected without specifying the attribute.
CXT-1140	The module "FirstSpirit Markdown Editor" requires at least FirstSpirit 2019-12 from version 1.17. Further information can be found in chapter "FirstSpirit Content Experience Tools (CXT): Module "FirstSpirit Markdown Editor": Compatibility".

12.12 FirstSpirit Jetty Web Server

ID	Description
CORE-11567	For better error analysis, the latest version of FirstSpirit now creates a log if problems occur when starting the JettyService (in file fs-server.log). The underlying exception will also be thrown in the event of an error. Further information can be found in chapter "Administration: Improved logging when starting the JettyService".
CORE-11608 CORE-11635 CXT-1099	In the current FirstSpirit release, updated internally used software. Further information can be found in chapter "System: Update of internally used software".

12.13 FirstSpirit Administrator

ID	Description
CORE-11088	In the latest version of FirstSpirit, the delivery of content via a redirect can be configured (using the `preview.externalDeliveryRedirect` parameter). This new configuration option should be utilized if the application server used by FirstSpirit does not have access to the web server via which the content is delivered. Further information can be found in chapter "Administration: Configuring the delivery of content via a redirect (fs-server.conf)".
CORE-11253	As of the current FirstSpirit release, the recommended PostgreSQL database version (reference) for use with the FirstSpirit Server changes to PostgreSQL 11 (previously: PostgreSQL 9.4). Additionally PostgreSQL 10.x and PostgreSQL 11.x have been added to the list of compatible databases. Further information can be found in chapter "Administration: Support for PostgreSQL 10.x and PostgreSQL 11.x".
CORE-11520	The FirstSpirit product documentation is made available via https://docs.e-spirit.com/. The presentation of the documentation on the page has been improved: ■ The documentations are additionally sorted in alphabetical order. ■ Some documents are offered for different versions. In this case, a combobox is displayed for selecting the desired version. This combobox now always displays the current version as the first entry. Older versions are displayed in descending order below the current version.
CORE-11550	Redirections in the client-server communication are restricted by the FirstSpirit server for security reasons. Using the optional parameter `allowedRedirectHosts` in the configuration file `fs-server.conf` URLs can be defined to which a redirect is to be allowed. Now the use of "wild-card" character is possible in the configuration. Further information can be found in chapter "Administration: Using wildcards to configure redirect URLs (fs-server.conf)".
CORE-11581	Fixed a bug that could cause instances of internal classes not to be removed when using ContentCreator when the underlying session was closed.
CORE-11608	In the current FirstSpirit release, updated internally used software.

ID	Description
CORE-11635 CXT-1099	Further information can be found in chapter "System: Update of internally used software".
CXT-824	An OutOfMemory error could occur in the Tomcat metaspace, e.g., after uninstalling and redeploying FragmentCreator. The web applications for FirstSpirit Content Experience Tools could then only be deployed after Tomcat was restarted. Error message: `SEVERE [http-nio-127.0.0.1-8080-exec-674] org.apache.tomcat.util.modeler.BaseModelMBean.invoke Exception invoking method [check] java.lang.OutOfMemoryError: Metaspace.` This was an error with the Eureka framework. It was rectified in close cooperation with the manufacturer: With the current release, the error message specified no longer appears. In rare cases, the web application will need to be redeployed after the "FragmentCreator" module has been updated.
CXT-967	The module "FirstSpirit CXT FragmentCreator - CaaS Integration" can now generate Preview URLs again. Further information can be found in chapter "FirstSpirit Content Experience Tools (CXT): "CaaS Integration" module: Creating Preview URLs".
CXT-998	Specification of a proxy when using the "FirstSpirit CXT FragmentCreator – CaaS Integration" module Further information can be found in chapter "FirstSpirit Content Experience Tools (CXT): "CaaS Integration" module: Specification of a proxy".
CXT-1132	FirstSpirit Content Experience Tools: Latest module versions Further information can be found in chapter "FirstSpirit Content Experience Tools (CXT): Latest module versions".
CXT-1148	The design and technical basis of the FirstSpirit ContentCreator are currently being revised. The revised ContentCreator will be officially released as of FirstSpirit 2020-01, the "old" ContentCreator will be discontinued as planned as of FirstSpirit 2020-07. Further information can be found in chapter "ContentCreator: ContentCreator re-design: Current time scheduling".

12.14 FirstSpirit API

ID	Description
CXT-1009	When configured accordingly, variants can also be created with content originating from a translation plugin. Further information can be found in chapter "FirstSpirit Content Experience Tools (CXT): Creating a variant with translated content".

12.15 FragmentCreator

ID	Description
CORE-5135 CORE-8414 CORE-11405	In the latest FirstSpirit release, FirstSpirit supports the upload of images in SVG format with automatically identifying the MIME type. Further information can be found in chapter "Media: Support for the SVG and WebP graphic formats".
CXT-194	A display problem of the fragment list, that could also mean that it was not possible to scroll through the list, has been rectified.
CXT-579	"CREATE FRAGMENT" button now shows the relevant category Further information can be found in chapter "FirstSpirit Content Experience Tools (CXT): FS_INDEX: "Create fragment" button now shows the relevant category".
CXT-784	With the current release, input components can be hidden for the editor using the `hidden` parameter. Further information can be found in chapter "FirstSpirit Content Experience Tools (CXT): Hiding input components: "hidden" parameter".
CXT-1096 CXT-985 CXT-1078	The graphical user interface of FragmentCreator is currently being revised. Further information can be found in chapter "FirstSpirit Content Experience Tools (CXT): FragmentCreator: Design revision".

ID	Description
CXT-1102	For the input component CMS_INPUT_DATE, the default for the attribute `mode` is now the value *datetime* (`mode="datetime"`) for FragmentCreator (as with the other clients) so that the date and time can now be selected without specifying the attribute.
CXT-1132	FirstSpirit Content Experience Tools: Latest module versions Further information can be found in chapter "FirstSpirit Content Experience Tools (CXT): Latest module versions".
CXT-1140	The module "FirstSpirit Markdown Editor" requires at least FirstSpirit 2019-12 from version 1.17. Further information can be found in chapter "FirstSpirit Content Experience Tools (CXT): Module "FirstSpirit Markdown Editor": Compatibility".

12.16 FSDevTools

ID	Description
DEVEX-324	With the current FSDevTools release (release 2.5.5), an error has been rectified that prevented the import of projected in which global schedule templates were referenced.

12.17 Integrated software

ID	Description
CORE-11567	For better error analysis, the latest version of FirstSpirit now creates a log if problems occur when starting the JettyService (in file fs-server.log). The underlying exception will also be thrown in the event of an error. Further information can be found in chapter "Administration: Improved logging when starting the JettyService".
CORE-11608 CORE-11635 CXT-1099	In the current FirstSpirit release, updated internally used software. Further information can be found in chapter "System: Update of internally used software".

12.18 Java

ID	Description
CORE-11501	The Java versions included in the "FirstSpirit Launcher JRE" module were updated in the latest FirstSpirit release. Further information can be found in chapter "SiteArchitect / ServerManager: "FirstSpirit Launcher JRE" module: update to Java versions".
CORE-11608 CORE-11635 CXT-1099	In the current FirstSpirit release, updated internally used software. Further information can be found in chapter "System: Update of internally used software".

12.19 Support for JSON

ID	Description
CXT-1140	The module "FirstSpirit Markdown Editor" requires at least FirstSpirit 2019-12 from version 1.17. Further information can be found in chapter "FirstSpirit Content Experience Tools (CXT): Module "FirstSpirit Markdown Editor": Compatibility".

12.20 Launcher

ID	Description
CORE-11501	The Java versions included in the "FirstSpirit Launcher JRE" module were updated in the latest FirstSpirit release. Further information can be found in chapter "SiteArchitect / ServerManager: "FirstSpirit Launcher JRE" module: update to Java versions".

12.21 LiveEdit

ID	Description
CORE-11453	When using the "LiveEdit" functionality, it was possible that the page could not be edited after starting a workflow.

12.22 Media

ID	Description
CORE-5135 CORE-8414 CORE-11405	In the latest FirstSpirit release, FirstSpirit supports the upload of images in SVG format with automatically identifying the MIME type. Further information can be found in chapter "Media: Support for the SVG and WebP graphic formats".

12.23 Media Store

ID	Description
CORE-5135 CORE-8414 CORE-11405	In the latest FirstSpirit release, FirstSpirit supports the upload of images in SVG format with automatically identifying the MIME type. Further information can be found in chapter "Media: Support for the SVG and WebP graphic formats".

12.24 Metadata

ID	Description
CORE-11499	Malfunctions occurred when exporting the project properties, which include a metadata configuration for the ContentCreator.

12.25 Migration

ID	Description
CORE-11171	In the latest version of FirstSpirit, the log level of the message indicating that data has been detected in an old data format has been changed from *WARN* to *DEBUG*. There are no plans to discontinue support for the old format. There is therefore no need to make manual modifications in the projects. Further information can be found in chapter "Input components: Changing the log level when indicating an old data format".
CORE-11529	**With FirstSpirit 2019-12**, the ramp-down phase for the FS_LIST input component is extended by additional use cases. A **Deprecation warning** can now also occur in projects that were still running without warnings in FirstSpirit 2019-11. The component remains fully functional with FirstSpirit 2019-12 and can still be used. **Before updating to FirstSpirit 2020-01 or higher, all FS_LIST uses must be converted to one of the successor components.** Further information can be found in chapter "Input components: FS_LIST: Ramp-down phase: Deprecation warnings".
CORE-11604	An error that prevented an input component migrated from FS_LIST to FS_CATALOG being edited initially in the ContentCreator has been corrected.
CORE-11622	With the current FirstSpirit version an error was corrected that prevented the data stored by an FS_LIST (type SERVICE) input component from being read by an FS_INDEX input component (with DataAccessPlugin), even if the DataAccessPlugin used there was compatible with the stored data of the service in the FS_LIST. Further information can be found in chapter "Input components: Error corrected when migrating data from FS_LIST (type SERVICE) ".

12.26 Module development

ID	Description
CXT-1009	When configured accordingly, variants can also be created with content originating from a translation plugin.

ID	Description
	Further information can be found in chapter "FirstSpirit Content Experience Tools (CXT): Creating a variant with translated content".

12.27 Modules

ID	Description
CORE-11520	The FirstSpirit product documentation is made available via https://docs.e-spirit.com/. The presentation of the documentation on the page has been improved: ■ The documentations are additionally sorted in alphabetical order. ■ Some documents are offered for different versions. In this case, a combobox is displayed for selecting the desired version. This combobox now always displays the current version as the first entry. Older versions are displayed in descending order below the current version.
CXT-579	"CREATE FRAGMENT" button now shows the relevant category Further information can be found in chapter "FirstSpirit Content Experience Tools (CXT): FS_INDEX: "Create fragment" button now shows the relevant category".
CXT-967	The module "FirstSpirit CXT FragmentCreator - CaaS Integration" can now generate Preview URLs again. Further information can be found in chapter "FirstSpirit Content Experience Tools (CXT): "CaaS Integration" module: Creating Preview URLs".
CXT-1132	FirstSpirit Content Experience Tools: Latest module versions Further information can be found in chapter "FirstSpirit Content Experience Tools (CXT): Latest module versions".
CXT-1140	The module "FirstSpirit Markdown Editor" requires at least FirstSpirit 2019-12 from version 1.17. Further information can be found in chapter "FirstSpirit Content Experience Tools (CXT): Module "FirstSpirit Markdown Editor": Compatibility".

12.28 Performance

ID	Description
CXT-824	An OutOfMemory error could occur in the Tomcat metaspace, e.g., after uninstalling and redeploying FragmentCreator. The web applications for FirstSpirit Content Experience Tools could then only be deployed after Tomcat was restarted. Error message: `SEVERE [http-nio-127.0.0.1-8080-exec-674] org.apache.tomcat.util.modeler.BaseModelMBean.invoke Exception invoking method [check] java.lang.OutOfMemoryError: Metaspace`. This was an error with the Eureka framework. It was rectified in close cooperation with the manufacturer: With the current release, the error message specified no longer appears. In rare cases, the web application will need to be redeployed after the "FragmentCreator" module has been updated.

12.29 Editor

ID	Description
CORE-5135 CORE-8414 CORE-11405	In the latest FirstSpirit release, FirstSpirit supports the upload of images in SVG format with automatically identifying the MIME type. Further information can be found in chapter "Media: Support for the SVG and WebP graphic formats".
CORE-11453	When using the "LiveEdit" functionality, it was possible that the page could not be edited after starting a workflow.
CORE-11520	The FirstSpirit product documentation is made available via https://docs.e-spirit.com/. The presentation of the documentation on the page has been improved: ■ The documentations are additionally sorted in alphabetical order. ■ Some documents are offered for different versions. In this case, a combobox is displayed for selecting the desired version. This combobox now always displays the current version as the first entry. Older versions are displayed in descending order below the current version.

ID	Description
CXT-194	A display problem of the fragment list, that could also mean that it was not possible to scroll through the list, has been rectified.
CXT-579	"CREATE FRAGMENT" button now shows the relevant category Further information can be found in chapter "FirstSpirit Content Experience Tools (CXT): FS_INDEX: "Create fragment" button now shows the relevant category".
CXT-721	With the current release, special variants can be created using the MicroApps API. Further information can be found in chapter "FirstSpirit Content Experience Tools (CXT): MicroApps API: Creating special variants ("variant dimensions")".
CXT-966	References from *DataAccessPlugins* are now resolved correctly even if the ID of the element contains a slash (/).
CXT-1009	When configured accordingly, variants can also be created with content originating from a translation plugin. Further information can be found in chapter "FirstSpirit Content Experience Tools (CXT): Creating a variant with translated content".
CXT-1096 CXT-985 CXT-1078	The graphical user interface of FragmentCreator is currently being revised. Further information can be found in chapter "FirstSpirit Content Experience Tools (CXT): FragmentCreator: Design revision".
CXT-1148	The design and technical basis of the FirstSpirit ContentCreator are currently being revised. The revised ContentCreator will be officially released as of FirstSpirit 2020-01, the "old" ContentCreator will be discontinued as planned as of FirstSpirit 2020-07. Further information can be found in chapter "ContentCreator: ContentCreator re-design: Current time scheduling".

12.30 Server Administrator

ID	Description
CORE-11550	Redirections in the client-server communication are restricted by the FirstSpirit server for security reasons. Using the optional parameter `allowedRedirectHosts` in the configuration

ID	Description
	file `fs-server.conf` URLs can be defined to which a redirect is to be allowed. Now the use of "wild-card" character is possible in the configuration. Further information can be found in chapter "Administration: Using wildcards to configure redirect URLs (fs-server.conf)".
CORE-11567	For better error analysis, the latest version of FirstSpirit now creates a log if problems occur when starting the JettyService (in file fs-server.log). The underlying exception will also be thrown in the event of an error. Further information can be found in chapter "Administration: Improved logging when starting the JettyService".
CORE-11584	Log level for OutOfMemory errors on the server has been changed from `ERROR` to `FATAL`.
CORE-11595	An error was fixed which could cause in rare cases that the transmission of reports could be delayed by one run due to a `java.lang.StackOverflowError` when reporting was activated.

12.31 ServerManager

ID	Description
CXT-967	The module "FirstSpirit CXT FragmentCreator - CaaS Integration" can now generate Preview URLs again. Further information can be found in chapter "FirstSpirit Content Experience Tools (CXT): "CaaS Integration" module: Creating Preview URLs".
CXT-998	Specification of a proxy when using the "FirstSpirit CXT FragmentCreator – CaaS Integration" module Further information can be found in chapter "FirstSpirit Content Experience Tools (CXT): "CaaS Integration" module: Specification of a proxy".

12.32 SiteArchitect

ID	Description
CORE-3136	With the current FirstSpirit release, the display of database tables can be collapsed in the schema editor for language-dependent columns. The simplified display ensures better legibility, particularly in projects with many project languages (and many database tables). Further information can be found in chapter "SiteArchitect: Templates: Optimizing the schema display in the schema editor".
CORE-5135 CORE-8414 CORE-11405	In the latest FirstSpirit release, FirstSpirit supports the upload of images in SVG format with automatically identifying the MIME type. Further information can be found in chapter "Media: Support for the SVG and WebP graphic formats".
CORE-11171	In the latest version of FirstSpirit, the log level of the message indicating that data has been detected in an old data format has been changed from *WARN* to *DEBUG*. There are no plans to discontinue support for the old format. There is therefore no need to make manual modifications in the projects. Further information can be found in chapter "Input components: Changing the log level when indicating an old data format".
CORE-11529	**With FirstSpirit 2019-12**, the ramp-down phase for the FS_LIST input component is extended by additional use cases. A **Deprecation warning** can now also occur in projects that were still running without warnings in FirstSpirit 2019-11. The component remains fully functional with FirstSpirit 2019-12 and can still be used. **Before updating to FirstSpirit 2020-01 or higher, all FS_LIST uses must be converted to one of the successor components.** Further information can be found in chapter "Input components: FS_LIST: Ramp-down phase: Deprecation warnings".
CORE-11583	Input components set to the "deprecated" state are now marked separately within the form (GOM definition). The opening and closing tag of the input component is crossed out in the form. Further information can be found in chapter "SiteArchitect: Templates: Better marking for input components in deprecated state".

ID	Description
CORE-11604	An error that prevented an input component migrated from FS_LIST to FS_CATALOG being edited initially in the ContentCreator has been corrected.

12.33 Sessions

ID	Description
CORE-10806	If connections to the FirstSpirit server become invalid, an automatic re-registration is now performed (if SSO is used): Previously, if an invalid session was answered with a 500 error message in the browser in some cases (`java.lang.SecurityException: Not authorized`), a new login via the start page could only take place after deleting a corresponding cookie (e.g. by terminating all browser instances). Now a new login is performed automatically (or the login dialog is displayed if no SSO is used), the cookie no longer needs to be removed.
CORE-11581	Fixed a bug that could cause instances of internal classes not to be removed when using ContentCreator when the underlying session was closed.

12.34 Languages

ID	Description
CXT-1009	When configured accordingly, variants can also be created with content originating from a translation plugin. Further information can be found in chapter "FirstSpirit Content Experience Tools (CXT): Creating a variant with translated content".

12.35 Template Store

ID	Description
CORE-3136	With the current FirstSpirit release, the display of database tables can be collapsed in the schema editor for language-dependent columns. The simplified display ensures better legibility, particularly in projects with many project languages (and many database tables). Further information can be found in chapter "SiteArchitect: Templates: Optimizing the schema display in the schema editor".
CORE-11583	Input components set to the "deprecated" state are now marked separately within the form (GOM definition). The opening and closing tag of the input component is crossed out in the form. Further information can be found in chapter "SiteArchitect: Templates: Better marking for input components in deprecated state".

12.36 Template Development

ID	Description
CORE-11171	In the latest version of FirstSpirit, the log level of the message indicating that data has been detected in an old data format has been changed from *WARN* to *DEBUG*. There are no plans to discontinue support for the old format. There is therefore no need to make manual modifications in the projects. Further information can be found in chapter "Input components: Changing the log level when indicating an old data format".
CORE-11529	**With FirstSpirit 2019-12**, the ramp-down phase for the FS_LIST input component is extended by additional use cases. A **Deprecation warning** can now also occur in projects that were still running without warnings in FirstSpirit 2019-11. The component remains fully functional with FirstSpirit 2019-12 and can still be used. **Before updating to FirstSpirit 2020-01 or higher, all FS_LIST uses must be converted to one of the successor components.** Further information can be found in chapter "Input components: FS_LIST: Ramp-down phase: Deprecation warnings".

ID	Description
CORE-11583	Input components set to the "deprecated" state are now marked separately within the form (GOM definition). The opening and closing tag of the input component is crossed out in the form. Further information can be found in chapter "SiteArchitect: Templates: Better marking for input components in deprecated state".
CORE-11604	An error that prevented an input component migrated from FS_LIST to FS_CATALOG being edited initially in the ContentCreator has been corrected.
CORE-11622	With the current FirstSpirit version an error was corrected that prevented the data stored by an FS_LIST (type SERVICE) input component from being read by an FS_INDEX input component (with DataAccessPlugin), even if the DataAccessPlugin used there was compatible with the stored data of the service in the FS_LIST. Further information can be found in chapter "Input components: Error corrected when migrating data from FS_LIST (type SERVICE) ".
CXT-579	"CREATE FRAGMENT" button now shows the relevant category Further information can be found in chapter "FirstSpirit Content Experience Tools (CXT): FS_INDEX: "Create fragment" button now shows the relevant category".
CXT-1102	For the input component CMS_INPUT_DATE, the default for the attribute `mode` is now the value *datetime* (`mode="datetime"`) for FragmentCreator (as with the other clients) so that the date and time can now be selected without specifying the attribute.

12.37 Preview

ID	Description
CORE-11088	In the latest version of FirstSpirit, the delivery of content via a redirect can be configured (using the `preview.externalDeliveryRedirect` parameter). This new configuration option should be utilized if the application server used by FirstSpirit does not have access to the web server via which the content is delivered. Further information can be found in chapter "Administration: Configuring the delivery of content via a redirect (fs-server.conf)".

12.38 Web server

ID	Description
CORE-11088	In the latest version of FirstSpirit, the delivery of content via a redirect can be configured (using the `preview.externalDeliveryRedirect` parameter). This new configuration option should be utilized if the application server used by FirstSpirit does not have access to the web server via which the content is delivered. Further information can be found in chapter "Administration: Configuring the delivery of content via a redirect (fs-server.conf)".
CXT-824	An OutOfMemory error could occur in the Tomcat metaspace, e.g., after uninstalling and redeploying FragmentCreator. The web applications for FirstSpirit Content Experience Tools could then only be deployed after Tomcat was restarted. Error message: `SEVERE [http-nio-127.0.0.1-8080-exec-674] org.apache.tomcat.util.modeler.BaseModelMBean.invoke Exception invoking method [check] java.lang.OutOfMemoryError: Metaspace.` This was an error with the Eureka framework. It was rectified in close cooperation with the manufacturer: With the current release, the error message specified no longer appears. In rare cases, the web application will need to be redeployed after the "FragmentCreator" module has been updated.