FirstSpirit™
Unlock Your Content

FirstSpirit™ Release Notes

FirstSpirit™ Version 5.2 Release 12

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1 Innovations concerning the FirstSpirit Release Management

e-Spirit develops software on the basis of a continuous improvement process. The aim is to develop functions in an agile and needs-based manner, to make them available to customers more quickly, and to continue elevating the quality of the software. This means that:

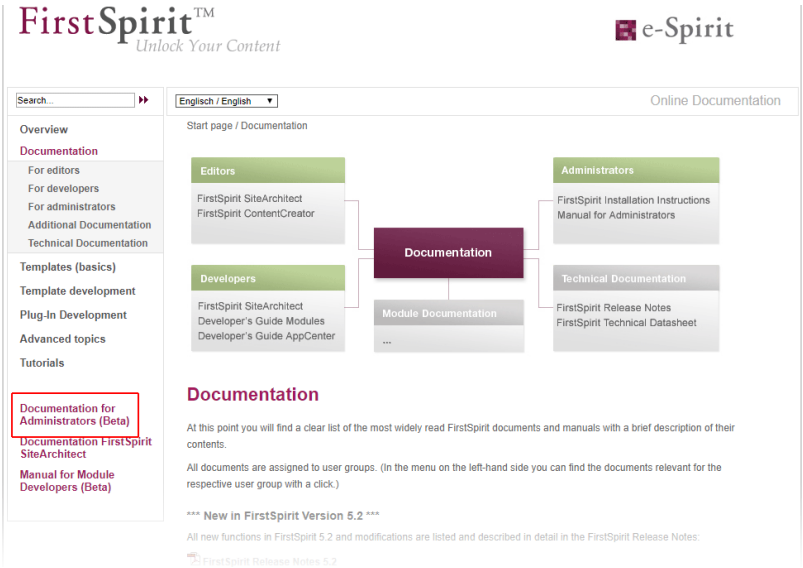
- New features and extensions are released immediately after development, testing, and documentation – irrespective of the version number.
- Wherever possible, large extensions are rolled out incrementally – even if a feature has not yet achieved its full intended range of functions, an initial version is released as soon as it provides a useful additional benefit (minimum viable product). Additional features and convenience functions are then gradually added in the following releases.
- There are no more big-bang releases. Releasing features immediately allows the software development output to be distributed evenly over time.

This approach affects our usual handling of FirstSpirit version updates and involves new best practices. For more information, please refer to FirstSpirit Community (https://community.e-spirit.com/docs/DOC-2091).

2 FirstSpirit Manual for Administrators

The “FirstSpirit Documentation for administrators” is now also created and managed by FirstSpirit. While the documentation has been available so far only in PDF format, it is now also available as HTML edition. The HTML edition is currently at beta stage: It is currently still being revised.

The HTML documentation can be reached from the left navigation sidebar in *FirstSpirit Online Documentation* (“ODFS”):



The PDF version of this documentation continues to be available via ODFS in the chapter “Documentation”, as well as from within SiteArchitect (menu “Help” (menu entry “Administrators”) and F1 or by using the help button in the horizontal toolbar).

3 Indexing of referenced datasets ("indexing.maxNoOfAssociations")

As of the current FirstSpirit version, it is possible to more precisely control indexing of referenced datasets.

The **`indexing.maxNoOfAssociations`** parameter will no longer be evaluated. If it is used in existing configurations, it should be removed from the configuration file **`fs-server.conf`** and replaced appropriately with the new parameters **`indexing.relationshipPathLengthToFollow`** and **`indexTreatment`**.

For a more detailed description of the new parameters please see Chapter “Controlling indexing of referenced datasets”.

4 Administration

4.1 Refactoring of the file fs-webapp.xml (web server "Jetty")

The file **`fs-webapp.xml`** in the sub-directory “conf” of the FirstSpirit server contains configuration settings for the internal web server “Jetty”. Due to refactoring measures, entries were removed from this file. This change only affects new installations. For existing FirstSpirit installations, this change may be carried out manually by the FirstSpirit administrator if so desired.

The following lines may be removed from the file **`fs-webapp.xml`**:

```
<!-- FirstSpirit Web Applications -->
 <!-- ============================ -->
 <New class="de.espirit.firstspirit.server.jetty.
 JettyManagerImpl$FailSafeWebAppContext">
 <Arg><Ref refid="Contexts"/></Arg>
 <Arg><SystemProperty name="WEBAPP_ROOT_PATH"/></Arg>
 <Arg><SystemProperty name="WEBAPP_ROOT_URL"/></Arg>
 </New>
 <New class="de.espirit.firstspirit.server.jetty.
 JettyManagerImpl$FailSafeWebAppContext">
 <Arg><Ref refid="Contexts"/></Arg>
 <Arg><SystemProperty name="WEBAPP_WEBMON_PATH"/></Arg>
 <Arg><SystemProperty name="WEBAPP_WEBMON_URL"/></Arg>
 </New>
 <New class="de.espirit.firstspirit.server.jetty.
 JettyManagerImpl$FailSafeWebAppContext">
 <Arg><Ref refid="Contexts"/></Arg>
 <Arg><SystemProperty name="WEBAPP_WEBEDIT5_PATH"/></Arg>
 <Arg><SystemProperty name="WEBAPP_WEBEDIT5_URL"/></Arg>
 </New>
 <New class="de.espirit.firstspirit.server.jetty.
 JettyManagerImpl$FailSafeWebAppContext">
 <Arg><Ref refid="Contexts"/></Arg>
 <Arg><SystemProperty name="WEBAPP_STAGING_PATH"/></Arg>
 <Arg><SystemProperty name="WEBAPP_STAGING_URL"/></Arg>
 </New>
 <New class="de.espirit.firstspirit.server.jetty.
 JettyManagerImpl$FailSafeWebAppContext">
 <Arg><Ref refid="Contexts"/></Arg>
 <Arg><SystemProperty name="WEBAPP_PREVIEW_PATH"/></Arg>
 <Arg><SystemProperty name="WEBAPP_PREVIEW_URL"/></Arg>
 </New>
```

! The integrated web server Jetty is not fit for use in production scenarios and should only be used for testing.

5 External Synchronization

5.1 External Synchronization: More stable identification of objects (using GIDs)

The identification of objects via the functionality “External Synchronization” now uses GIDs (“global IDs”). GIDs are project data that are used internally for object referencing. As opposed to UIDs, GIDs are not affected by manual changes, such as renaming an object in either source or target projects, and thus allow for more stable behavior when exporting or importing objects.

Previous behavior: When importing an object from a source project into a target project, External Synchronization attempted to identify a matching object in the target project using the UID. If an object was identified, modifications to that object in the target project were overwritten. If no object could be identified, the object was created in the target project.
Changes to the UID of the object in either the source or the target projects had the effect that, during a subsequent import into the target project, a matching object could not be identified, always leading to *creation of a new object* in the target project.

Current behavior: When importing an object from a source project into a target project, External Synchronization now attempts to identify a matching object in the target project using the GID. If an object is identified, modifications to that object in the target project will be overwritten. Even if the UID of the object was changed, the object can now be identified in the target project. If no matching object can be identified using the GID, an attempt will be made to identify a matching object using the UID (see “Previous behavior”).

6 General

6.1 Datenbases: Support for MariaDB

FirstSpirit has been designed as an enterprise content management system for application in complex IT landscapes, and supports various operating systems, Java runtime environments, and databases.

As of the current FirstSpirit version, MariaDB (cf. also to https://mariadb.org) is officially supported for use with FirstSpirit, in version 10.1. Reference version is 10.1.23.

Note: Please use the MySQL JDBC driver for MariaDB (**`mysql-connector-java-x.x-bin.jar`**).

For further information, see *FirstSpirit Technical Datasheet* and *FirstSpirit Server configuration / Database connection / Examples of application* (→*Documentation for Administrators (Beta)*).

7 Module Development, Scripts, API

7.1 Modifying FeatureDescriptor objects stored server-side via API

With newly-created API means, it is now possible to modify **`FeatureDescriptor`** objects stored server-side and to save them again. A typical use case is storing a FeatureDescriptor with a current revision (method **`createFeatureBuilder`** of the interface **`FeatureAgent`**, package **`de.espirit.firstspirit.feature`**, FirstSpirit Developer API).

7.2 New method "getServiceConfig" in interface "ModuleAdminAgent"

The new method **`getServiceConfig`** of the interface **`ModuleAdminAgent`** (package **`de.espirit.firstspirit.agency`**, FirstSpirit Developer API) provides access to the directory containing the configuration files of a service of a module (analogous to **`getProjectAppConfig`** and **`getWebAppConfig`**). This requires server administrator privileges.

8 Search

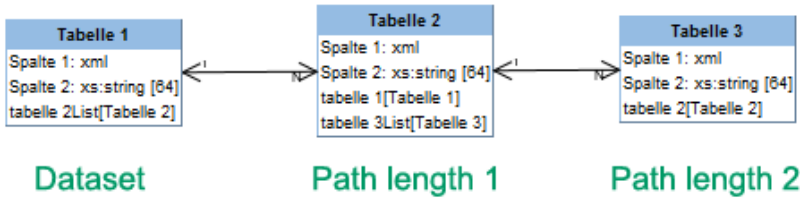
8.1 Controlling indexing of referenced datasets

When creating, editing, or deleting FirstSpirit elements (e.g. pages, sections, media), the contents and data of such elements are written into or removed from the index, respectively, so that elements can be found more quickly using search functionality. This indexing process also includes referenced elements. The number of references that have to be considered influences the duration of an indexing process. Especially datasets that reference further datasets in other tables can cause indexing of all referenced elements to run long due to the resulting complex data structures. Until now, the parameter **`indexing.maxNoOfAssociations`** (configuration file **`fs-server.conf`**) could be used to limit indexing of referencing datasets: when a defined limit of indexed elements was reached, indexing was aborted, and further elements were not written into the index. As of the current version of FirstSpirit, this parameter will no longer be evaluated and has been replaced with a new parameter, **`indexing.relationshipPathLengthToFollow`**, which allows better control of indexing.

As of the current FirstSpirit version, indexing of datasets that are referenced via

- FS_DATASET
- FS_INDEX (used for dataset selection via **`DatasetDataAccessPlugin`**)
- FS_LIST (type DATABASE)

may be configured such that the path length will be considered. For a dataset which references other datasets, this controls whether the contents of only this “origin” dataset should be indexed or the contents of this dataset and of the datasets it references should be indexed. If contents of referenced datasets should be indexed as well, the parameter allows specification of the path length to which references should be considered. For example, a path length 2 means that, in addition to the contents of the “origin” dataset, the contents of datasets referenced by this “origin” dataset as well as the contents of datasets referenced by these datasets will be indexed:



The path length can be set for the input components mentioned above via the parameter **`indexing.relationshipPathLengthToFollow`** in the configuration file **`fs-server.conf`**. By default, a path length “1” is assumed such that, for the input components mentioned above, datasets and the datasets they immediately reference are indexed. If no referenced datasets should be indexed, the parameter's value must be set to “0”, e.g.

```
indexing.relationshipPathLengthToFollow=0
```

Other path lengths may be specified by setting the desired value. This configuration is applied server-wide for all projects.

> **!** Datasets which are stored in the same table will not be indexed.

> **!** The indexing behavior illustrated here only applies to the input components mentioned above. For other input components which may reference datasets via CMS_INCLUDE_OPTIONS, contents of referenced datasets will not be indexed, but the ID of the referenced dataset, the label (tag **LABELS**), and the key (tag **KEY**) will be added to the index.

The indexing behavior illustrated here also applies to referenced datasets in pages and sections. The page or section in which the dataset-referencing input component is located is considered to be path length “0”. With **`indexing.relationshipPathLengthToFollow=0`**, only the contents of the page or the section would be indexed. In order to also index contents of the referenced dataset, **`indexing.relationshipPathLengthToFollow`** must be set to a value of “1”.

On a project/component level, the parameter **`indexTreatment`** may be used to manually extend the path length specified by **`indexing.relationshipPathLengthToFollow`** across certain tables, thereby practically increasing the value of the parameter **`indexing.relationshipPathLengthToFollow`** for individual input components. If **`indexTreatment="follow"`** is set, datasets which are referenced by the input component in question will be indexed along with the origin dataset. If the parameter is not set, **`indexTreatment="default"`** is assumed, and referenced datasets will be indexed according to the configuration of **`indexing.relationshipPathLengthToFollow`**. The parameter **`indexTreatment`** can thus only be used to extend indexing to a longer path length, but not to limit indexing.

If the path length should be extended via **`indexTreatment="follow"`** across several tables, **`indexTreatment="follow"`** must be set for the relevant input component in each table along the desired path. If **`indexTreatment="follow"`** is not set in a table template (this corresponds to **`indexTreatment="default"`**), indexing will stop.

> **!** Contents in input components for which the parameter **`searchRelevancy="none"`** is set will not be indexed, regardless of the configuration of **`indexing.relationshipPathLengthToFollow`** and/or **`indexTreatment`**.

> **!** Because the new parameters **`indexing.relationshipPathLengthToFollow`** and **`indexTreatment`** allow for more precise configuration of the indexing behavior for referenced datasets, the parameter **`indexing.maxNoOfAssociations`** will no longer be evaluated as of the current FirstSpirit version. In existing configurations, **`indexing.maxNoOfAssociations`** must be replaced with the new parameters in a suitable fashion. If **`indexing.maxNoOfAssociations`** was set to “0” or “1” in existing projects, **`indexing.relationshipPathLengthToFollow`** should be set to “0” after an update to the current version of FirstSpirit in order to ensure comparable behavior. Regardless of setting these new parameters, the set of search results may be different between the current FirstSpirit version and previous FirstSpirit versions, depending on the database schema.

Setting or modifying these parameters in retrospect will not have automatic effects on search results; the different indexing behavior will only be shown after modifying respective content. Alternatively, it is possible to reindex the entire project or parts of a project via a schedule task or the API. Such a reindexing process creates higher CPU and memory loads, however, and should only be carried out during a maintenance period!

In the context of these changes, the FirstSpirit API was extended. Use of the API is only relevant for development of project-specific input components.

The interface **`ValueIndexer`** (FirstSpirit Developer API, package **`de.espirit.firstspirit.access.editor`**) was extended with the following methods:

- *appendFormData(FormData formData, Language language, boolean followAssociations)*: This method is used to add content of form data (provided by the **`formData`** object) for a given language (**`language`** object) to the index. If **`followAssociations`** is set to *true*, dataset references contained in the form data will be followed.

- *appendAssociate(Associate associate, Language language, boolean followAssociations)*: This method allows adding data of an associated element in the given language to the index. If **`followAssociations`** is set to *true*, dataset references will be followed.
  If the method *associate(Entity)* is used, the method *appendAssociate()* will not have any effect if it is used for the same element.

Furthermore, the following interfaces were added to the package **`de.espirit.firstspirit.access.editor`**:

- **`Associate`**: Offers an abstract description of associated elements which may be referenced from form data.

- **`GomIndexTreatment`**: Provides the parameter **`indexTreatment`** for customer-specific input components.

For further information, see

- *FirstSpirit Manual for Administrators*, “FirstSpirit Server configuration / Configuration files (FirstSpirit Server) / FirstSpirit Server configuration (fs-server.conf) / Server”, parameter **`indexing.relationshipPathLengthToFollow`**

- *FirstSpirit Online Documentation*, parameter **`indexTreatment`** for input components at “Template development / Forms / Input components”

- *FirstSpirit Online Documentation*, “Plug-In Development / Universal Extensions / Input Components / GOM Form Element”

9 Security

9.1 Behavior of the HTTP header "X-Frame-Options" is now configurable for the FirstSpirit web applications fs5root and fs5webmon

Support for the HTTP header “X-Frame-Options”: The behavior of the HTTP header “X-Frame-Options” is now configurable for the FirstSpirit web applications **`fs5root`** (start page and SiteArchitect) and **`fs5webmon`** (ServerMonitoring). It can be controlled via the parameter **`frameOptionsHeader`** in the configuration file **`fs-server.conf`**:

```
#######################################################
# X-Frame-Options header to control frame embedding
# of FirstSpirit fs5root or fs5webmon webapplication
#######################################################
# X-Frame-Options header value
# - DENY do not allow embedding in a frame
# - SAMEORIGIN only allow embedding in a frame from a page of the same origin
# - ALLOW_ALL do not limit embedding / do not set X-Frame-Options header
frameOptionsHeader=SAMEORIGIN
```

Possible values:

- **`DENY`** prohibits embedding of the web applications into a frame
- **`SAMEORIGIN`** prohibits embedding of the web applications into a frame which is not located on the same host (default value)
- **`ALLOW_ALL`** allows embedding of the web applications into a frame

> **!** The new parameter changes the previous default behavior. If embedding of the FirstSpirit web applications (or LiveEdit) into frames of another host should be allowed or if such embedding should generally be prohibited, the configuration parameter must now be set to the appropriate value.

10 System

10.1 Integrated Software

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

- **Java Development Kit** (“JDK”, included in FirstSpirit Launcher)
  Update from version 1.8.0_121 to 1.8.0_131

11 Overview

ID	Description	Categories
177696	For a project, several remote projects can be configured that all have the same remote category. In an error case (e.g. if a remote project was deleted), the error message now mentions the symbolic name of the project in question when saving the remote configuration of an input component (e.g. FS_REFERENCE, tag **`<CATEGORY>`**).	Remote access, SiteArchitect

ID	Description	Categories
179562	With newly-created API means, it is now possible to modify **`FeatureDescriptor`** objects stored server-side and to save them again. Further information can be found in chapter “Module Development, Scripts, API: Modifying FeatureDescriptor objects stored server-side via API”.	Content Transport, FirstSpirit API
183736	In rare cases, switching among tabs in the editorial workspace could lead to erroneous behavior.	SiteArchitect
188265	Due to refactoring measures, entries were removed from the file **`fs-webapp.xml`**. This change only affects new installations. For existing FirstSpirit installations, this change may be carried out manually by the FirstSpirit administrator if so desired. Further information can be found in chapter “Administration: Refactoring of the file fs-webapp.xml (web server "Jetty")”.	FirstSpirit Administrator
193244	When installing the Launcher, problems could arise if multiple users used the same computer.	Launcher
193704	Under certain circumstances, nesting of the input component FS_CATALOG could lead to erroneous behavior.	SiteArchitect
194731	As of the current FirstSpirit version, MariaDB is officially supported for use with FirstSpirit. Further information can be found in chapter “General: Datenbases: Support for MariaDB”.	Database
195760	Improved cluster generation on slave servers.	Generation
198086	As of the current FirstSpirit version, it is possible to more precisely control indexing of referenced datasets. Further information can be found in chapter “Search: Controlling indexing of referenced datasets”.	Content Store, Developer, FirstSpirit API, Indexing, Input Components, Performance, Search
199248	Improved logging when rolling out packages.	Corporate Content

ID	Description	Categories
199336	In the current FirstSpirit version, updated internally used software (JDK in FirstSpirit Launcher). Further information can be found in chapter “System: Integrated Software”.	Integrated software
199443	Improved user interaction pattern of creating a dataset.	Content Store, Content-Creator
199453	Improved display of errors of type “FATAL” in ServerMonitoring.	ServerMonitoring
199483	Improved update process for global web applications.	FirstSpirit Administrator, Modules
199484	Improved deployment of custom global web applications.	Server Administrator
199969	Improved management of technical user sessions.	Sessions
200201	Temporal facets of search will now be evaluated correctly again.	ContentCreator, Search
200362	When transferring changes between projects with different language sets, using default values could erroneously lead to manually set values not being preserved.	Corporate Content
200488	From within a script, dialogs may be opened and forms may be displayed and modified using the FirstSpirit API. In this context, erroneous behavior could arise when setting values for the input component FS_REFERENCE.	Developer, SiteArchitect
200581	On the operating system Microsoft Windows, the parameter **`WEBAPP_STAGING_PATH`** in the file **`fs-server.conf`** no longer distinguishes between uppercase and lowercase characters in the path value.	FirstSpirit Administrator
200638	Improved behavior of the attribute **`regex`** of the **`<MATCHES/>`** tag in rules (functionality “Dynamic Forms”).	Developer, Dynamic Forms, Template Development
200642	Improved installation process for features that contain datasets.	Content Transport
200678	If a filtered data source is used in conjunction with an FS_DATASET input component and **`selectorMode="list"`**, this filter will now also be used for dataset searches in the selection dialog.	Input Components, Search, SiteArchitect

ID	Description	Categories
200738	In very rare cases, erroneous behavior could occur in Template Wizard.	Template Wizard
200743	Improved performance of storing and writing revision data.	Performance, Repository
200941	In very rare cases, it was possible that not all external references were observed during archiving.	Archiving
201164	When using cluster generation, an error could arise if user-specific services were used.	Generation, Modules, Services
201198	Improved observation of own values in the input component CMS_INPUT_COMBOBOX (attribute **`editable`**).	Input Components, SiteArchitect
201211	Identification of objects now uses GIDs (“global IDs”) instead of UIDs. This allows for better matching of objects from a source project to objects in a target project and thus more stable behavior when exporting and importing objects via the functionality “External Synchronization”. Further information can be found in chapter “External Synchronization: External Synchronization: More stable identification of objects (using GIDs)”.	Developer, External synchronization
201269	By implementing Data Access Plug-Ins, external sources can be integrated into FS_INDEX input components. The snippet display for referenced objects has been optimized.	ContentCreator
201326	Improved evaluation of rules within the input component FS_LIST (type DATABASE).	Dynamic Forms, SiteArchitect
201349	Optimized log messages of the browser engines used for internal preview.	SiteArchitect
201358	Generation on a cluster node could lead to erroneous behavior.	FirstSpirit Administrator, Generation
201391	In very rare cases, not all values were copied when creating a copy of a dataset.	ContentCreator

ID	Description	Categories
201458	The behavior of the HTTP header “X-Frame-Options” is now configurable for the FirstSpirit web applications **`fs5root`** (start page and SiteArchitect) and **`fs5webmon`** (ServerMonitoring). It can be controlled via the parameter **`frameOptionsHeader`** in the configuration file **`fs-server.conf`**. The new parameter changes the previous default behavior. If embedding of the FirstSpirit web applications (or LiveEdit) into frames of another host should be allowed or if such embedding should generally be prohibited, the configuration parameter must now be set to the appropriate value. Further information can be found in chapter “Security: Behavior of the HTTP header "X-Frame-Options" is now configurable for the FirstSpirit web applications fs5root and fs5webmon”.	FirstSpirit Administrator, FirstSpirit home page, Security, Server Administrator, ServerMonitoring
201493	Improved performance related to media uploads.	ContentCreator, SiteArchitect
201510	In rare cases, erroneous behavior could occur when using ContentCreator in Apache Tomcat.	ContentCreator
201517	In very rare cases, erroneous behavior could arise during identification of the page template upon which the Project Settings page is based.	Global settings
201632	Improved performance related to the use of many ACL databases.	Performance
201690	Improved start-up of Launcher with proxy settings.	Launcher, SiteArchitect
201881	New method **`getServiceConfig`** in interface **`ModuleAdminAgent`**. Further information can be found in chapter “Module Development, Scripts, API: New method "getServiceConfig" in interface "ModuleAdminAgent"”.	Developer, FirstSpirit API, Module development
201949	When archiving a project, contents of databases that were marked “read-only” were erroneously archived as well.	Archiving, Database, Tasks
201996	In rare cases, erroneous behavior could occur while editing scripts.	SiteArchitect, Template Development

12 Categories

12.1 Archiving

ID	Description
200941	In very rare cases, it was possible that not all external references were observed during archiving.
201949	When archiving a project, contents of databases that were marked “read-only” were erroneously archived as well.

12.2 Content Store

ID	Description
198086	As of the current FirstSpirit version, it is possible to more precisely control indexing of referenced datasets. Further information can be found in chapter “Search: Controlling indexing of referenced datasets”.
199443	Improved user interaction pattern of creating a dataset.

12.3 Content Transport

ID	Description
179562	With newly-created API means, it is now possible to modify **`FeatureDescriptor`** objects stored server-side and to save them again. Further information can be found in chapter “Module Development, Scripts, API: Modifying Feature-Descriptor objects stored server-side via API”.
200642	Improved installation process for features that contain datasets.

12.4 ContentCreator

ID	Description
199443	Improved user interaction pattern of creating a dataset.
200201	Temporal facets of search will now be evaluated correctly again.
201269	By implementing Data Access Plug-Ins, external sources can be integrated into FS_INDEX input components. The snippet display for referenced objects has been optimized.
201391	In very rare cases, not all values were copied when creating a copy of a dataset.
201493	Improved performance related to media uploads.
201510	In rare cases, erroneous behavior could occur when using ContentCreator in Apache Tomcat.

12.5 Corporate Content

ID	Description
199248	Improved logging when rolling out packages.
200362	When transferring changes between projects with different language sets, using default values could erroneously lead to manually set values not being preserved.

12.6 Database

ID	Description
194731	As of the current FirstSpirit version, MariaDB is officially supported for use with FirstSpirit. Further information can be found in chapter “General: Datenbases: Support for MariaDB”.
201949	When archiving a project, contents of databases that were marked “read-only” were erroneously archived as well.

12.7 Developer

ID	Description
198086	As of the current FirstSpirit version, it is possible to more precisely control indexing of referenced datasets. Further information can be found in chapter “Search: Controlling indexing of referenced datasets”.
200488	From within a script, dialogs may be opened and forms may be displayed and modified using the FirstSpirit API. In this context, erroneous behavior could arise when setting values for the input component FS_REFERENCE.
200638	Improved behavior of the attribute **`regex`** of the **`<MATCHES/>`** tag in rules (functionality “Dynamic Forms”).
201211	Identification of objects now uses GIDs (“global IDs”) instead of UIDs. This allows for better matching of objects from a source project to objects in a target project and thus more stable behavior when exporting and importing objects via the functionality “External Synchronization”. Further information can be found in chapter “External Synchronization: External Synchronization: More stable identification of objects (using GIDs)”.
201881	New method **`getServiceConfig`** in interface **`ModuleAdminAgent`**. Further information can be found in chapter “Module Development, Scripts, API: New method "getServiceConfig" in interface "ModuleAdminAgent"”.

12.8 Dynamic Forms

ID	Description
200638	Improved behavior of the attribute **`regex`** of the **`<MATCHES/>`** tag in rules (functionality “Dynamic Forms”).
201326	Improved evaluation of rules within the input component FS_LIST (type DATABASE).

12.9 External synchronization

ID	Description
201211	Identification of objects now uses GIDs (“global IDs”) instead of UIDs. This allows for better matching of objects from a source project to objects in a target project and thus more stable behavior when exporting and importing objects via the functionality “External Synchronization”. Further information can be found in chapter “External Synchronization: External Synchronization: More stable identification of objects (using GIDs)”.

12.10 FirstSpirit API

ID	Description
179562	With newly-created API means, it is now possible to modify **`FeatureDescriptor`** objects stored server-side and to save them again. Further information can be found in chapter “Module Development, Scripts, API: Modifying Feature-Descriptor objects stored server-side via API”.
198086	As of the current FirstSpirit version, it is possible to more precisely control indexing of referenced datasets. Further information can be found in chapter “Search: Controlling indexing of referenced datasets”.
201881	New method **`getServiceConfig`** in interface **`ModuleAdminAgent`**. Further information can be found in chapter “Module Development, Scripts, API: New method "getServiceConfig" in interface "ModuleAdminAgent"”.

12.11 FirstSpirit Administrator

ID	Description
188265	Due to refactoring measures, entries were removed from the file **`fs-webapp.xml`**. This change only affects new installations. For existing FirstSpirit installations, this change may be carried out manually by the FirstSpirit administrator if so desired.

ID	Description
	Further information can be found in chapter “Administration: Refactoring of the file fs-webapp.xml (web server "Jetty")”.
199483	Improved update process for global web applications.
200581	On the operating system Microsoft Windows, the parameter **`WEBAPP_STAGING_PATH`** in the file **`fs-server.conf`** no longer distinguishes between uppercase and lowercase characters in the path value.
201358	Generation on a cluster node could lead to erroneous behavior.
201458	The behavior of the HTTP header “X-Frame-Options” is now configurable for the FirstSpirit web applications **`fs5root`** (start page and SiteArchitect) and **`fs5webmon`** (ServerMonitoring). It can be controlled via the parameter **`frameOptionsHeader`** in the configuration file **`fs-server.conf`**. The new parameter changes the previous default behavior. If embedding of the FirstSpirit web applications (or LiveEdit) into frames of another host should be allowed or if such embedding should generally be prohibited, the configuration parameter must now be set to the appropriate value. Further information can be found in chapter “Security: Behavior of the HTTP header "X-Frame-Options" is now configurable for the FirstSpirit web applications fs5root and fs5webmon”.

12.12 FirstSpirit home page

ID	Description
201458	The behavior of the HTTP header “X-Frame-Options” is now configurable for the FirstSpirit web applications **`fs5root`** (start page and SiteArchitect) and **`fs5webmon`** (ServerMonitoring). It can be controlled via the parameter **`frameOptionsHeader`** in the configuration file **`fs-server.conf`**. The new parameter changes the previous default behavior. If embedding of the FirstSpirit web applications (or LiveEdit) into frames of another host should be allowed or if such embedding should generally be prohibited, the configuration parameter must now be set to the appropriate value. Further information can be found in chapter “Security: Behavior of the HTTP header "X-Frame-Options" is now configurable for the FirstSpirit web applications fs5root and fs5webmon”.

12.13 Generation

ID	Description
195760	Improved cluster generation on slave servers.
201164	When using cluster generation, an error could arise if user-specific services were used.
201358	Generation on a cluster node could lead to erroneous behavior.

12.14 Global settings

ID	Description
201517	In very rare cases, erroneous behavior could arise during identification of the page template upon which the Project Settings page is based.

12.15 Indexing

ID	Description
198086	As of the current FirstSpirit version, it is possible to more precisely control indexing of referenced datasets. Further information can be found in chapter “Search: Controlling indexing of referenced datasets”.

12.16 Input Components

ID	Description
198086	As of the current FirstSpirit version, it is possible to more precisely control indexing of referenced datasets. Further information can be found in chapter “Search: Controlling indexing of referenced datasets”.
200678	If a filtered data source is used in conjunction with an FS_DATASET input component and **`selectorMode="list"`**, this filter will now also be used for dataset searches in the selection dialog.

ID	Description
201198	Improved observation of own values in the input component CMS_INPUT_COMBOBOX (attribute **`editable`**).

12.17 Integrated software

ID	Description
199336	In the current FirstSpirit version, updated internally used software (JDK in FirstSpirit Launcher). Further information can be found in chapter “System: Integrated Software”.

12.18 Launcher

ID	Description
193244	When installing the Launcher, problems could arise if multiple users used the same computer.
201690	Improved start-up of Launcher with proxy settings.

12.19 Module development

ID	Description
201881	New method **`getServiceConfig`** in interface **`ModuleAdminAgent`**. Further information can be found in chapter “Module Development, Scripts, API: New method "getServiceConfig" in interface "ModuleAdminAgent"”.

12.20 Modules

ID	Description
199483	Improved update process for global web applications.
201164	When using cluster generation, an error could arise if user-specific services were used.

12.21 Performance

ID	Description
198086	As of the current FirstSpirit version, it is possible to more precisely control indexing of referenced datasets. Further information can be found in chapter “Search: Controlling indexing of referenced datasets”.
200743	Improved performance of storing and writing revision data.
201632	Improved performance related to the use of many ACL databases.

12.22 Remote access

ID	Description
177696	For a project, several remote projects can be configured that all have the same remote category. In an error case (e.g. if a remote project was deleted), the error message now mentions the symbolic name of the project in question when saving the remote configuration of an input component (e.g. FS_REFERENCE, tag **<CATEGORY>**).

12.23 Repository

ID	Description
200743	Improved performance of storing and writing revision data.

12.24 Search

ID	Description
198086	As of the current FirstSpirit version, it is possible to more precisely control indexing of referenced datasets. Further information can be found in chapter “Search: Controlling indexing of referenced datasets”.
200201	Temporal facets of search will now be evaluated correctly again.

ID	Description
200678	If a filtered data source is used in conjunction with an FS_DATASET input component and **`selectorMode="list"`**, this filter will now also be used for dataset searches in the selection dialog.

12.25 Security

ID	Description
201458	The behavior of the HTTP header “X-Frame-Options” is now configurable for the FirstSpirit web applications **`fs5root`** (start page and SiteArchitect) and **`fs5webmon`** (ServerMonitoring). It can be controlled via the parameter **`frameOptionsHeader`** in the configuration file **`fs-server.conf`**. The new parameter changes the previous default behavior. If embedding of the FirstSpirit web applications (or LiveEdit) into frames of another host should be allowed or if such embedding should generally be prohibited, the configuration parameter must now be set to the appropriate value. Further information can be found in chapter “Security: Behavior of the HTTP header "X-Frame-Options" is now configurable for the FirstSpirit web applications fs5root and fs5webmon”.

12.26 Server Administrator

ID	Description
199484	Improved deployment of custom global web applications.
201458	The behavior of the HTTP header “X-Frame-Options” is now configurable for the FirstSpirit web applications **`fs5root`** (start page and SiteArchitect) and **`fs5webmon`** (ServerMonitoring). It can be controlled via the parameter **`frameOptionsHeader`** in the configuration file **`fs-server.conf`**. The new parameter changes the previous default behavior. If embedding of the FirstSpirit web applications (or LiveEdit) into frames of another host should be allowed or if such embedding should generally be prohibited, the configuration parameter must now be set to the appropriate value. Further information can be found in chapter “Security: Behavior of the HTTP header "X-Frame-Options" is now configurable for the FirstSpirit web applications fs5root and fs5webmon”.

12.27 ServerMonitoring

ID	Description
199453	Improved display of errors of type “FATAL” in ServerMonitoring.
201458	The behavior of the HTTP header “X-Frame-Options” is now configurable for the FirstSpirit web applications **`fs5root`** (start page and SiteArchitect) and **`fs5webmon`** (ServerMonitoring). It can be controlled via the parameter **`frameOptionsHeader`** in the configuration file **`fs-server.conf`**. The new parameter changes the previous default behavior. If embedding of the FirstSpirit web applications (or LiveEdit) into frames of another host should be allowed or if such embedding should generally be prohibited, the configuration parameter must now be set to the appropriate value. Further information can be found in chapter “Security: Behavior of the HTTP header "X-Frame-Options" is now configurable for the FirstSpirit web applications fs5root and fs5webmon”.

12.28 Services

ID	Description
201164	When using cluster generation, an error could arise if user-specific services were used.

12.29 Sessions

ID	Description
199969	Improved management of technical user sessions.

12.30 SiteArchitect

ID	Description
177696	For a project, several remote projects can be configured that all have the same remote category. In an error case (e.g. if a remote project was deleted), the error message now mentions the symbolic name of the project in question when saving the remote configuration of an input component (e.g. FS_REFERENCE, tag **`<CATEGORY>`**).

ID	Description
183736	In rare cases, switching among tabs in the editorial workspace could lead to erroneous behavior.
193704	Under certain circumstances, nesting of the input component FS_CATALOG could lead to erroneous behavior.
200488	From within a script, dialogs may be opened and forms may be displayed and modified using the FirstSpirit API. In this context, erroneous behavior could arise when setting values for the input component FS_REFERENCE.
200678	If a filtered data source is used in conjunction with an FS_DATASET input component and **`selectorMode="list"`**, this filter will now also be used for dataset searches in the selection dialog.
201198	Improved observation of own values in the input component CMS_INPUT_COMBOBOX (attribute **`editable`**).
201326	Improved evaluation of rules within the input component FS_LIST (type DATABASE).
201349	Optimized log messages of the browser engines used for internal preview.
201493	Improved performance related to media uploads.
201690	Improved start-up of Launcher with proxy settings.
201996	In rare cases, erroneous behavior could occur while editing scripts.

12.31 Tasks

ID	Description
201949	When archiving a project, contents of databases that were marked “read-only” were erroneously archived as well.

12.32 Template Development

ID	Description
200638	Improved behavior of the attribute **`regex`** of the **`<MATCHES/>`** tag in rules (functionality “Dynamic Forms”).
201996	In rare cases, erroneous behavior could occur while editing scripts.

12.33 Template Wizard

ID	Description
200738	In very rare cases, erroneous behavior could occur in Template Wizard.