

Previously released versions: 4.2.38, 4.2.206, 4.2.219, 4.2.223, 4.2.432, 4.2.437, 4.2.446, 4.2.453, 4.2.454, 4.2.461

Passing authentication cookies

Some HTTP servers may require user authentication to establish a connection or for communication. In this case information is provided (e.g. a ticket number) using a cookie after successful authentication in the HTTP client (e.g. a web browser) in order to avoid having to re-authenticate the next time the user opens the client.

FirstSpirit has now been enhanced to allow these authentication cookies to be used for HTTP communication between the FirstSpirit JavaClient and HTTP servers, i.e. the cookie is passed from the web browser via Java Webstart to an opened FirstSpirit JavaClient.

The "clientCookieNames" parameter in the server configuration file ("fs-server.conf") can be used to define which cookies are to be considered for passing.

For the value, the parameter expects a comma-separated list of cookie names that are to be used for passing:

```
clientCookieNames=cookieA,cookieB...
```

Updates of the cookie values by the HTTP server are accordingly taken into account for the HTTP connections.

Exporting projects and archiving

As listed in the release notes for FirstSpirit version 4.2.223 (page 3, ID 84303), tar archives are used for archiving and for exporting and importing projects, for instance. So far the size of the individual files has been limited to a maximum of 8 GB. For the Content Store, an additional protective feature has been implemented for archiving, which means that once the tar entry there reaches 90% of its maximum size, one final row is exported and archival is then stopped.

Tar support was improved in FirstSpirit version 4.2.468. Now an extended tar format ("star/GNU tar/BSD tar") is being used. This provides the ability to handle individual files that are larger than 8 GB. Unfortunately, the specification does not include information on the maximum size or more specific information. Only the "files with unlimited size" information is included.

This change, however, does not have any impact on the protective feature when archiving content sources, which means that the maximum size of a tar entry for a content source in a tar archive is limited to 8 GB. This limitation does not have any impact on the archival functionality.

Importing parts of projects to older versions of the software

Exporting projects or even parts of projects (e.g. template updates, etc.) that were created using a newer version of the FirstSpirit Server, e.g. 4.2, and then importing to an older version of the FirstSpirit Server, such as 4.1, is not guaranteed to work.

Technically, this type of export/import is possible, but may lead to unpredictable problems, particularly when exporting or saving a template from version 4.2 to version 4.1 or older, for instance, due to the numerous new functions that have been implemented and incompatible modifications that affect the software's behavior.

Staging web application and "SEARCH" module

As part of the continuous improvements being made to FirstSpirit as of version 4.2.468, the staging web application has been expanded to include user authentication, which means that the staging web application now also incorporates the login process configuration (fs-jaas.conf). Additional information on configuring the login process can be found in the FirstSpirit "Documentation for Administrators" (section 4.3.4, page 76 ff.).

As with any FirstSpirit update, when using external application servers, the global and local project staging web applications must be manually updated in order to use the add-on.

User authentication may impact modules such as the "SEARCH" module, or other uses of the staging web application. Since it is no longer possible to call the staging web application without authentication, the search index cannot be built when using the "SEARCH" module, for instance. In this case, the "SEARCH" module configuration needs to be adapted and additional login information is required.

It is advisable that you review the local project and global staging web applications and, if necessary, amend the login information.

Search function: indexing additional Office formats

In FirstSpirit version 4.2.468 the search mechanism has been updated. It is now possible to index more Microsoft Office file formats, including Office 2007 and 2010, than in previous versions of FirstSpirit.

The new Office formats are included only when indexing new or changed files.

To ensure that the new functionality in the “SEARCH” module can be used, all web applications that use this module must be updated.

Notes on using FirstSpirit under Windows 2008 with special files systems

We generally advise against using FirstSpirit in conjunction with remote and virtual file systems for the repository (see Technical Data Sheet - FirstSpirit version 4.2).

Specifically under Windows 2008, malfunctions may occur in some cases in conjunction with file systems that are linked via NFS/NAS or virtualization technology.

In this case, the “repository.je.log.useODSYNC” parameter needs to be added to the “fs-server.conf” file:

```
repository.je.log.useODSYNC=true
```

Additional information is available on the following web page:

<http://www.oracle.com/technetwork/database/berkeleydb/je-faq-096044.html#CanBerkeleyDBJavaEditionuseaNFSSANorotherremotessharednetworkfilesystemforanenvironment>

Errors in Oracle / Sun JDK versions before version 6 update 32

Generally, FirstSpirit is approved for use with a major version of a JDK, such as Oracle Java 6 (JDK 1.6) or IBM JDK 1.5.

JDK updates are regularly issued as part of JDK bug fixes. These updates are checked for compatibility with FirstSpirit as part of quality assurance.

In very rare cases bugs in JDK that cannot be bypassed by programming may cause incompatibilities. These bugs are not related to FirstSpirit.

Due to a bug in Oracle (formerly Sun) JDK versions prior to version 6 update 32, a memory leak occurs in the JMX garbage collector MXBean which can be used to monitor garbage collection.

It is advisable when using an Oracle JDK version older than version 6 update 32 and a FirstSpirit version older than 4.2.468 to add the parameter “memory.gcMaxTimeWarn” to the “fs-server.conf” file:

```
memory.gcMaxTimeWarn=0
```

Starting with FirstSpirit version 4.2.468 the standard value for the “memory.gcMaxTimeWarn” parameter was changed so that in most cases it is not necessary to make any adjustments. However, it is advisable to check the “fs-server.conf” file and, if necessary, remove the parameter there.

You can read more about the particular bug entry by Oracle here: http://bugs.sun.com/bugdatabase/view_bug.do?bug_id=7066129

FS_LIST (DATABASE type): defining default values

Default values in FirstSpirit can be defined in templates. This is useful when input components are to be initialized with particular values.

Defining default values for the FS_LIST input component when using the DATABASE type is not recommended!

Exporting revision metadata

In FirstSpirit, revisions are created for every change (adding new elements, modifying elements, etc.). Changes in a revision are recorded in the revision metadata.

Using the `getMetaData()` method of the `Revision` interface (Access API, `de.espirit.firstspirit.storage.Revision`), it is possible to analyze or output changes to the revision that are recorded in the revision metadata.

When using package management (CorporateContent module), it was unfortunately not possible to find all changes if the language structure between the master and target project was heterogeneous. For this reason, – as of FirstSpirit version 4.2.468 –, additional information will now be recorded in the revision metadata when a revision is generated.

The additional information is only available for new revisions. Legacy revisions will not be changed.

FS_LIST: language-dependent section lists

In FirstSpirit version 4.2 release 4, the `FS_LIST` input component was revised so that all input components with a list character (e.g. `CMS_INPUT_LINKLIST`, `CMS_INPUT_CONTENTAREALIST`, etc.), can be displayed with this input component.

The `FS_LIST` input component can be configured using the `INLINE` type so that section lists can be processed. Previously it was only possible to process section lists independently from the language, i.e. the number of sections for all languages are identical (`useLanguages="no"`).

Starting with FirstSpirit version 4.2.468 it is also possible for the first time to process section lists that are language-dependent, i.e. in one language, other sections that are in a different language can be processed.

The input components displayed in an `FS_LIST` section may also be defined depending on the language or separately from the language.

In an `FS_LIST` input component that is to process language-dependent section lists (`useLanguages="yes"`), is it recommended that all input components are defined as language-independent in the section templates used (`useLanguages="no"`).

Simple editing: replacing Picnik with PicMonkey

Since FirstSpirit version 4.2 release 4, the `JavaClient` has provided the ability to edit images in Media Store using the Picnik editing tool from Google (<http://www.picnik.de>) (Picnik graphics engine).

Unfortunately, Google discontinued the image editing service on April 19, 2012 (see also <http://googleblog.blogspot.de/2012/01/renewing-old-resolutions-for-new-year.html>).

PicMonkey (<http://www.picmonkey.com>) is a new picture editing service that was recently created by former Picnik developers.

As of FirstSpirit version 4.2.468, due to the situation described, the Picnik graphics engine has been removed and replaced by the new PicMonkey graphics engine.

The user should not have to make any changes. If the Picnik graphics engine was used for a project before the update to the new version, the new PicMonkey graphics engine will be used automatically with the updated version.

All limitations and notes on Picnik, which were mentioned in the FirstSpirit version 4.2 release 4 release notes (see Chapter 3 - The FirstSpirit AppCenter) fully apply to PicMonkey as well.

FirstSpirit “PORTAL SAP EP BP” module: control characters in configuration files

XML version 1.0 is used as the data exchange format between the FirstSpirit “PORTAL SAP EP BP” module and the portal.

In version 1.0 of the XML standard (see <http://www.w3.org/TR/REC-xml/>), the characters that can be used are defined as follows:

```
Char ::= #x9 | #xA | #xD | [#x20-#xD7FF] | [#xE000-#xFFFF] | [#x10000-#x10FFFF]
```

To prevent operating errors, now all control characters lower than Unicode value `#x20` are removed when saving XML files.

Bug-fixes

ID	Role	Category	Sub Category	Description
42873	All Users	JavaClient	Security	Security improvements for the staging application.
79258	All Users	JavaClient	Version History	In FirstSpirit the project archival function can be used to archive parts of a project. After an archival is completed, parts of a revision can be archived. This type of revision is called a partly archived revision. When navigating within the version comparison, an error occasionally occurred in partly archived revisions (the option "Show partly archived revisions" was enabled in the version history).
101426	All Users	JavaClient	All Stores	As of FirstSpirit version 4.2, the user is now able to use what is known as "breadcrumb navigation" for path-based navigation. The display of long display names has been improved for breadcrumb navigation.
102607	All Users	JavaClient	Input Components	Input components in a form are grouped using the <CMS_GROUP> design element for a better overview. The "hidden" parameter in the input components was not evaluated within the group.
104706	All Users	Administration	Backup	After restoration of an incremental or differential backup, the task associated with a workflow was missing from the task list.
104778	All Users	Administration	All Stores	In the JavaClient search dialog, an initial selection would occasionally not be accepted (for instance, with the "Select" button in the FS_LIST input component).
106347	All Users	JavaClient	All Stores	The save behavior when indexing large Microsoft Excel files has been improved.
106886	All Users	JavaClient	Workflow	A keyboard shortcut can be created in the JavaClient for workflows. Only keys and key combinations with a valid keyboard code can be used for this shortcut.
107164	All Users	JavaClient	Media Store	The "lang" or "language" parameter is available in the "\$CMS_REF(...)\$" instruction so that the language can be changed, for instance, in order to instantiate an object. A "Language" object (Access API, de.espirit.firstspirit.access.Language) or a language abbreviation (such as "DE") can be entered as a value. An error mistakenly occurred in connection with remote projects ("remote" parameter) when a language abbreviation was added and the number of languages in both projects were not homogeneous.
108860	FirstSpirit Administrator	Server and Project Configuration	Export / Import	Projects can be exported and imported again in the Server and Project Configuration. Even if more than one default layer has been used in the source project, only one common default layer was mistakenly used for the import.
108876	All Users	Server and Project Configuration	None	Languages can be configured for a project in the Server and Project Configuration. The editor can cancel editing of the language by using the "Cancel" button. A display error occasionally mistakenly occurred when the user started to edit the language again – without closing and then reopening Server and Project Configuration – beforehand.
108986	Developer	JavaClient	Input Components	The selected set of content sources for the FS_DATASET input component can be limited using the CONTENT tag. The information on the permitted content sources was mistakenly also applied to folders in the Content Store.
109544	All Users	JavaClient	Input Components	When adding new sections to the FS_LIST input component (INLINE type), an error occasionally occurred if the user only had "visible" access to a section template.
109643	All Users	JavaClient	Page Store	Objects can be moved with the mouse in the JavaClient. In Page Store, a new reference name was sometimes created when sections were moved within a page.
109663	All Users	JavaClient	All Stores	In very rare cases, an error appeared when displaying deleted objects ("Restore deleted objects" context menu item).
109982	All Users	JavaClient	Input Components	In the CMS_INPUT_LINK input component, if a generic link template was used, changes to the link text were occasionally not saved.
110407	All Users	JavaClient	Input Components	In the case of certain configurations, the overview table was not displayed when comparing versions (version history) in the FS_LIST input component (DATABASE type).
110493	All Users	JavaClient	Input Components	The FS_LIST input component (DATABASE type) can be configured so that new data records can be added and copied. When copying new data records – without saving beforehand –, an error message was displayed by mistake.
110500	All Users	JavaClient	Database Configuration	If a content source contains several data records that may also contain foreign key relationships, saving changes may occasionally take a while. In such cases it may be helpful to remove the unnecessary reverse direction of the foreign key relationships (for example, the "to N direction") in the schema. However, changing the reverse direction was (even when editing the schema externally) not previously possible. Now it is possible to make changes at a later time by editing the schema externally.
110710	All Users	JavaClient	Content Store	If the "singleview", "simpleview" or "tabbedview" layout components were used to hide the detailed view in the FS_LIST input component (DATABASE type), incorrect functionality made it impossible to open an entry's editor window by double-clicking on the entry.
110779	All Users	JavaClient	Tasks	The task list mistakenly appeared empty in the JavaClient if the logged in user did not have permission to carry out one of the tasks.
111257	All Users	JavaClient	Input Components	An error occasionally occurred in the selection dialog of the FS_REFERENCE input component in the JavaClient.
111272	All Users	JavaClient	Input Components	In rare instances, an error may have occurred while making edits within the FS_LIST (INLINE type) input component.
111408	All Users	JavaClient	Content Store	When displaying a content source in the Content Manager, an error was mistakenly displayed to the user when the user did not have read access.
111762	All Users	JavaClient	Page Store	In Page Store, validity periods can be defined for sections. The corresponding context menu item was mistakenly displayed for content source sections as well.
111780	All Users	JavaClient	All Stores	In the case of very large projects, it may take longer to load the initial display of deleted objects (context menu: "Restore deleted objects"). Unfortunately, the display could not previously be canceled by the user.
111796	FirstSpirit Administrator	Administration	None	An identification number is used in many operations, such as when adding new objects, in the FirstSpirit Server. The FirstSpirit Server increments the identification number automatically and keeps a backup. In very rare instances, such as when the original file was missing, the backup file unfortunately was not used when the FirstSpirit Servers was launched.
111865	All Users	JavaClient and WebClient	All Stores	Pages can be edited in the JavaClient and WebClient at the same time. As soon as a section on a page was deleted in the WebClient, an error was displayed when the user switched to editing mode in the JavaClient.
111924	All Users	JavaClient	All Stores	Incorrect functionality made it possible to change the reference name of the Page and Media Store root nodes.

ID	Role	Category	Sub Category	Description
111950	All Users	JavaClient	All Stores	Security improvements for the local project staging application.
111981	All Users	JavaClient	Search Menu	When using the search function in the JavaClient an error appeared occasionally if the form with the search hit contained the FS_DATASET input component.
111983	FirstSpirit Administrator	Server and Project Configuration	Modules	User permissions can be defined hierarchically by means of the input component CMS_INPUT_PERMISSION. The parameter "group" is used to define which group hierarchy is to be applied. Unfortunately, a new group hierarchy was not taken into account completely after having changed from one group hierarchy to another at a later time.
112107	All Users	WebClient	All Stores	When editing links in an FS_LIST input component (INLINE type), new identifying features were added to the individual links. This caused display issues when using Content Highlighting in the integrated preview.
112117	All Users	JavaClient	Preview	Images may be included or loaded in a template using JavaScript. When displaying the internal preview in the JavaClient, a download dialog mistakenly appeared in some instances.
112215	All Users	JavaClient	Media Store	In the JavaClient context menu, some entries for copying and cutting elements were mistakenly enabled, even if the user did not have sufficient rights for the actions.
112357	All Users	JavaClient	Input Components	FS_LIST input components can be nested inside each other. In the case of the DATABASE type, this type of configuration may have occurred if, when adding an entry for the first time, default values were defined for the FS_LIST input component and the input components were temporarily initialized with values of a different entry.
112366	All Users	JavaClient	Template Store	Users can hide input components in FirstSpirit ("hidden" parameter). In the JavaClient hidden input components are displayed again in the dialog box used to define fall-back values (Template Store).
112444	FirstSpirit Administrator	Server and Project Configuration	Tasks	When editing orders or scripts in the Server and Project Configuration, changes already made were only partially and not completely discarded if editing was canceled.
112466	All Users	JavaClient	Workflow	In rare cases the RAM allocated by a workflow in JavaClient was no longer freed up.
112864	All Users	JavaClient	Input Components	A list of data records can be managed in an FS_LIST input component (DATABASE type). Any number of input components can be used within a data record, such as the FS_REFERENCE input component for choosing media. When displaying this type of input component, an error may have occurred if the user did not have "read" access to the selected medium.
112934	FirstSpirit Administrator	JavaClient	Generation	A project can be generated in the JavaClient using the "Generate project" menu item (menu: Project / Generate project). After initiating the generation process, a message dialog box is displayed to the user. Using this dialog box it is possible to open the generated URL in a web browser ("Open URL in browser" button). The FirstSpirit user authentication is now used to call this up. It is not possible to open more than one login session at a time on the web application server (e.g. Tomcat).
113087	All Users	JavaClient	All Stores	The display name is now always used in the language tabs of the translation help in the JavaClient (menu: "Extras") to label the language tab.
113164	FirstSpirit Administrator	Server-Monitoring	New Action	In Server Monitoring (Overview / Sessions) the "Staging" session type is now displayed for staging applications.
113235	FirstSpirit Administrator	Server and Project Configuration	Modules	If a module contains a service, this service needs to be restarted after updating the module in order to ensure that it works correctly. In the case of dependent modules, errors occurred in certain instances after restarting the service. In this case, it was unfortunately necessary to restart the FirstSpirit Server.
113291	All Users	JavaClient	Export / Import	Objects can be imported by means of the context menu entry "Import" in the JavaClient. Keyboard shortcuts which have been already used in the target project were ignored in the Template Store when importing scripts with stored keyboard shortcuts.
113297	All Users	JavaClient	Scripting	In a schedule script, it is possible to add your own connection if you are a technical user, for instance. When running the script, a new session is then started for this user. These types of connections were mistakenly not terminated automatically after running the script.
113332	All Users	JavaClient	Input Components	In the FS_LIST input component, permitted actions, such as adding or moving entries, can be defined for an FS_LIST input component using the "ACTION" tag. If the overview table was not displayed, modified operations, such as inserting or moving operations, occasionally caused malfunctions, since the data record currently selected could not be determined by the user.
113420	All Users	JavaClient	Input Components	When creating a new data record using the FS_LIST input component (DATABASE type) or displaying a data record in the input component overview, a display error occurred if the data record contained a CMS_INPUT_DATE input component.
113481	All Users	JavaClient	Input Components	When using the grouping element "CMS_GROUP" in a style template, unfortunately it was not possible in some instances to edit the cell properties of an inline table (CMS_INPUT_DOM input component) in the JavaClient.
113516	All Users	JavaClient	Modules	An error occurred on rare occasions when using the FirstSpirit SEARCH module.
113997	All Users	JavaClient	Input Components	Inline tables can be used in the CMS_INPUT_DOM input component. By using style templates, properties such as the foreground or background color can be recorded in the individual cells of an inline table. Unfortunately, recorded cell properties were not accounted for when the tables were saved in the WebClient.
114095	All Users	JavaClient	Input Components	The FS_LIST input component (DATABASE type) can be run in a media mode (MEDIAMODE tag), such as for a media gallery. Unfortunately, it was not possible in the interim to add or delete new entries in media mode.
114104	All Users	JavaClient	Template Store	Users can hide page templates in selection dialogs or lists ("Hide in selection list" option). Using the keyboard in the selection dialogs, it was possible to use hidden page templates to create new pages, which was incorrect functionality.
114121	All Users	JavaClient	Input Components	A project can be configured in such a way that metadata can be processed. When processing metadata in pages and sections (Page Store), an error occasionally occurred if input components were hidden ("hidden" parameter).
114200	All Users	Administration	Backup	When using snapshot backup, system information was occasionally written multiple times, which could have caused deviations in the file size compared to the exported project.
114427	All Users	JavaClient	Input Components	When using the FS_LIST (SERVICE type) input component, an error occasionally appeared in Page Store.
114712	All Users	JavaClient	Input Components	FS_LIST input components can be configured to hide the detailed view (LAYOUT tag). If the detailed view of an FS_LIST input component (DATABASE type) with the "stackedview" layout component was hidden, a comparison of the versions of an input component entry unfortunately could not be closed if the "singleview", "simpleview" or "tabbedview" layout component was also configured.
114954	All Users	WebClient	All Stores	In the WebClient selection dialogs, the last elements selected were unfortunately not pre-selected the next time the dialog was opened.

ID	Role	Category	Sub Category	Description
115557	FirstSpirit Administrator	JavaClient	Input Components	If a default value was defined in an FS_REFERENCE input component on the project settings page, on very rare occasions an error occurred during the generation process.
115658	FirstSpirit Administrator	Server and Project Configuration	Clustering	FirstSpirit offers the "Clustering" functionality. This can be understood as the load distribution for the generation of projects to other FirstSpirit Servers (so-called "generation on a cluster node"). An error may have occurred and the generation may have been cancelled partly in very rare cases when carrying out a generation on a cluster node.
115831	All Users	JavaClient	Content Store	Project languages can be hidden in the JavaClient. When hiding the project master language, a display error occasionally occurred in the editing area of the Content Store.
115857	All Users	JavaClient	Input Components	The INLINE and SERVICE types in the FS_LIST input component have been expanded to include "simpleview" mode.
116031	All Users	JavaClient	Media Store	Media Restrictions can be used to limit the permitted media types in a project. When using "drag & drop" to move directory structures from the file system to the Media Store, the specified file extensions that were permitted were mistakenly applied to folders as well.
116045	All Users	JavaClient	Input Components	When editing an FS_LIST input component (INLINE type), on very rare occasions changes were not accounted for when the language was changed while editing.
116211	FirstSpirit Administrator	Administration	Tasks	Errors that occur when executing the "FirstSpirit publication servlet" ("CRC transfer servlet"), are logged. Some messages have been improved for easier identification of the source of the errors.
116638	FirstSpirit Administrator	Server and Project Configuration	Clustering	FirstSpirit offers the "Clustering" functionality. This can be understood as the load distribution for the generation of projects to other FirstSpirit Servers (so-called "generation on a cluster node"). The generation of media in the generation directory can be disabled in a generation action (option "Generate Media in the generation directory"). Nevertheless, the media will be published in following publications. In case of a "Clustering" configuration, it was possible that the media were mistakenly not taken into account in a publication.
116716	All Users	JavaClient	Input Components	An error may have occurred within the input component FS_LIST in very rare cases when displaying tooltips.
116897	All Users	JavaClient	Page Store	Input components can be hidden or concealed using the "hidden" parameter in the form. Input components that were hidden in the JavaClient translation help were mistakenly displayed and could be edited.
117362	Developer	JavaClient	Template Development	When using the "PORTAL" module in conjunction with multiple remote projects, an error may have occurred when generating the portal links.
118019	All Users	JavaClient	Input Components	When initially opening a selection dialog (e.g. a CMS_INPUT_PICTURE input component), the "Select" button was mistakenly disabled in some rare cases.