



FirstSpirit™

Your Content Integration Platform

FirstSpirit™ Release Notes

FirstSpirit™ Version 4.2 Release 2

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1 Introduction

This document introduces the new functions implemented in FirstSpirit™ Version 4.2 Release 2 (in short: FirstSpirit V4.2R2, for notes on FirstSpirit Release Management see also Chapter 1.1 page 4). It is assumed that the reader is familiar with FirstSpirit™ and has background technical knowledge. To understand Chapter 5 to 7 in particular, in-depth knowledge of the respective field is required (template development, administration).

1.1 Changes in FirstSpirit Release Management

Several changes result with FirstSpirit Version 4.2 within the scope of the Release Management, which are briefly dealt with here.

The Release Management of FirstSpirit has been extended to increase an additional level to enable further improvements to the software quality of FirstSpirit with simultaneous functional enhancements:

Up to FirstSpirit Version 4.1, with minor version line (i.e. 4.0 and 4.1) software versions (so-called "Build" versions, e.g. Version 4.1.xx) were released which, apart from debugging, also include several (minor) new functions.

With FirstSpirit Version 4.2, a clear differentiation is made within a minor version line between two different types of software versions:

- **Release** versions: apart from complex bug fixes, these also include several new functions, however, far less than a minor version. They are viewed as being an independent software status within the minor version line and are named "Release" and the number of the release, e.g. "Release 2". Versions of this release always include a version number, after the minor version index; the number lies between 200 and 299, e.g. 4.2.206. Release versions which have not yet been released but can already be used for tests are also denoted by the supplement "BETA" in the version number (e.g. 4.2_BETA.202.36664).
- **Bugfix** versions: these solely contain fixes.

The software version of these release notes is the first release version published following initial release of FirstSpirit Version 4.2. The complete name is "FirstSpirit Version 4.2 Release 2", or "V4.2R2" for short. Following the release of this version, it is also planned to release another release version, namely Release 4 (V4.2R4, see



also Chapter 8.3.1 page 41).

The idea behind the introduction of these release versions is to be able to publish new functions within a released minor version line, while retaining the software stability. They are tested particularly thoroughly before release, and if necessary are also evaluated in practice within the scope of a Beta test phase, to prevent the system stability from being put at risk due to the introduction of new functions.

If a fix is to be performed within the scope of the maintenance agreement, customers must update FirstSpirit to the status of the release versions (just like bugfix versions), as all debugging is performed only on the respective current status of a version line.

Use of a release version does not result in project migration work.



2 System Requirements and Installation

The system requirements for FirstSpirit Version 4.2 Release 2 and the basic installation procedure have not changed compared to FirstSpirit Version 4.2.

2.1 System Requirements

For details of the **System Requirements** for FirstSpirit Version 4.2 Release 2, see initial *Release Notes* for FirstSpirit Version 4.2 and *Technical Data Sheet* for FirstSpirit Version 4.2.



*With FirstSpirit Version 4.2 Release 2, the 32 bit version of **Sun JDK 1.6.0_18** is released for FirstSpirit-JavaClient. Unfortunately, this JDK (like all JDKs since 1.6.0_14) contains fatal errors. But as customers want an updated JDK release for JavaClient, e-Spirit has implemented a special strategy for circumventing a JDK error, which was intensely checked within the scope of the FirstSpirit Version 4.2 Release 2 release tests. The Sun JDK 1.6.0_18 can therefore be released for use in JavaClient. A release for older FirstSpirit versions (before Release 2) is **not** possible because it is too risky to transfer the measurement which has been implemented to circumvent the error into stable version lines. Further, it is also possible that there are still places in FirstSpirit in which the error has not yet been circumvented. The error in Sun JDK is primarily manifested in shift buttons (radio buttons), which do not respond (or unexpectedly respond) to a status change. The error has been reported to Sun, but cannot yet be publicly viewed (internal review ID: 1714980).*

Furthermore, VM crashes can occur currently. The conditions for them have not yet been resolved.



For the FirstSpirit Server on AIX only the IBM JDK 1.5 is supported at the moment. At this point, we must warn about the risk of data loss when using the IBM JDK 1.6!



2.2 Installation and Update

For details of **installation** of FirstSpirit Version 4.2 Release 2, see *FirstSpirit Installation Instructions Version 4.2* and *FirstSpirit Release Notes Version 4.2*.

New in FirstSpirit Version 4.2 Release 2 is that the Windows Installer is now signed under Windows Vista, Windows 7 and Windows Server 2008.

An **update** from FirstSpirit Version 4.2 to FirstSpirit Version 4.2 Release 2 can be easily made by replacing the JAR file (see *FirstSpirit Installation Instructions Version 4.2*, Chapter 4.9). There is no need to make any changes to existing projects.



Several changes have also been made to FirstSpirit Licence Management. Before installing or updating to FirstSpirit Version 4.2 Release 2 you should therefore read Chapter 6.5 from page 28 first.



3 New/modified Functions for all user groups

3.1 Using Microsoft Internet Explorer for the integrated preview

To date, Mozilla Firefox (JXBrowser) has been used for the integrated (inline) preview. With FirstSpirit Version 4.2R2, it is now possible to use the Microsoft Internet Explorer (JExplorer) on Windows platforms. It is possible to switch between both browsers in FirstSpirit-JavaClient using the "View" menu (sub-item "Browser engine"):

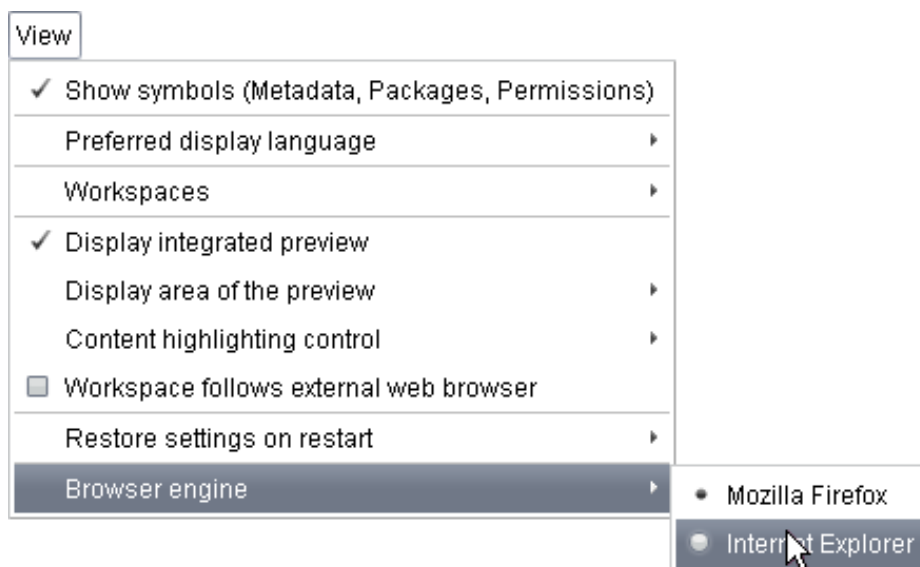


Figure 3-1: View menu – Select Browser Engine

Switching from one browser to the other can take up some time.

The selected browser is saved in the user profile. JExplorer provides the same functions as the JXBrowser (see also *FirstSpirit Manual for Editors (JavaClient)*, Chapter "Integrated preview in JavaClient"). The selected browser is indicated in the bottom right-hand corner of the integrated preview:



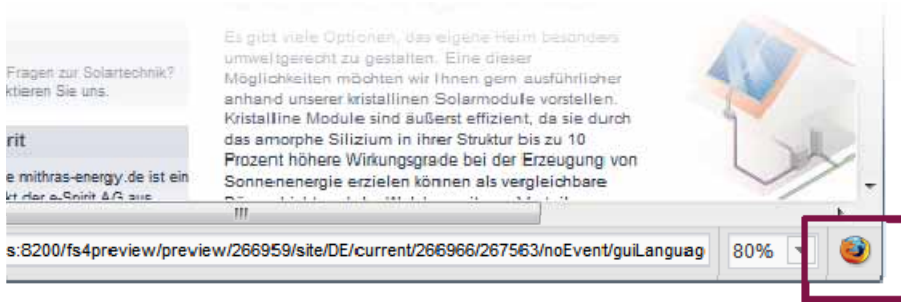


Figure 3-2: Integrated preview with Mozilla Firefox

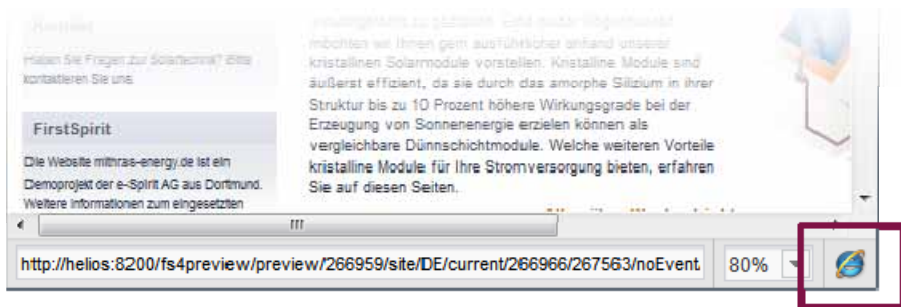


Figure 3-3: Integrated preview with Microsoft Internet Explorer

Unlike use of the JXBrowser, which is included in FirstSpirit from Version 4.2, if the JExplorer is selected, the locally installed Microsoft Internet Explorer of the operating system is used. The user-specific configuration is therefore also used.

Versions 6, 7 and 8 of Microsoft Internet Explorer are supported for use with the integrated preview, however only in 32 bit environments and not under MacOS X and Linux.

3.2 "Change Project" function available again

With FirstSpirit Version 4.2R2, the "Change Project" function in the "Project" menu of FirstSpirit JavaClient has been reactivated. However, it is still in a test phase, does not work throughout and can potentially be removed again. The switch between two projects can take up some time.

3.3 Language addition Dutch

Apart from German, English, French, Spanish, Italian and Russian, the FirstSpirit applications JavaClient, WebClient, Server and Project Configuration and Server Monitoring are now also available in Dutch. The language setting of the menu



labelling, context menus and dialogs can be selected via the FirstSpirit start page.

3.4 Search in FirstSpirit Online Documentation and Access-API

With FirstSpirit Version 4.2R2, the FirstSpirit Online Documentation (also called "ODFS") also includes a full text search with which the content of the online documentation and FirstSpirit Access-API can be searched. All FirstSpirit manuals, which can be found in the online documentation under the "Documentation" menu item, are also included in the search. To do this, the online documentation must be included in the web application *fs4root*, which is a default for installation of a FirstSpirit Server.

The search field in which the search terms can be entered are located in the top left-hand side on each page of the online documentation:

The screenshot displays the FirstSpirit Online Documentation interface. At the top left, there is a search field labeled "Search..." with a magnifying glass icon. To its right is a language dropdown menu set to "Englisch / English". The page title "Online Documentation" is in the top right corner. A left-hand navigation menu is visible, with "Documentation" highlighted. The main content area shows a central "Documentation" box with several sub-sections: "For Editors" (Manual: JAVAclient, Manual: WEBclient, WEBclient Crash Course), "For Developers" (Manual: Basics, Manual: Advanced, Manual: Components), "For Administrators" (FirstSpirit Installation Guide, Manual for Administrators), "Module Documentation", and "Technical Documentation" (Release-Notes, Technical Data Sheet). Below the navigation menu, the word "Documentation" is written in a large, bold font. At the bottom, a paragraph states: "At this point you will find a clear list of the most widely read FirstSpirit documents and manuals with a brief description of their contents."

Figure 3-4: Online documentation with search field

The search result can first be output filtered by target group (administrators, users and developers). Search results which are relevant for developers can be further filtered by various topics.

A search result filtered in this way could appear as follows:



Searchresults

Results 1-7 of 7 for *navigation*

Functions in the header: Navigation

FirstSpirit V4.2 Online Documentation - Functions in the header: **Navigation** **Navigation**
 The **Navigation** function is used to display the page structure specified by the Site Store on the generated pages. The **navigation** output is defined in the page temp...
 Developer Templates **Navigation** **Syntax**

Changing menu orders

.2 Online Documentation - Changing menu orders How to change menu orders For every **navigation** level all its sub-ordinated menu levels are listed on the tab Menu order. The order in which the sub-ordinated menu levels are to be displayed in the ...
 Developer Common Templates **Navigation**

Defining page structure - Menu levels

Name field. Each menu level in the Site Store corresponds to a level in the **navigation** so that a new **navigation** level is automatically added with each new sub-folder. Please now create all other menu levels for our **navigation** in the same way as above...
 Developer Common Templates **Navigation**

#nav

#nav The system object #nav is available in the following functions: MenuGroup **Navigation** PageGroup #nav can be used to access special values of the relevant **navigation** functions. A list of the functions and their possible uses are given in the following...
 Developer Templates **Navigation** **Syntax**

Functions in the header: MenuGroup

menu group members of the page reference new have a grey background). Unlike the **navigation**, there is no query for menu groups whether a folder has been hidden from the **navigation** or not. Therefore, all folders of the menu group are always displayed...
 Developer Templates **Navigation** **Syntax**

Category Filter
Without restriction
Administrators
Developer
Access API
Forms
Permissions
Scripting
Templates
Common
Content Highlighting
Data sources
Format and link templates
Navigation
Syntax
WebEdit
Users

Figure 3-5: Online documentation search results

The title of the page containing the search hits can be clicked and then leads to the relevant page. The search text is highlighted in colour on this page.

3.5 Extended information in exceptions and thread dumps

With FirstSpirit Version 4.2R2, the information contained in exceptions and thread dumps has been extended for the reproduction and correction of errors and now includes the following information:

- Precise details of the JDK used (incl. number of bits),
- Precise details of the operating system (incl. number of bits),
- Current date / time.



Example:

```

...
FSVersion=4.2_BETA.202.36412#365;JDK=1.6.0_18 32bit Sun Microsystems
Inc.;OS=Windows 7 6.1 x86;Date=25.01.2010 10:46:52
...

```

3.6 Use of FirstSpirit under Mac OS X

It is planned to release use of FirstSpirit under Mac OS X for future versions. The following features and optimisations implemented with FirstSpirit Version 4.2R2 represent a further step in this direction:

- The Look & Feel of FirstSpirit-JavaClient and the FirstSpirit application for server and project configuration have been brought in line with Mac OS. Therefore, for example, only the familiar upper Mac OS upper menu is used, so that each JavaClient no longer has its own menu bar and e.g. available services are now available as usual via the Program menu (here: "FirstSpirit Client (pegasus)").



Figure 3-6: Menu bar of FirstSpirit JavaClient – View under Mac OS

- Instead of the Windows keyboard shortcuts used to date, the familiar keyboard shortcuts can now be used under Mac OS. Instead of the CTRL button frequently used under Windows, the command key (⌘, "Apple key") can now be used under Mac OS frequently.

Examples:

- For the action "Switch to Edit mode", use the keyboard shortcut Command key + E (Windows: CTRL + E),
- The keyboard shortcuts Command key + C, Command key + X and Command key + V are used to Copy, Cut and Paste (Windows: CTRL + C, CTRL + X, CTRL + V),
- The keyboard shortcut Command key + G (Windows: F3) is used to jump to the next search result, etc.
- The integrated preview introduced in FirstSpirit Version 4.2 now also works under Mac OS on 64 bit systems.
- PDFs can now also be displayed in the integrated preview.




4 New/Modified Functions for Editors

4.1 New functions in JavaClient

4.1.1 Limited and filtered display of data records


From FirstSpirit Version 4.2R2, it is possible to set the number of data records to be displayed in data sources. This makes work easier, especially when working with data sources with lots of data records. This is done using a drop-down menu, located on the right above the data records (see Figure 4-1). The number of data records displayed can be limited to 100, 500, 1000 and 2000. The default limit is 500. Select the "Display all data sets" entry to display all data records. The user merely needs "Visible" rights to use this function.


The displayed data records can be further limited by using filtering and the data search. These functions already existed in earlier versions of FirstSpirit, but from FirstSpirit Version 4.2R2 they are made available directly above the data records. To date, filtering was only possible by using the context menu of a data source ("Extras" – "Set filter" menu item), the data search was performed using the icon . From FirstSpirit Version 4.2R2, the familiar filtering dialog can be opened by clicking the "Set filter" link, the search is opened using the "Search" link (see Figure 4-1).



The "Set filter" link is only active if the user has relevant permissions.

All three options (filter, search, limit of displayed data records) can be combined with each other. If filtering or a search is active, this is indicated by a ticked checkbox.

Active filtering is also visualised in the tree view using the familiar icon . The search can be quickly deactivated and re-activated using the preceding checkbox.

If the ID of a data record is known, it can be entered in the input field in the status line. After pressing the <RETURN> key, the required data record is displayed, provided any filtering that has been set allows this. Therefore, this function corresponds to the already familiar search for ID (which can be reached via the icon , "Simple Search" tab, "ID" field). As a default, the ID of the currently selected data



record is displayed in this field.

Filter **Data search** **Limitation to specific number of datasets**

ID	Product-Name	Product-Description	Picture	Picture Description	Product-Categories	Product-Properties
2050	Connector	This solar connector has been designed for use in extreme environmental situations and to satisfy		Connector	[Accessories]	[Size, Service life, Weight, Delivery period]
1989	Adapter	With this adapter you can easily and flexibly connect up to 10 solar collectors with each other. The		Adapter	[Accessories]	[Service life, Weight, Delivery period, Size]
1986	Solar cable	This solar cable has been developed for wiring photovoltaic systems inside and outside		Solar cable	[Accessories]	[Size, Service life, Delivery period]
1984	Accum 1,000 L	The optimum storage concept of the Accum 1.000 L is impressive due		Accum 1,000 L	[Solar store]	[Weight, Size, Delivery period, Service life]

ID of the current dataset / Jump to dataset with specific ID

Figure 4-1: Data source with search, filter and limitation

4.1.2 Display Preview at Content area level

From FirstSpirit Version 4.2R2, it is also possible to request a preview of content areas in the Page Store. To request a preview of the corresponding page with its current editing status, use the Preview icon in the FirstSpirit toolbar, the keyboard shortcut "Ctrl + P" or the "Preview" entry in the context menu of the Content area. To obtain a preview of the corresponding page in its released status, select the "Display Preview (release)" entry in the context menu of the Content area. In addition, possible errors which occurred during the last preview rendering are displayed via the context menu. When requesting the preview or the errors of the preview, the required language and channel can be selected using the context menu:



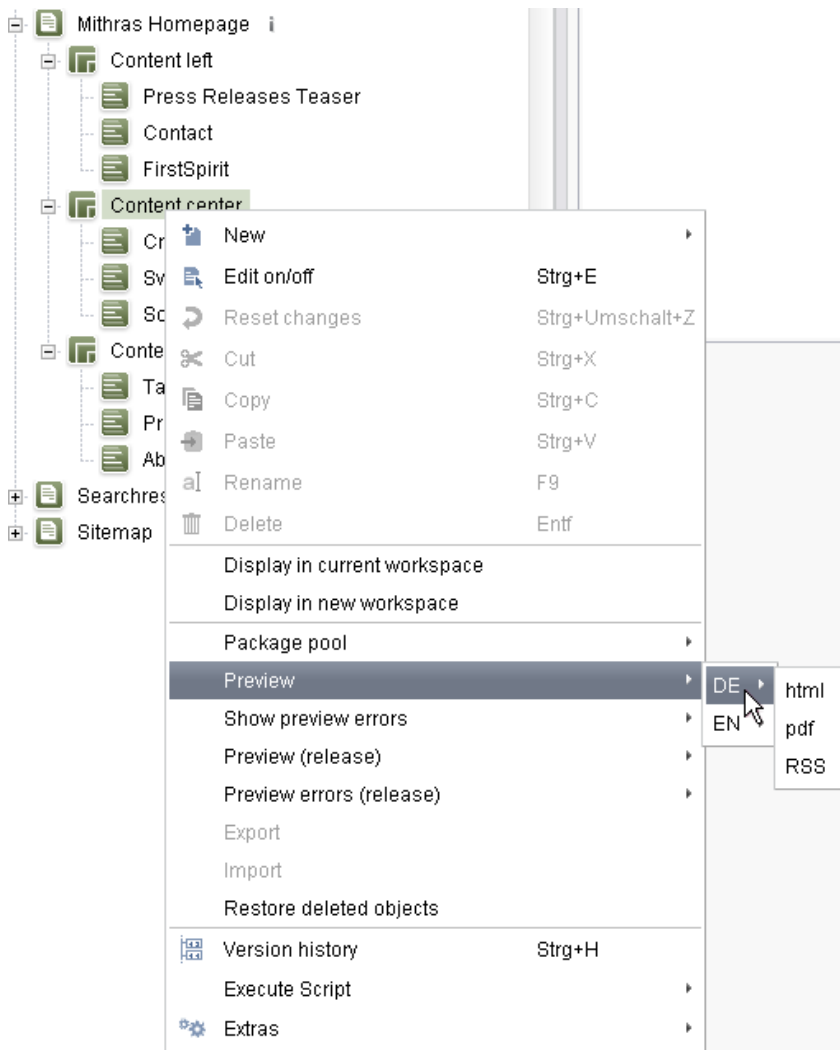


Figure 4-2: Context menu of a Content area

4.1.3 Version comparison in the new look & feel

The look & feel of the version comparison has been adjusted to the current look & feel of FirstSpirit JavaClient. For example, it is used for comparison of versions in the version history of an object ("Compare" button), in the translation aid ("Extras" menu) and in workflows (see Chapter 4.1.4 page 16). Icons are now used in the top part of the dialog (selection area), which have been adjusted to the new "LightGray" look & feel implemented in FirstSpirit Version 4.1. Localised system messages are now displayed in the *Comment* field:



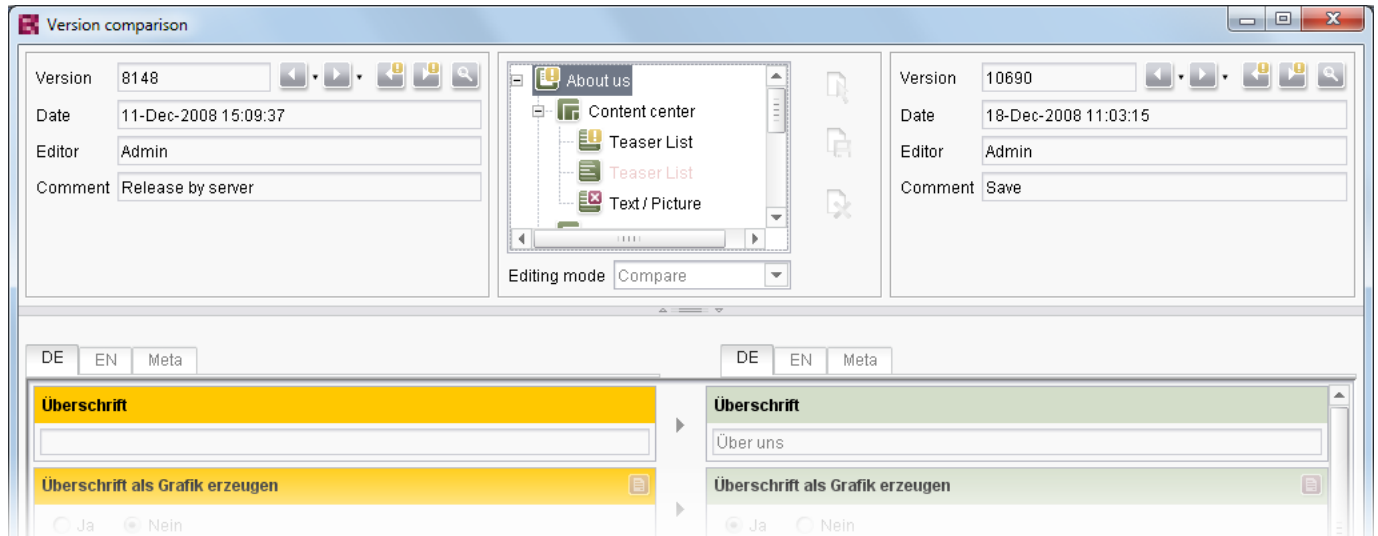



Figure 4-3: Revised version comparison (here: a page of the Page Store)

4.1.4 Version comparison in workflows

From FirstSpirit Version 4.2R2, it is possible to open a version comparison for the respective object from the workflow dialogs. In this way, for example, the changes between the last released and current status which is to be released now, can be easily compared.

Click the new icon  in the Workflow dialog to open the version comparison for the object on which the workflow was started (see also example in Figure 4-3). The current revision of the object, i.e. the current status of the object, is displayed on the **right-hand** side. The revision of the last release is displayed on the **left-hand** side, or (if the object concerned has not yet been released) the last revision before the current revision is displayed. Depending on the object type, in the top part it is possible to switch as usual to other revisions of the selected object or to child elements (e.g. to sections of a page).

After checking the changes in the version comparison window, it can be closed and the next action can be selected from the Workflow dialog, which is then visible again.



In context-free workflows which have not been started using the context menu of an object, the "Version Comparison" icon is disabled, a version comparison is not possible.



4.1.5 Save "Display reference names in tree" as user setting

The "Display reference names in tree" menu item in the "View" menu – "Preferred display language" can be used to select whether the reference names or the display names are to be displayed for all objects in the tree structure:



Figure 4-4: "View" menu – "Preferred display language"

From FirstSpirit Version 4.2R2, the setting made for this option is saved for the respective user. The respective selected option is used for the user until they change it.

4.2 New/Modified functions in WebClient

4.2.1 Modified display logic for deleting page references

If, in WebClient, a page reference is deleted using the "Delete Page" menu item



of the Quickbar or a workflow (Quickbar or WebEdit toolbar), the next available page reference located above the deleted page reference is displayed. If the deleted page reference was not a Start page, the Start page of the current menu node is displayed, if available. If the deleted page reference was a Start page, a remaining page reference – if available – to the Start page is displayed in the preview.

To date, after a page reference had been deleted, the Start page of the respective project was always displayed. Thanks to the modified display object, the navigation context is now retained.



4.3 New/Modified functions in JavaClient and WebClient

4.3.1 Date and/or time selection with CMS_INPUT_DATE

Whereas to date, the data selection input component (CMS_INPUT_DATE) could only be used to select a date **together** with a time, depending on the configuration by the template developer, from FirstSpirit Version 4.2R2 it is now possible to select a date only or a time only.

In JavaClient the modified input component looks like this:

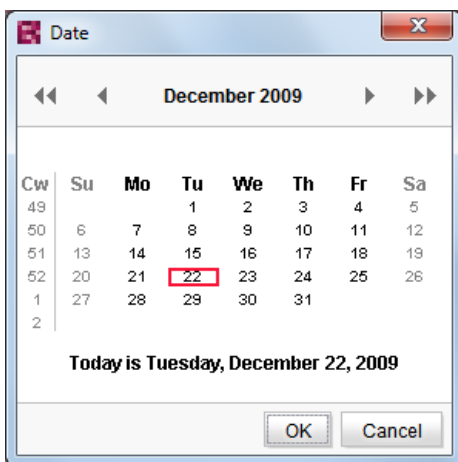


Figure 4-5: Date selection

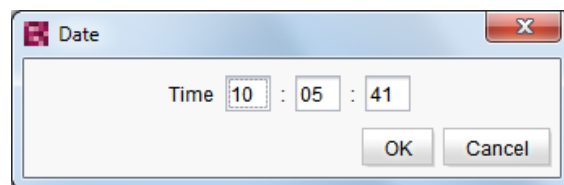


Figure 4-6: Time selection

In WebClient the input component looks like this:

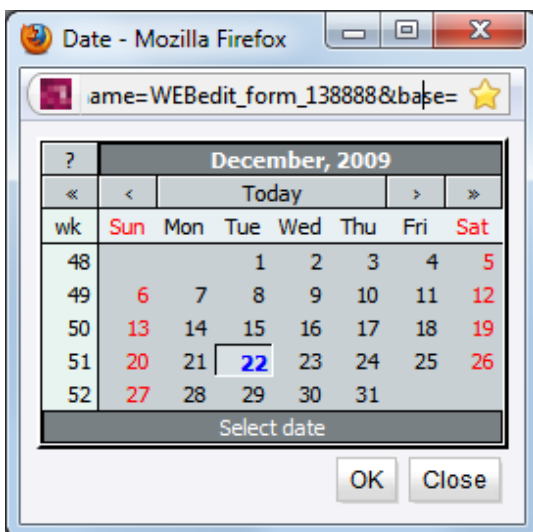


Figure 4-7: Date selection

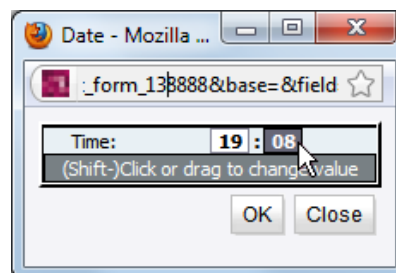


Figure 4-8: Time selection



The current date and the current time are preset as a default. The information can be changed by selection or input.

Depending on the configuration, the date and time can also be input directly in the text field, namely with a specific format. If the format of the input differs from the required format it cannot be saved, and an error message is displayed instead.

For details of use of this input component, see FirstSpirit Manual for Editors (JavaClient), Chapter "10.9 Date Selection (CMS_INPUT_DATE)" or FirstSpirit Manual for Editors (WebEdit), "Chapter 10.4 Date Selection (CMS_INPUT_DATE)".



5 New Functions for Template Developers

5.1 Date and/or time selection with CMS_INPUT_DATE

5.1.1 Configuring the input component

Whereas to date, the data selection input component (CMS_INPUT_DATE) for the editor could only be used to select a date **together** with a time, from FirstSpirit Version 4.2R2 it can be configured so that a date only, a time only or a date and time can be selected. The `mode` attribute is used for this. Possible values `date`, `time` or `datetime`. If `mode="date"` is set, the editor can only select the date, if `mode="time"` is set, the editor can only select the time (see also Chapter 4.3.1 page 18, Figure 4-5 to Figure 4-8). The response of the input component to date (selection of date and time) is achieved with `mode="datetime"`; this is also the default setting if `mode` is not set.

In `date` mode, the time "00:00" (UTC) is saved for the date chosen by the editor, in `time` mode, the date "01.01.1970" is saved for the time given by the editor. However, this information is not visualised in the input component. It should be taken into account that if the mode for already saved values is changed from `datetime` to `date` or `time`, the saved time and and/or date is reset to "00:00" hrs or "01.01.1970". On the other hand, if `date` or `time` is changed to `datetime`, "00:00" hrs or "01.01.1970" respectively is saved for the information not set by the editor. Also, if using the saved modes for retrieval values (`preset` parameter), in the case of `mode="date"` "00:00" is saved as the time and in the case of `mode="time"` "01.01.1970" is saved as the date.

5.1.2 Using CMS_INPUT_DATE in different time zones

Depending on the selected mode, different time and date information is saved in different time zones: If `mode="datetime"` is set the current time zone and summer / winter time are taken into account for preview, generation and display of date and time in the input component (see also FirstSpirit Online Documentation, section "Template development" / "Forms" / "Input components" / "CMS_INPUT_DATE"), whereas the same date or time will be displayed (in the input component, preview and generation) in all time zones if `mode="date"` or `mode="time"` are set.

Example:



If the date/time „01.01.1970 00:00“ is entered in the mode `mode="datetime"` in the time zone UTC+1, „31.12.1969 23:00“ will be displayed in a client in the time zone UTC. However, another date and time can be output in the preview and/or generation and depend on the time zone, in which the FirstSpirit Server exists.

If in contrast the date “01.01.1970” or the time “00:00” is entered in the mode `mode="date"` or in the mode `mode="time"` in the time zone UTC+1, “01.01.1970” or “00:00” are displayed in all time zones.

5.1.3 Using CMS_INPUT_DATE in table templates / data sources

CMS_INPUT_DATE can be made available to the editor not only in the Page Store (pages and sections), but also in data sources. The usage in both stores can differ.

According to the mode, the following data types can be used in table templates:

- `mode="datetime"`: FIRSTspirit-Editor, Long and Date
- `mode="date"`: FIRSTspirit-Editor und Long
- `mode="time"`: FIRSTspirit-Editor und Long



The data type "Date" can not be used for the modes date and time!

The selection of the datatype controls how date and time are displayed in the input component, preview and generation:

- If the data type **FIRSTspirit-Editor** is used, date and time are displayed like in the Page Store.
- If the data type **Date** is used (only available in the mode `datetime`), date and time are saved depending on the time zone in which the FirstSpirit Server currently is. The difference between the time zone of the client and the time zone of the server is taken into account.

Example: The client is in the time zone UTC+1, the FirstSpirit Server is in the time zone UTC. If the editor enters "01.02.2010 00:30:00" in the client, it will be saved as "31.01.2010 23:30:00" in the database. "01.02.2010 00:30:00" is still displayed in the input component, but "31.01.2010 23:30:00" is displayed in the preview and on the generated page.

In contrast, date and time are saved in the **Page Store** in UTC if the mode `datetime` is set.

- If the data type **Long** is used, date and time are saved and displayed in the client



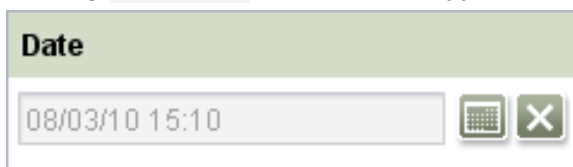
in UTC like in the Page Store. They are displayed independent of the time zone in preview and generation, i.e. as they are entered by the editor.

Example: If the editor enters the time "15:00:00", "15:00:00" will be displayed in the client and in the generation in all time zones.

5.1.4 Formatting date and time

As a default, the date and time are displayed in the input component in a language-specific format (depending on the respective project language), e.g. in the project language English:

- If using `datetime` mode: `dd.MM.yy HH:mm`, e.g.



A screenshot of a web form input field. The field has a light green header with the word "Date" in bold. Below the header is a text input box containing the value "08/03/10 15:10". To the right of the input box are two small icons: a calendar icon and a close icon (an 'X' in a square).

- if using `date` mode: `dd.MM.yy`, e.g.



A screenshot of a web form input field. The field has a light green header with the word "Date" in bold. Below the header is a text input box containing the value "08/03/10". To the right of the input box are two small icons: a calendar icon and a close icon (an 'X' in a square).

- if using `time` mode: `HH:mm`, e.g.



A screenshot of a web form input field. The field has a light green header with the word "Date" in bold. Below the header is a text input box containing the value "15:10". To the right of the input box are two small icons: a calendar icon and a close icon (an 'X' in a square).

However, this format can be overwritten using the `format` parameter, i.e. if the `format` parameter is used to define a format it is also used for visualisation of the selected date and/or the selected time in the input component. The format defined using `format` should therefore be adjusted to the mode defined using `mode`, as otherwise the selected time and/or selected date will not be visualised in the input component. If `mode="time"` is set, `format` should therefore contain details of the formatting of a time (e.g. hours and minutes), if `mode="date"` is set, `format` should contain details of the formatting of a date (e.g. date, month and year), if `mode="datetime"` is set, `format` should contain information for formatting a date and time.

If `allowInput="yes"` is set, the editor must enter the date and time in the required format. Otherwise, an error message is displayed and the input is not saved. If `mode="date"` is set, but `format` requires a time be given, the editor can enter a



time, but this will be set to "00:00" when saved, analogous to `mode="time"` and for retrieval values.



For the **Output**, the format for date and time is determined independent of the `mode` parameter, e.g. by the `format` method. Here too it is necessary to ensure that the format of the output matches the mode chosen using `mode` and the format chosen using `format`.

5.2 Syntax Highlighting in queries


Syntax Highlighting helps template developers in many areas of their work in FirstSpirit, e.g. in the Forms area and Output Channel tabs of templates. This Syntax Highlighting function is now available in queries  (in the Template Store in the Database schemes area), namely on the "Conditions" tab with disabled Wizard Mode ("Wizard mode" checkbox):



Figure 5-1: Query – "Conditions" tab (Wizard Mode disabled)

5.3 Navigation: Output first / last element of a level differently

The system object `#nav` can be used to access values of navigation functions. Within the *Navigation* function (see also *FirstSpirit Online Documentation*, page "Template Development" / "Template Syntax" / "Functions" / "in the Header" / "Navigation"), the `isFirst` and `isLast` methods are now available. These can be



used to determine whether a navigation point is the first or last one to be displayed in the current level, e.g.

```
#nav.isFirst
```

or

```
#nav.isLast
```

Alternatively, `#nav.first` or `#nav.last` can be used.

5.4 Access to information of generation schedules

The call `#global.scheduleContext` can be used to access the execution context of a generation schedule and therefore to access information such as the name of the project, the starting time of the schedule, the path to the generation directory, the number of errors during generation, etc.

To do this, in FirstSpirit templates, `#global.scheduleContext` variables can be set, changed and read out again before, during and after the generation.

The interface

`de.espirit.firstspirit.access.schedule.ScheduleContext`, which provides the necessary methods, is now available in the FirstSpirit Access-API.



This function is not available on cluster servers.

5.5 Relevant changes in FirstSpirit Access-API

5.5.1 General information

Among other things, FirstSpirit security has been further increased by more highly protected password information.

Several methods have been set to "deprecated" status in FirstSpirit Version 4.2R2. Refer to FirstSpirit Access-API to find out which methods are involved and which methods are to be used as replacement.



5.5.2 New input components

As announced in the FirstSpirit Release Notes for Version 4.2, the new input components with name prefix "FS_" for the time being still have "In development" status.

In Version 4.2R2, no incompatible changes resulted for the input components FS_DATASET and FS_REFERENCE with respect to FirstSpirit Access-API. However, several methods have been removed for input component FS_LIST (interface `de.espirit.firstspirit.access.editor.FsListEditorValue`).

5.5.3 Move operations

If FirstSpirit Access-API was used incorrectly, it was possible to generate duplicate child nodes below the folders of the different stores within a FirstSpirit project. For this reason, the semantics of the methods concerned are changed with the release of FirstSpirit Version 4.2R2 so that they can no longer generate this inconsistent state, even in the event of incorrect use.

The methods involved are the following methods from the class `de.espirit.firstspirit.access.store.StoreElement`:

- `appendChild(StoreElement child)`
- `appendChildBefore(StoreElement child, StoreElement nextSibling)`
- `replaceChild(StoreElement oldChild, StoreElement newChild)`

If these methods were used to implement move operations in other sub-trees, duplicate nodes could be created within a project.

The methods have been changed with 4.2R2 so that they now only allow nodes as parameters which already have the same parent as the nodes on which they were called.

In general, the corresponding method of the

`de.espirit.firstspirit.access.store.IDProvider` interface should be used for move operations:

- `moveChild(IDProvider child)`
- `moveChild(IDProvider child, int nextSiblingIndex)`

This applies both to move operations within the child list of a node (changes in order) and to move operations in another subtree.



6 New/modified Functions for Administrators

6.1 Fundamental revision of client-server communication in HTTP mode

The servlet responsible for forwarding HTTP communication from FirstSpirit-JavaClient to the FirstSpirit Server has been fundamentally revised with FirstSpirit Version 4.2R2. The objectives were:

- to optimise the use of resources in the Servlet Engine and in the Load-Balancer, in particular, by reducing the number of Web sessions,
- to improve compatibility with HTTP proxies and Load-Balancers and
- to increase security.



The fundamental changes are NOT downwards compatible. Clients of a FirstSpirit version lower than 4.2R2 cannot communicate with servers of a FirstSpirit version higher/equal to 4.2R2 and vice versa.

The following servlet mapping must exist in the `web.xml` of the web application `fs4root`:

```
<servlet-mapping>
  <servlet-name>cms-ClientIOServlet</servlet-name>
  <url-pattern>/servlet/ClientIO/*</url-pattern>
</servlet-mapping>
```



This requires updating fs4root. If using the internal servlet engine, this is done automatically, if using an external servlet engine (e.g. Tomcat) it is necessary to ensure that an update of the Web application is initiated. If the update is not made, Client and Server cannot connect over HTTP.



6.2 Communication of FirstSpirit servers in a network

An infrastructure has been created which enables FirstSpirit servers to communicate with each other within a network.

This function represents the basis for an automatic, central server update process (update management) in a subsequent version, but is not yet actively used at the present time. Depending on the log level chosen, the new function can cause a note to be included in the log output, e.g.

```
TRACE 20.01.2010 13:18:53.372
(de.espirit.firstspirit.server.AbstractManagerHost): Starting
DiscoveryManager...

INFO 20.01.2010 13:18:53.376
(de.espirit.firstspirit.server.io.discovery.DiscoveryListener):
Listening on socket=0.0.0.0:23416, interface=name:eth0 (eth0)
index: 2 addresses: e80:0:0:0:21f:d0ff:fed8:56412;
/192.168.100.228;

TRACE 20.01.2010 13:18:53.379
(de.espirit.firstspirit.server.io.DiscoveryManagerImpl): Sending
server query, 32 bytes

TRACE 20.01.2010 13:18:53.380
(de.espirit.firstspirit.server.io.discovery.DiscoveryListener):
Received 32 bytes from /192.168.100.228

TRACE 20.01.2010 13:18:53.383

TRACE 20.01.2010 13:18:53.414
(de.espirit.firstspirit.server.io.discovery.DiscoveryListener):
Received 150 bytes from /192.168.100.90

TRACE 20.01.2010 13:18:53.415
(de.espirit.firstspirit.server.io.discovery.DiscoveryListener):
Received 156 bytes from /192.168.100.94
```

6.3 Password-free user login via Kerberos

From FirstSpirit Version 4.2R2, Single Sign-On (SSO) authentication is possible at the FirstSpirit Server in conjunction with Kerberos / Active Directory. To achieve this, a new login module was implemented ("KerberosLoginModule").



For security reasons, this user authentication method should only be used in conjunction with HTTPS, to prevent so-called replay attacks.





Detailed information on configuration of the login module and on creating the Kerberos Keytab file under Windows Active Directory are given in the FirstSpirit Manual for Administrators, sub-chapter "Kerberos-Ticket (integrated Windows login)".

6.4 Logging of user authentication

The logging of user authentication has been changed in three points:

- Non-technical problems (LDAP user was not found, an incorrect password was entered, etc.) are no longer logged by the login modules as ERROR messages but only as INFO messages. This weakened logging is advantageous, e.g. if user authentication in FirstSpirit is configured so that several login modules have to be run through before the user is successfully logged in (e.g. password check against the FirstSpirit user database and against several LDAP login modules). In this case, to date an ERROR message was logged for each authentication step.
- Exceptions, which occurred during the login on the client, are recorded in the log file `fs-clients.log`. As the user is not yet known at the time, only the IP address is shown.
- The logging for login via LDAP has been extended to include Name of the corresponding LDAP section, which is defined in the `fs-jaas.conf` file by the `section` parameter and is also used in the `fs-server.conf` file as a prefix for the LDAP settings.

6.5 License management enhancements

A license is required to run FirstSpirit. Without a valid license, FirstSpirit can be used for 30 minutes after the start; the FirstSpirit server then ends automatically.

The following FirstSpirit license management enhancements have been made:

6.5.1 Install license under Windows

When installing a FirstSpirit server under Windows using the Installation Wizard, during the installation process the license file can now be selected directly from the local file system or the content of the file can be copied using Copy & Paste:



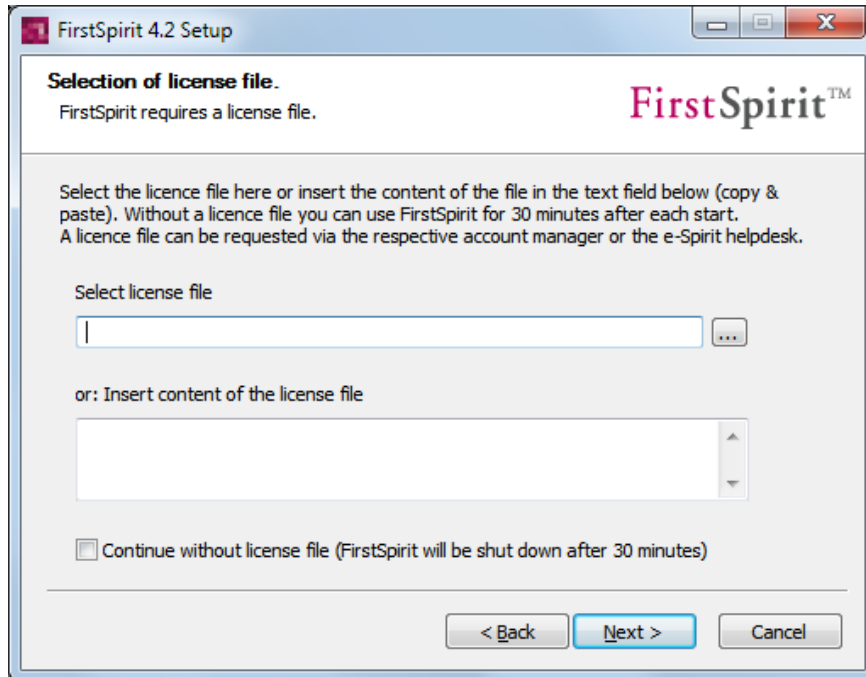


Figure 6-1: Installation Wizard – Selection of the license file

Without a valid license, FirstSpirit can be used for 30 minutes after starting. To do this, the "Continue without license file" option can be selected. Within these 30 minutes, a valid license file can still be retrospectively installed (using FirstSpirit Server-Monitoring or the file system, see *FirstSpirit Installation Instructions 4.2*).

6.5.2 New license parameters

Several new parameters have been added to the FirstSpirit licenses:

- `license.TYPE`: Apart from the existing license types "Productive", "Development" and "Demonstration" (license parameter `PRODUCTION`, `DEVELOPMENT` or `DEMO`), the new types "Staging" ("Quality Assurance") and "Training" have been introduced with the license parameters `STAGING` and `TRAINING`. The license type is displayed with a corresponding logo on the FirstSpirit start page and on the project entry page in FirstSpirit JavaClient, e.g.



Figure 6-2: Logo for "Training" license type

In the case of a "Productive" license, the project logo selected for the respective project in the server and project configuration is displayed on the project entry



page of JavaClient (see *FirstSpirit Manual for Administrators*), no logo is displayed on the FirstSpirit start page.

- `license.SCOPE`: This parameter is used to differentiate between whether the license is a single, stand-alone license (`license.SCOPE=SINGLE`) or a corporate license (`license.SCOPE=CORPORATE`).
- `license.MODULES`: New parameters have been introduced for the FirstSpirit FormEdit, FirstSpirit Newsletter and FirstSpirit ExaleadIntegration modules.



Due to the introduction of these new parameters, notes and warnings can result in the log output. Therefore, before updating to FirstSpirit-Version 4.2R2, it is necessary to check

- *whether each FirstSpirit-Server uses its own, unique license, provided it is not a cluster license (`license.CLUSTERING=1`) and / or a corporate license (`license.SCOPE=CORPORATE`) and*
- *whether the existing FirstSpirit license contains all the necessary parameters, e.g. for purchased modules too (however, not all the available FirstSpirit modules are managed via the license file, so that potentially, it is possible that a parameter does not have to exist for each module).*

If this is not the case, a new license must be requested before the update.



*The current license file ("fs-license.conf") can be checked in the sub-directory "conf" of the FirstSpirit-Server or via the FirstSpirit Server Monitoring, menu item "FirstSpirit" / "Configuration" / "Licence". For further information on licenses, see also *FirstSpirit Manual for Administrators*, Chapter "Licence Configuration (fs-license.conf)", and the installation chapter of the respective module documentation.*

6.6 Defining the directory for Client-side applications (e.g. JXBrowser)

For the roll-out process of native system components of Client applications (e.g. JXBrowser), from FirstSpirit Version 4.2R2, it is possible to define in which directory they are to be installed (cf. *FirstSpirit Manual for Administrators*, Chapter "Roll-out process for native applications (from V4.2)").

In FirstSpirit Version 4.2 they were always rolled out in the user home directory on the workstation of the respective user, for example, under Windows XP

```
C:\Documents and Settings\<<USER>\.firstspirit\
```



under Windows 7

```
C:\users\<<USER>\.firstspirit\
```

However, use of this directory can conflict with the rights of the respective user, in addition, the user home directory may not have sufficient memory. The components of the JXBrowser rolled out in the `\.firstspirit\` directory, for example, require around 20 MB.

The directory to be used can now be defined centrally for all users of a server using the following parameter in the `fs-server.conf` file, namely depending on the operating system of the respective user:

CLIENT_HOME_DIR: Details of path to the directory in the file system in which the Client applications are to be filed. Absolute (e.g. `CLIENT_HOME_DIR=C:/test`) or relative paths can be used. For relative paths, the `~` symbol can be used as a wildcard at the start of the path, e.g. `~/myclientapps`. `~` is then replaced by the operating system-specific, current user home directory.

If the parameter is not given, as a default, Client applications are rolled out in the `\.firstspirit` directory in the operating system-specific user home directory.

Default value: `CLIENT_HOME_DIR=~/.firstspirit`

CLIENT_HOME_DIR_WINDOWS: Details of path to the directory in the file system in which the Client applications are to be rolled out on workstations with Windows operating system. Example:

```
CLIENT_HOME_DIR_WINDOWS=C:/test
```

If `CLIENT_HOME_DIR_WINDOWS` only is given, the Client application is rolled out in the operating system-specific user home directory.

CLIENT_HOME_DIR_LINUX: Details of path to the directory in the file system in which the Client applications are to be rolled out on workstations with Linux operating system (cf. parameter `CLIENT_HOME_DIR_WINDOWS`).

CLIENT_HOME_DIR_MAC: Details of path to the directory in the file system in which the Client applications are to be rolled out on workstations with Macintosh operating system (cf. parameter `CLIENT_HOME_DIR_WINDOWS`).

CLIENT_HOME_DIR_AIX: Details of path to the directory in the file system in which the Client applications are to be rolled out on PCs/workstations with AIX operating system (cf. parameter



`CLIENT_HOME_DIR_WINDOWS`).

`CLIENT_HOME_DIR_SOLARIS`: Details of path to the directory in the file system in which the Client applications are to be rolled out on workstations with Solaris operating system (cf. parameter `CLIENT_HOME_DIR_WINDOWS`).

Alternatively, these parameters can also be set in the connection settings. The evaluation order is as follows:

1. First, the operating-system specific path details are evaluated, which are set in the **connection settings** (e.g. `CLIENT_HOME_DIR_WINDOWS`).
2. Then the path information set in the **connection settings** using the parameter `CLIENT_HOME_DIR` are evaluated.
3. Then the operating system-specific path details defined in **fs-server.conf** are evaluated (e.g. `CLIENT_HOME_DIR_WINDOWS`).
4. Then path information set in the **fs-server.conf** file using the parameter `CLIENT_HOME_DIR` are evaluated.
5. If the parameter is not set, either in the connection settings or in `fs-server.conf`, as a default the operating system-specific user home directory is used.

The information, which can be set server-wide for all users using `fs-server.conf`, can therefore be overwritten on a user-specific basis.



If a directory is given to which the respective user does not have any access rights, a corresponding exception is output. The respective Client application is then not rolled out and cannot be used.

6.7 HTTP proxy configuration for inline browsers

In FirstSpirit Version 4.2, integrated preview was introduced in JavaClient. The inline browsers Mozilla Firefox (JXBrowser) and Microsoft Internet Explorer (JExplorer, see also Chapter 3.1 page 8) used for this can now be configured for communication over an HTTP proxy (analogous to proxy configuration of FirstSpirit-JavaClient). To do this, the parameter `inlinebrowser.httpproxy` is used with server name or IP address of the proxy and the port, e.g.:



```
inlinebrowser.httpproxy=myServer:8888
```

Depending on requirements, the HTTP proxy configuration

- **server-wide** can be set using the "Additional Parameters (optional)" field in the server properties, "Webstart" menu item (see *FirstSpirit Manual for Administrators*, Chapter "Webstart"),
- **project-wide** can be set using the "Additional Parameters (optional)" field within a quick start entry in the server properties, "Start Page" menu item (see *FirstSpirit Manual for Administrators*, Chapter "Start Page") or
- **for a user** in the user-defined connection settings on the FirstSpirit start page (see *FirstSpirit Manual for Administrators*, Chapter "Configure Connection Settings").

An HTTP proxy configuration made using these parameters temporarily cancels the local configuration settings of the browser, but they are not saved there.



The proxy settings are not copied from the browser or Java Webstart settings and therefore have to be given manually.



Additional proxy settings, e.g. details of an authenticating proxy cannot be set using the `inlinebrowser.httpproxy` parameter, but instead have to be configured using the user settings of the browser.

6.8 Server monitoring: Clearer display of activities

The "Activities" page ("Overview" menu item) in FirstSpirit Server-Monitoring has been made clearer.



Language ▼

User Admin ▶ End monitoring

FirstSpirit	4.2.206.37300		
Projects	59	Actions	2
Sessions	2	Preview	0

- Overview
- State
- Activities**
- Sessions
- Projects
- Overview
- Statistic
- Logfiles
- complete server
- according to project
- according to deployment
- Scheduling
- Overview
- planned schedule entries
- executed schedule entries
- User
- Search
- FirstSpirit
- Configuration
- Control
- Message
- Databases
- Monitoring
- Clustering

Activities

Current schedules:

	generate full	Stop execution
QA-Projekt		
<div style="border: 1px solid #ccc; padding: 2px; margin-bottom: 5px;"> <div style="display: flex; justify-content: space-between;"> ■ Name: generate (Generation) </div> <div style="display: flex; justify-content: space-between;"> Status: Running </div> <div style="display: flex; justify-content: space-between;"> Process: generating </div> <div style="display: flex; justify-content: space-between;"> Page: 2 </div> <div style="display: flex; justify-content: space-between;"> Site name: autogenerate_4 </div> <div style="display: flex; justify-content: space-between;"> Language: Deutsch </div> <div style="display: flex; justify-content: space-between;"> Channel: html </div> </div>	<div style="border: 1px solid #ccc; padding: 2px; margin-bottom: 5px;"> <div style="display: flex; justify-content: space-between;"> Start date: 08.03.2010 12:00:34 </div> <div style="display: flex; justify-content: space-between;"> Runtime to date: 27s </div> <div style="display: flex; justify-content: space-between;"> Remaining runtime: 7s (estimated) </div> <div style="display: flex; justify-content: space-between;"> Duration per page (total): 3s (estimated) </div> <div style="display: flex; justify-content: space-between;"> Duration per page (the last 10): 3s (estimated) </div> <div style="display: flex; justify-content: space-between;"> Pages (per language / in total): ? / ? </div> <div style="display: flex; justify-content: space-between;"> Position: 1 / 2 </div> </div>	
Mithras (Import 2009-11-11)		
<div style="border: 1px solid #ccc; padding: 2px; margin-bottom: 5px;"> <div style="display: flex; justify-content: space-between;"> ■ Name: generate (Generation) </div> <div style="display: flex; justify-content: space-between;"> Status: Running </div> <div style="display: flex; justify-content: space-between;"> Process: generating </div> <div style="display: flex; justify-content: space-between;"> Page: 846 </div> <div style="display: flex; justify-content: space-between;"> Site name: produkteeinzelseite </div> <div style="display: flex; justify-content: space-between;"> Language: English </div> <div style="display: flex; justify-content: space-between;"> Channel: html </div> </div>	<div style="border: 1px solid #ccc; padding: 2px; margin-bottom: 5px;"> <div style="display: flex; justify-content: space-between;"> Start date: 08.03.2010 11:59:03 </div> <div style="display: flex; justify-content: space-between;"> Runtime to date: 1m 59s </div> <div style="display: flex; justify-content: space-between;"> Remaining runtime: 1m 35s (estimated) </div> <div style="display: flex; justify-content: space-between;"> Duration per page (total): 134ms (estimated) </div> <div style="display: flex; justify-content: space-between;"> Duration per page (the last 10): 203ms (estimated) </div> <div style="display: flex; justify-content: space-between;"> Pages (per language / in total): 259 / 1554 (estimated) </div> <div style="display: flex; justify-content: space-between;"> Position: 4 / 6 </div> </div>	

Planned schedules

Project-based	Server-wide
	Clean up logs: Start date: 13.03.2010 23:00:00 ◦ Clean up logs

Figure 6-3: Server Monitoring – "Activities" overview

Currently running schedules are each displayed with a preceding box, which clearly shows the respective status. The detailed schedule information (e.g. action, page, page name, language, channel, etc.) has been indented.



7 New/Modified Functions in Modules

7.1 FirstSpirit Portal SAP EP BP



For detailed information on the FirstSpirit Portal SAP EP BP module, please also refer to the relevant module documentation.

7.1.1 Enhancement of XML files for navigation and search

When using the FirstSpirit Portal SAP EP BP module, XML files are generated by Generator for navigation and search. These files have been enhanced to include several additional attributes so that the following information is now also available in portals:

- Date and time of the release of
 - menu folders,
 - page references,
 - sections (in case of "mixed portal pages"),
 - media and
 - media folders
- last modifier (login name) of media
- file size of media in bytes (language-dependent).

7.1.2 Optimisation for multilingualism

If multi-lingual projects contain lots of content which is only in one or a few languages, individual pages in the editorial languages can be excluded from the generation, in which they have no content. They then do not appear in the XML file either for navigation or for the search. In addition, duplicate or multiple entries for **language-independent media** can be suppressed in the XML file for the search. As a result the file size is reduced, thereby saving resources for the generation and subsequent reading out of the files.

To use the new function, the new implemented "Language optimization" option is activated in the project properties (in "Project Components" area of the respective portal project, "FS PORTAL" entry, "Configure" button“):



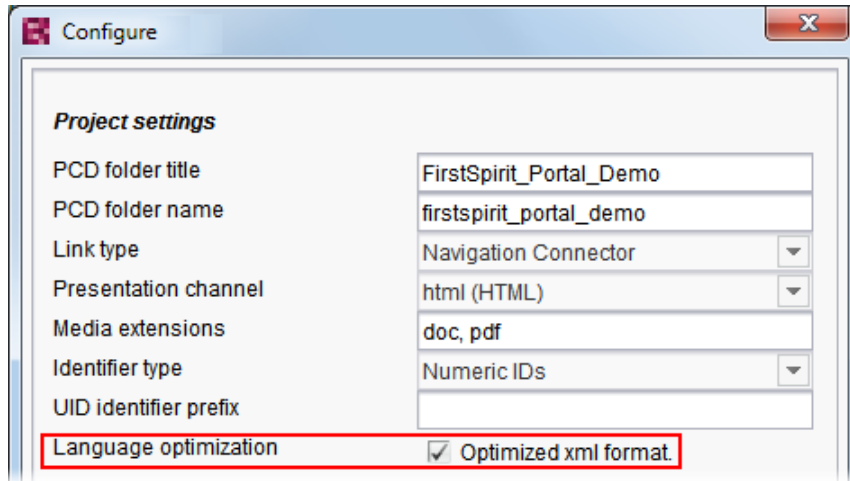


Figure 7-1: FirstSpirit Portal SAP EP BP – Optimisation for multilingualism

In the Client, the pages to be excluded from the generation can now be marked in the Page Store using the "Page completely translated into this language" checkbox, e.g. in the FirstSpirit JavaClient:

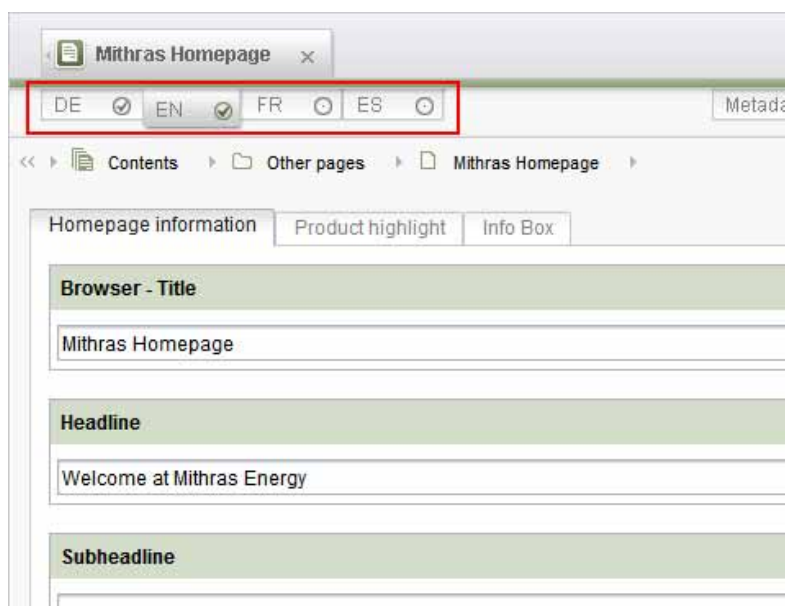


Figure 7-2: FirstSpirit Portal SAP EP BP – Page in several languages



All pages are generated in the master language, regardless of whether the "Page completely translated into this language" checkbox has been activated for a page or not.

In addition, if the "Language optimization" option is activated, language-independent



media only appear once in the XML file for the search; namely only in the master language.

7.2 FirstSpirit Search



For detailed information on the FirstSpirit Search module, please also refer to the relevant module documentation.

7.2.1 Search for character strings and beginnings of words

Whereas to date, it was only possible to search for whole words or precise search terms with the Search-Servlet, it is now possible to use the `wildcardSearch` parameter to search for the beginnings of words only (right-hand side truncation) or character strings (right and left-hand side truncation), whereby `*` is used as the truncation symbol. The parameter can be used in the `web.xml` file as a configuration parameter and as a request parameter in an HTML form. If the parameter is defined both in the `web.xml` file and as a request parameter, the definition is used with priority in the `web.xml` file.

The following values are available for this parameter:

- `contains`: A wildcard search is performed, whereby the search text entered by the user is automatically supplemented with an asterisk operator (`*`), namely at the start **and** at the end (right and left-hand side truncation). I.e., a search for *list* finds *List*, *Listing* and *Contentlist*.
Example: `wildcardSearch="contains"`
- `startsWith`: A search is performed for the start of a word, whereby the search text entered by the user is automatically supplemented with an asterisk operator (`*`), namely only at the end (right-hand side truncation). I.e., a search for *list* finds *List* and *Listing*, but not *Contentlist*.
Example: `wildcardSearch="startsWith"`
- `none`: The search looks for precisely the same search term. I.e., a search for *list* finds only *List*, but not *Listing* or *Contentlist*. This is the default response, if the parameter is not set.
Example: `wildcardSearch="none"`





*If the user uses inverted commas to search for a phrase (e.g. "List") or enters the wildcard * themselves (e.g. *List), automatic truncation is not performed.*



If using the parameter, you should take into account the fact that a search with `wildcardSearch="contains"` is more complicated and is therefore slower than a search with `wildcardSearch="startsWith"`.



8 Appendix

8.1 Changes to software behaviour

- **Translation help in the Content Store:** On opening the translation aid ("Extras" menu / "Translation help") on a data record, changes previously made to the data record but not yet saved are automatically saved. In this way, the changes can be directly taken into account in the translation. With automatic saving, a revision with the comment "Translation support (auto-save)" is generated in the version history of the data record.
- **Metadata in section references:** If a section reference is created by a section (Drag & Drop a section with Shift and CTRL key pressed), metadata which exists in the source section is copied into the section reference ("Reference section"). Metadata cannot be defined in these reference sections. Previously, metadata was not copied, or – if available – the default values defined in the metadata template. With output via the `none` and `inherit` parameters, the respective (source) section is now used to determine the meta information, or the object chain of the source section, in the case of output via `add` on the other hand, the object chain of the new reference section created is used.
- **Computing operations using types of `java.lang.Double` and `java.lang.Float`:** From FirstSpirit Version 4.2R2, the computing operations addition, subtraction and multiplication with `java.lang.Double` and `java.lang.Float` in combination with `java.lang.Integer`, `java.lang.Long`, `java.lang.Short` and `java.lang.Byte` return a correct calculated result compared to earlier FirstSpirit versions.

Example: From FirstSpirit Version 4.2R2, the following computing operation

```
$CMS_SET(a, class("java.lang.Double").valueOf("1.1"))$  
$CMS_SET(b, class("java.lang.Integer").valueOf("1"))$  
$CMS_VALUE((a + b).format("#0.000000"))$
```

returns the result `2.100000`, while before the result was `2.000000`.

Alternatively, the following operation can also be used:

```
$CMS_VALUE((1.1 + 1).format("#0.000000"))$
```

- **WARNING notifications in conjunction with schedules:** WARNING notifications of the following kind can arise in the file `fs-server.log` when starting a FirstSpirit Server:




```
WARN 03.03.2010 17:38:35.888
(de.espirit.firstspirit.common.xml.XmlSerializer): no field
de.espirit.firstspirit.server.scheduler.ScheduleEntryControlDTO#_id
```

These notifications is for information only and do not indicate any problems with the execution of schedules.

- **No server start if idseed.bin file is defective:** To avoid data inconsistencies, FirstSpirit-Server can now not be started if a defective `idseed.bin` file exists (directory: `~/data/server/idseed.bin`). Such a defective file can occur because of hardware faults or other errors in the file system.
- **Generation schedules on clusters:** Information on possible errors which have occurred during a generation can be viewed in server monitoring and in the schedule management or schedule overview in the server and project properties. Error evaluation and status ("Error"; "Finished with errors") of generation schedules with activated "Execute on cluster nodes" option is now identical to generation schedules executed without this option. Existing cluster Servers are incompatible due to this change and therefore have to be updated.
- **FirstSpirit Package Management:** Content in the input components `CMS_INPUT_CONTENTAREALIST` and `FS_LIST` are now only overwritten with master project content if they exist in the master project in the same language. If the master project contains, e.g. only content in English and the target project is in German and English languages, in the event of an update, content from the input components of the type `CMS_INPUT_CONTENTAREALIST` and `FS_LIST` are only overwritten with English language content from the master project, the German language content remains unchanged. Previously, only the English language content from the master project was copied into the target project with an update and the German language content of the input components `CMS_INPUT_CONTENTAREALIST` and `FS_LIST` was removed from the target project. This change already applies from FirstSpirit Version 4.2:
- **FirstSpirit Search:** From Version 4.2R2, if the request parameter "categories" is set in the Search-Servlet (cf. Module Documentation, Chapter "Searches (Search-Servlet)"), but no value is given (`categories=`), such a parameter is ignored in the search. Up to and including FirstSpirit Version 4.2, in this case a search was performed for an empty category ("").



8.2 Expiring functions in FirstSpirit Version 4.2R2

The following functions have been removed with FirstSpirit Version 4.2R2:

- **"Open tasklist on startup" ("Extras" menu):** The "Open tasklist on startup" option in the "Extras" menu of FirstSpirit JavaClient has been removed with FirstSpirit Version 4.2. As an alternative to this, since FirstSpirit Version 4.1, open tasks of each user are displayed on the personalised project entry page. In addition, the task list can be opened at any time using the keyboard shortcut "Ctrl+ T" or the menu item "Task list" in the "Tasks" menu.
- **"Delete" context menu entry on data sources:** The "Delete" context menu entry on data sources (Content Store) has been disabled. They can be removed using the "Delete data source" entry in the context menu, sub-item "Extras", data records can only be deleted in the data overview.

8.3 Announcements for future versions

8.3.1 Release of new database, web browser and operating system versions

It is currently planned to include the following **databases** in maintenance with FirstSpirit Version 4.2 Release 4 (4.2R4) or to let the maintenance expire:

- **Apache Derby:** The FirstSpirit internal database will be updated to Version 10.5.3.0.
- **Oracle:** Maintenance for Oracle databases Version 9 (Solaris and Linux) is to expire, in exchange, Version 11 (Solaris, Linux, Windows) is to be included in the maintenance. Maintenance will continue to be provided for Version 10 (Solaris, Linux, Windows).
- **Microsoft SQL Server:** Maintenance for the Microsoft SQL Server 2000 (Windows) is to expire, in exchange, Microsoft SQL Server 2008 (Windows) is to be included in the maintenance. Maintenance will continue to be provided for Version 2005 (Windows).
- **MySQL:** Maintenance for MySQL Version 4.1 is to expire, on the other hand, Versions 5.0 and 5.1 (each Linux and Windows) are to be included in the maintenance.
- **PostgreSQL:** Maintenance for PostgreSQL Versions 8.0 and 8.2 will continue, in addition, Versions 8.3 and 8.4 will be included in the maintenance. Universal maintenance of 8.x (each Linux and Windows) is planned.
- **IBM DB2:** Maintenance for IBM DB2 Version 8.2 (Linux and AIX) is to expire, on



the other hand, Versions 9.5 and 9.7 will be included in the maintenance. Maintenance will continue to be provided for Version 9.1 (Linux, AIX, Windows). Universal maintenance of 9.x is planned.

The release of **web browsers** (for use of FirstSpirit WebEdit) is due to change from FirstSpirit Version 4.2R4 as follows:

- **Mozilla Firefox:** It is planned to release Mozilla Firefox Versions 3.0, 3.5 and 3.6, on the other hand, Version 2.0 maintenance is to expire.
- **Microsoft Internet Explorer:** Microsoft Internet Explorer Version 7 will continue to be included in the maintenance, in addition, Version 8 will also be included. Maintenance for Version 6 on the other hand is to expire.



*It is also planned to extend the releases for **operating systems**, but specific details have not yet been decided at the present time.*

All changes will be listed in the technical data sheet for Version 4.2R4.

