

SYSTEM MANUAL

Version 3.6

GPL Edition

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I. Serverinstallation

1. Introduction

In today's world, we are constantly encountering documents, whether in our private or business lives. A document management system is essential to ensure that you don't lose track of what you have received at any given time and that you can trace it even after many years. With bitfarm-Archiv GPL 3.6, this can be guaranteed without any problems.

The new version GPL 3.6 offers a wide range of functionalities that considerably simplify the processing of documents both in the private sector and in smaller companies. Whether you want to map work processes in the system, or annotate or send documents, split booking information, archive and process e-invoices or simply as an audit-proof repository for the most important documents: The bitfarm-Archiv DMS offers you a tool for this, with which you can use all the functions mentioned above and many more.

This GPL version, just like our Enterprise version, is completely free of license costs and can be expanded and administered independently as required. The GPL version offers two databases as standard, from which you can choose and which should give you an understanding of the system's possibilities. Please bear in mind that these are examples and that you can adapt them to suit your requirements.

The existing installation routine will guide you through the installation process and provide you with a ready-made system that you can start working with as soon as the server installation is complete.

This manual is designed so that you can carry out an installation on the server, a setup in the administrator area and the installation on the clients directly one after the other. If you have problems with individual installations, you will find further information in the [Troubleshooting](#) section.

2. Standard means of representation in bitfarm-Archiv manuals

This manual uses different notations to highlight important information. Below you will find a small list of the presentation methods:

Please note: These are important issues that you should be aware of in the next steps in order to avoid problems

Note: Notes represent minor additional information intended to simplify the configuration of your system

Tip: Minor tips for easier administration of the system

Example: For better illustration, certain issues are explained using concrete examples

root Important technical terms are shown in italics the first time they appear

`scripts.ini` File names are highlighted with a different font

`ocrxmlfor=` Important commands in configuration files are always highlighted in blue and in a different font

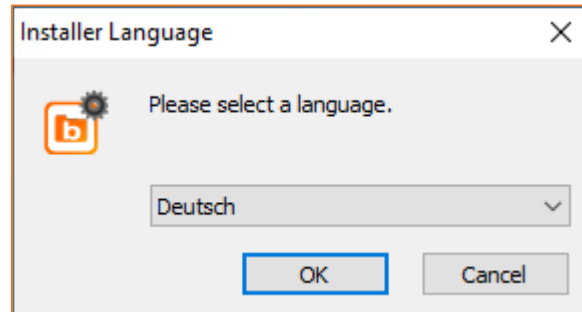
c:\bitfarm-archiv Paths and directories are written in italics

"Save" Quotation marks are used to highlight buttons in programs

3. Installation bitfarm-Archiv GPL version

In the first step, download the installer from our bitfarm-Archiv website and start it on the designated server. This can also be a supported client system, such as Windows 11.

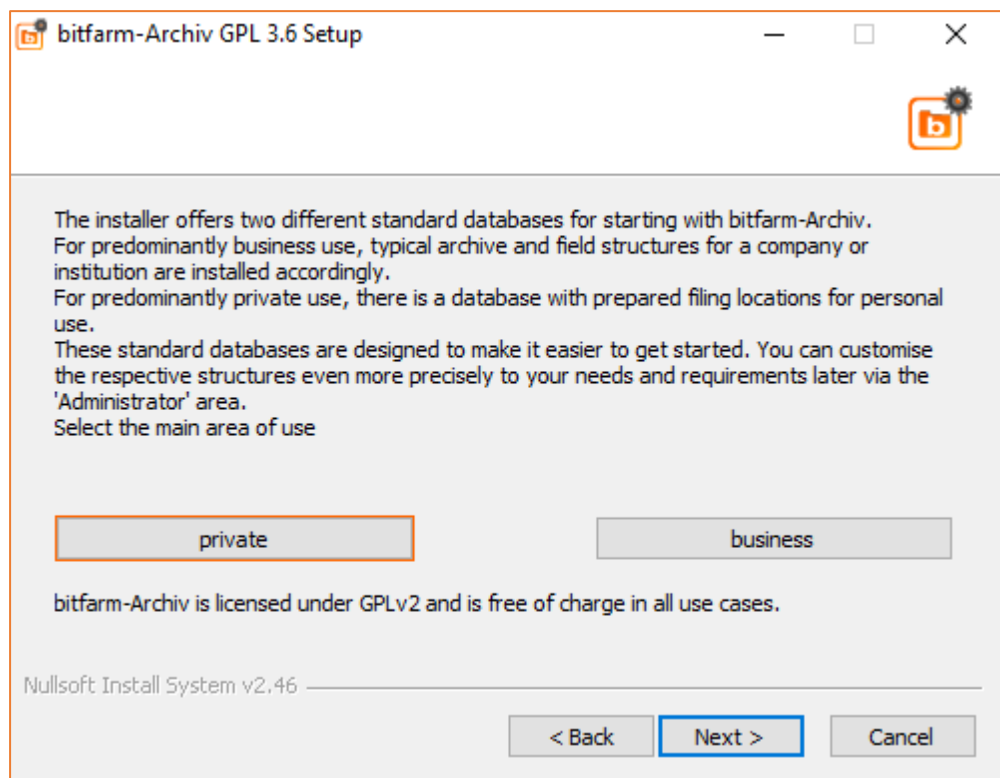
In the first window, select your preferred language, German or English, and then click on "Next".



In the following window, also click on "Next". Then select the type of database you want to start with, private or business. A ready-made database structure will be generated for you according to your selection, which you can work with directly in the system.

The notes and license conditions for using the GPL version will then appear. You must accept all windows before you can continue.

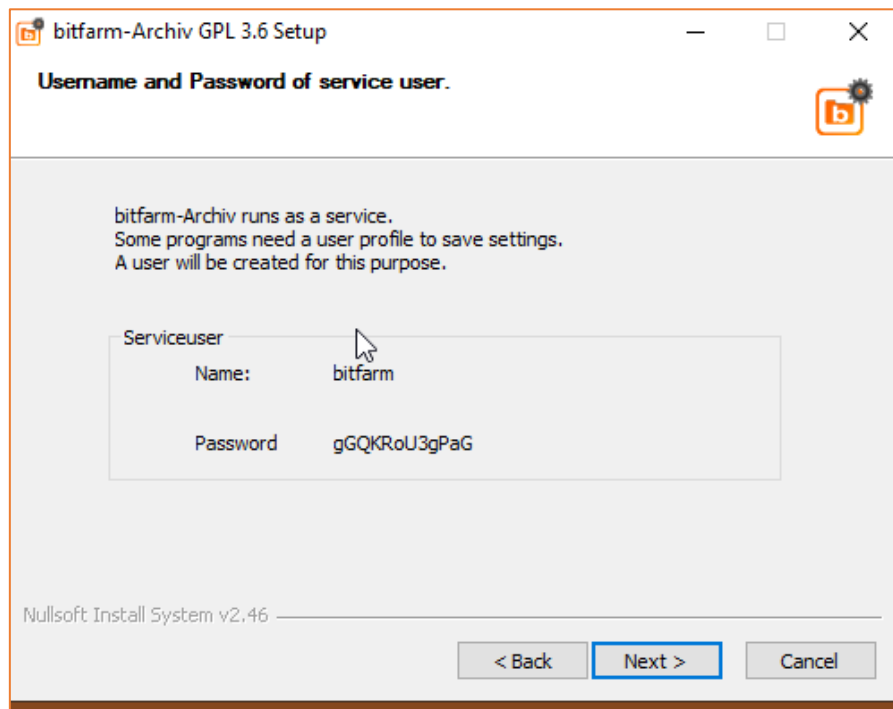
You will then see a window containing the access data for the new MySQL database to be created. Click on "Next" here too.



In order for bitfarm to run smoothly on your computer, it requires a local administrative user. The user name and password of this bitfarm service user, which is created for the smooth operation of the system, will appear in the next window. Click on "Next" to continue.

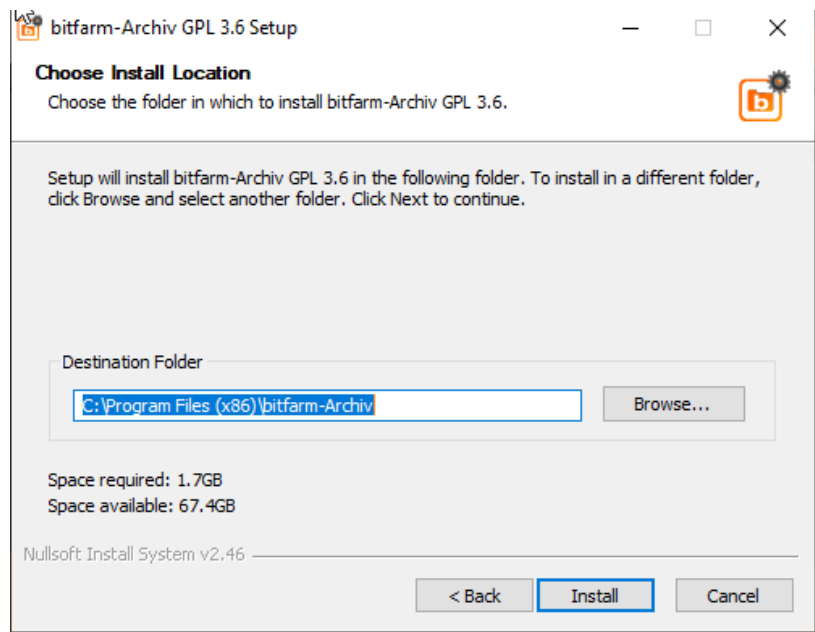
Note: A new user with the name "bitfarm" is created as the service user. If this user already exists, we will assign it a new password. This user is not intended for normal access, but only for the smooth running of the bitfarm services. For this reason, the user is hidden on the Windows side via the registry for logging in.

If you ever want to log in as a service user, the entry "bitfarm" must be set from 0 to 1 in the registry under [HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows NT\CurrentVersion\Winlogon\SpecialAccounts\UserList]. You can then log in as a bitfarm user with the cre-



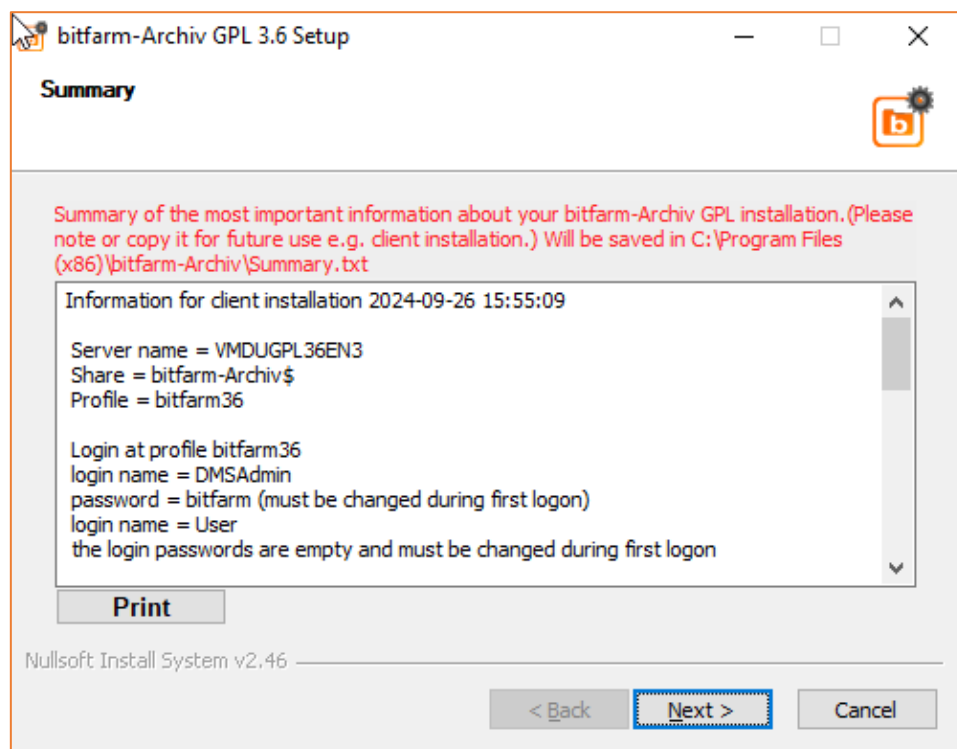
dentials stored in the summary.

You can then decide under which path the bitfarm-Archiv DMS should be installed. By default, we install in the *Program Files (x86)* directory, in a new *bitfarm-Archiv* folder. If necessary, select a different directory here. This should always be empty. Bear in mind that this directory also contains the file storage and will be correspondingly larger.



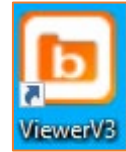
Click on "Install" if you have entered the path and the required disk space is sufficient. The bitfarm-Archiv will then be installed in the GPL version.

Once the installation is complete, the installation routine will show you a summary of all important information. This is also saved in a `summary.txt` file, but should always be stored somewhere.



You can close the installer with "Next" and "Exit". The server installation is now complete and bitfarm-Archiv GPL 3.6 can be used.

Note: A shortcut for the application has been placed on your desktop, if checked. You can now use this to start and use the system.



Note: The installation automatically creates 4 users (business database) with whom you can work directly in the system. One user "DMSAdmin", who acts as a super administrator in the system. This user can give each user authorizations for all areas. It is therefore not advisable to distribute its user data. The initial password for this user is "bitfarm". A password change is expected after the first login with this user.

In addition, the users "User1", "User2" and "User3" are stored in the system. When logging in for the first time, all users do not have a password and a new one must be defined immediately. You can also change the names of the users in the administration.

4. Setting up a data backup (recommended)

Note: To ensure that you have an audit-proof DMS, you always need a backup strategy, which you must describe in the process documentation.

bitfarm recommends a backup program to save your data. We automatically supply a backup utility called `bfa-backup.vbs`, which packs the most important data into zip archives for easy backup.

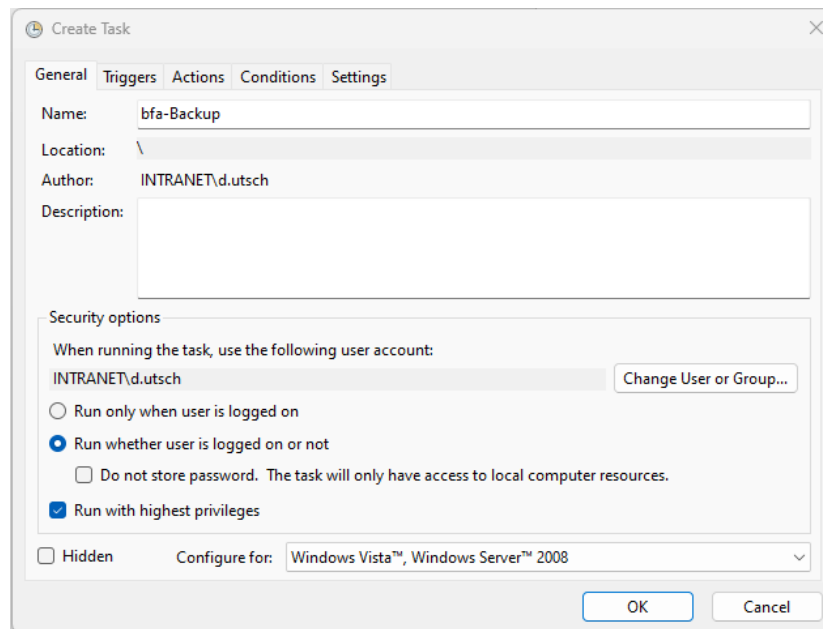
Note: The backup solution developed by bitfarm is only suitable for smaller solutions, for larger environments we recommend external data backup software to ensure maximum data security.

Please note: As soon as you execute the file `bfa-backup.vbs`, all bitfarm services are terminated and the database is stopped. This means that you cannot archive any documents or work with the bitfarm-Archiv DMS while the backup is running. It is therefore advisable to choose a time outside working hours for an automatic backup.

For the further configuration of the data backup, some paths must be specified in the `bitfarm36.CON` file. `backuppath` indicates where the zip archives are to be exported to. This path must at least be backed up using conventional backup means (e.g. tape drive or similar). Incidentally, the path is cleaned up by the utility program itself, so that as a rule there should be no data there that is older than 3-5 days. This period can be extended or shortened in the `CON` file itself using the `backup period` button, which expects an entry in days.

It is also essential to specify the `sqldatapath`. The storage location of the data from the MySQL DB must be specified here. This is usually the path `...\bitfarm-archiv\mysql-8.x.x-winx64\data`.

To set up the data backup, create a corresponding task (Actions → Create task...) via the



"Windows Task Scheduler". The following window opens:

You will first be on the "General" tab. First give your backup task a name here, e.g. "bfa-Backup". The task should always be executed **independently of the user login** and with the highest privileges. Then switch to the "Trigger" tab. There, create a new trigger for the task with "New".

Set the backup to "daily" and the repetition to "1" days. Then set the optimum start time for the backup program, depending on the working hours of your users; we have chosen 10 p.m. as an example. Once you have made all the settings, confirm them by clicking the "OK" button.

New Trigger

Begin the task: On a schedule

Settings

☐ One time
☒ Daily
☐ Weekly
☐ Monthly

Start: 10/17/2024 10:03:11 PM ☐ Synchronize across time zones

Recur every: 1 days

Advanced settings

☐ Delay task for up to (random delay): 1 hour
☐ Repeat task every: 1 hour for a duration of: 1 day
☐ Stop all running tasks at end of repetition duration
☐ Stop task if it runs longer than: 3 days
☐ Expire: 10/17/2025 4:03:11 PM ☐ Synchronize across time zones
☒ Enabled

OK Cancel

Set the action to "Start program" and select the path and the file `bfa-backup.vbs` for the "Program/Script" field. This should be located in your "bitfarm-Archiv" directory. Add the name of your `bitfarm36.CON` as an argument and confirm with "OK".

New Action

You must specify what action this task will perform.

Action: Start a program

Settings

Program/script: C:\bitfarm-archiv\bfa-backup.vbs

Add arguments (optional): DMS

Start in (optional):

OK Cancel

You will return to the "Create task" menu. Confirm this with "OK". A user prompt may open. Enter your user name and password there and the task has been successfully created. If you

wish, you can test the backup by executing the task or starting the file `bfa-backup.vbs` manually (must be done in an administrator console). Only pass the name of the `CON` file as a parameter, which is `bitfarm36` by default.

Additional switches for data backup can be activated in the `bitfarm36.CON` file. The following commands are available for this purpose:

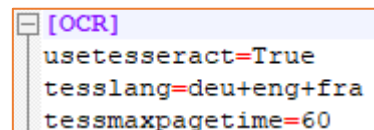
<code>backuparchiv=true</code>	Additionally backs up the audit-proof documents
<code>backupnrsarchiv=true</code>	Additionally backs up the non-auditable documents
<code>backupversion=true</code>	Backs up the bitfarm-Archiv directory
<code>filesize=40000</code>	Defines the size of the individual backup files (in kb)
<code>mysqlservice=MySQL8-bf</code>	Enter the MySQL service name here
<code>stoponfail=true</code>	Defines whether the services are restarted if the backup fails. are restarted. If the switch is set to "true", the services are not restarted.
<code>use7zip=true</code>	Uses 7Zip to zip the files

Note: The `backupversion` button can only be used if the database is not located in the bitfarm-Archiv directory. Otherwise the backup will fail. The switch is also used to save the file storage, as this is located in the bitfarm-Archiv *directory* by default.

Attention: Regularly check the up-to-dateness and content of the `.rar` archives on a random basis! bitfarm also recommends occasionally checking your backup strategy using a simulated "disaster recovery" scenario.

5. Full text recognition

The GPL version of bitfarm-Archiv DMS automatically includes full-text recognition, which is configured for German and English. The open source software Tesseract is used for this. This also allows you to add additional language files independently. To do this, copy the required Tesseract language files into the `...\bitfarm-archiv\Tesseract-OCR\tessdata` directory. Additional language files can be downloaded from the Tesseract Github repository. To activate the new languages, add the language code for the respective language, e.g. `fra` for French, in `scripts.ini` under `tesslang=`.



```
[OCR]
usetesseract=True
tesslang=deu+eng+fra
tessmaxpagetime=60
```

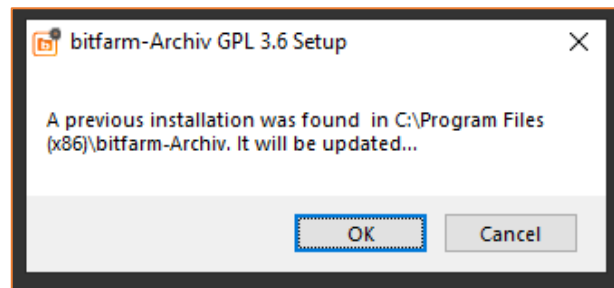
6. E-invoices

In 2025, you may receive invoices in digital format, such as XML or PDF with integrated XML. So that you can store these XML invoices not only in an audit-proof manner, but also in a readable format for normal people, bitfarm automatically offers you the option of transferring XML invoice files into a user-friendly format. You do not have to make any further settings, the

GPL version has an integrated display for XML invoice files in its standard version and automatically converts these into human-readable documents so that you are not confronted with the pure XML file in accounting. As we do not delete the original files, you can of course always access the original via the "Original file" button or view the complete text of the file via the "Full text" tab. When you click on the "Original file" button, the XML file will open the program you have stored for this file format.

7. Update/Upgrade

If you already have an existing GPL version 3.6 on your system, you can easily update the system with a new installer. Once you have downloaded it, simply run it on the server. The installer recognizes that a GPL version already exists and offers you to migrate or update the version, as



shown in the following illustration.

Please note: No user can work with bitfarm while the system is being updated. bitfarm also recommends that you always make a backup of the system before updating.

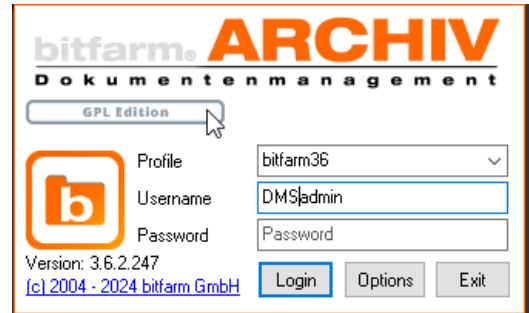
Your system will then be updated. Finally, you will receive a short summary, which you can continue without any problems, and finally you will be given the opportunity to start the viewer directly. This completes the system update and you can get back to work.

II Administration

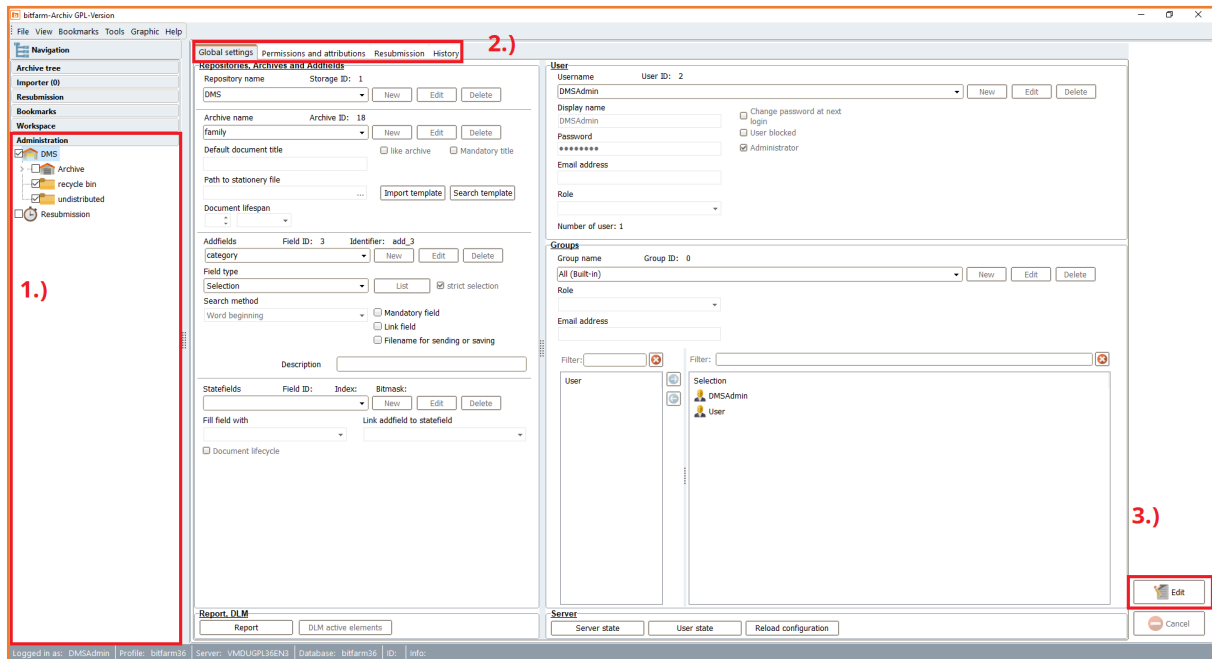
The administration is an important part of the bitfarm DMS. Here the administrator can set the archive structure, users, groups, additional fields, various authorizations and all other functionalities of the interface. Access to this area of the application should therefore only be granted **to suitable personnel**.

An administrative user with the name *DMSadmin* has automatically been set up for administration. The password for this user is initially bitfarm. You can reassign this via "File" and "Change password".

Note: This chapter deals exclusively with the use of the "Administration" tab and setting up the bitfarm-Archiv DMS. If you need information on how to use the application from a user perspective, please refer to our user manual in *the ... \bitfarm-archiv\docs directory*.



1. Basic operation



To administer your DMS, first switch to the "Administration" tab in the navigation area of the application (1). If you log in as DMSAdmin, this area will be opened initially by default. Here you will also find the administrable archive tree. This is already provided with a few warehouses and archives at the start, which you can already actively use.

In the upper area (2) you will find the various tabs for navigating between individual areas in the Administrator:

In **Global Settings**, archives and storage locations, various additional and status fields can be set up on different archives and, last but not least, you can create and assign groups and users. It is possible to create a report of your users and groups with the respective groups, but also to assign deletion periods.

All user and group authorizations for the individual warehouses and archives, as well as additional and status fields, are assigned in **Assignment and rights**. The status and additional fields are also assigned to the individual archives.

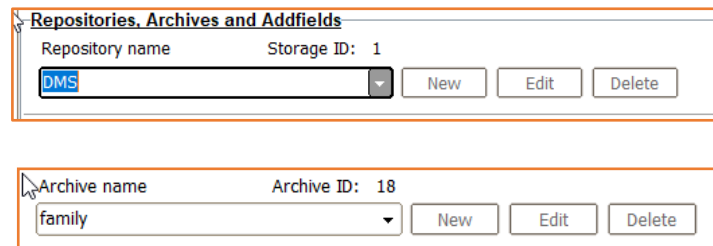
In **Resubmission**, you can see all current and completed resubmissions and with whom they are currently located and delete them if necessary.

In **History**, you can track and trace the actions of specific users, as well as the history of documents. Every administrative change can also be viewed here.

As a general rule, if you want to make changes, you must first click on the "Edit" button (3) to make this possible. Your changes are then saved with "Save".

2. Global settings

In the "Global settings" area, you can create all three objects contained in the name as well as status fields in the "Warehouse, archives, additional fields" section. To create a storage location, first click on the storage location in the administrator tree under which the new storage location is to be inserted. Then click on "New" and enter the name for a new warehouse, e.g. Sales. The warehouse is saved by clicking the "Save" button and the warehouse location should be displayed on the left in the Administration tab as a new warehouse in the archive tree. Proceed in the same way when creating archives.



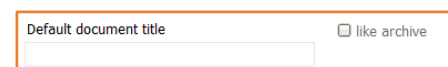
The image shows two screenshots of the 'Repositories, Archives and Addfields' interface. The top screenshot shows the 'Repository name' field with 'DMS' selected and 'Storage ID: 1'. The bottom screenshot shows the 'Archive name' field with 'family' selected and 'Archive ID: 18'. Both screenshots include 'New', 'Edit', and 'Delete' buttons.

In bitfarm-Archiv DMS, documents are only stored in archives. Storage locations are only intended for navigation and therefore cannot contain any documents.

Changes to existing archives or storage locations can be made by selecting the archive or storage location in the drop-down field and then pressing the "Change" button. Pressing the "Remove" button removes the archive or storage location in question. When warehouses are deleted, the archives they contain are moved to the root archive.

Attention: If an archive is removed, it should be noted that although the physical documents are still in the file storage directory ("bitfarm-daten"), the references to these files are deleted from the database. Documents that were in a remote archive can therefore no longer be accessed via the application.

With **Standard document title**, you define the standardized name to be given to the documents entering a previously defined archive. However, this function only applies if a document has not previously been given a name that differs from the DMS standard (= "document") (e.g. by applying server rules). By ticking "Like archive", the document is given the archive name as the document title. Checking "Title required" means that a title must be set.



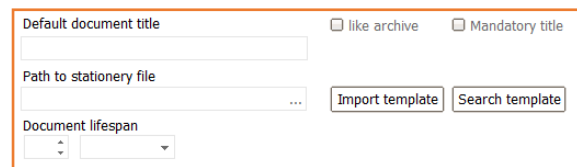
The image shows a screenshot of the 'Default document title' field with a 'like archive' checkbox.

With "Path to stationery file", you can place your stationery layer over archived files in the viewer and send customer invoices directly with your stationery, for example. One or more stationery files (also multi-page) can be stored in TIF format.

Clicking the "Import template" button creates a template for the archive. This is required for various processes in the application and should be created for each archive and after each change to the archive. This process is also automated.

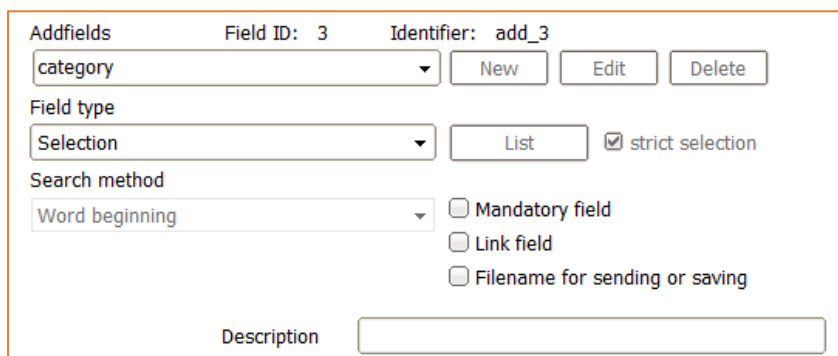
Tip: Avoid archives with the same name, as this can lead to overwriting and confusion when creating import templates and cause problems in the WFD. In addition, there should be no special characters in the name.

Clicking the "Search template" button creates a search template for the archive. This can be used for programmatic calls of the application with a corresponding search.



The **Document lifecycle** selection field allows you to define the deletion period for received documents in certain archives. More detailed information on setting up the DLM can be found in the [corresponding section](#).

Furthermore, you can create "additional fields" of various types in this area and also specify a search method. Checking the "Strict selection" box for selection fields means that users cannot



add any selection options, only the administrator in the administration area by clicking on the "List" button. Even the WFD file can then only enter valid values. By clicking on "List", you can store a list for the respective selection field. It is

also possible to load a file with many values. The list must be stored in ANSI format and have no Unix breaks. "Mandatory field" means that the user must make an entry for manual archiving. "Link field" causes a link to be created with the field content. In the "Check program" field, you can select a program or script that checks the entered values for correctness, for example. By ticking the "File name when sending or saving" box, the additional field value is used as the name for the document if it is saved or sent. The "Description" field is intended for further information on the respective additional field.

The "Field type" drop-down menu allows you to determine the type of additional field. The following options are available:

Universal	Field can be filled with text, numbers and special characters
Date field	Date field with calendar selection
Selection	Drop-down field with various selection options, one selectable selectable
Multiple selection	Drop-down field with various selection options, several options selectable options selectable

Interval	Field with time interval value. Days, weeks, months and years selectable available
Integer	Can be filled with positive and negative integers
Floating point	Can be filled with floating point number
Currency	Combination of two fields with a count-up function, in which floating point amounts can be entered in the positive or negative range or can be selected by clicking.
DLM selection field	Selection field that controls deletion periods through various selection options.
DLM date field	Date field in which deletion periods are influenced by an entered date. are influenced by an entered date.
Grid field	Table field, for example for split bookings

The search method can also be changed here as required. There are four different variants:

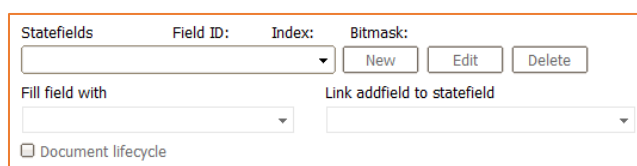
Start of word	Finds the search term at the beginning of words, standard variant
End of word	Finds the search term at the end of words
Component	Finds the search term even if it starts in the middle of the additional field
Exact	Only finds documents where the search term is exactly in the add-field

Note: Adding additional fields to databases with several 100,000 documents can take several minutes. During this time, users cannot make any changes to additional field values and may even receive an error message. It is therefore best to carry out administrative activities during system downtimes.

Note: When naming the additional fields, avoid technical names such as user, type or title. In addition, the search method "word component" should always be selected for multiple selection fields.

Note: Avoid the accumulation of selection or multiple selection fields with large lists. These can lead to performance problems with large databases.

Please note: Only delete those additional or status fields that you no longer need. Subsequent restoration is only possible with enormous effort.



The screenshot shows a web interface for managing 'Statefields'. At the top, there are labels for 'Field ID:', 'Index:', and 'Bitmask:'. Below these is a table with three columns: 'Field ID', 'Index', and 'Bitmask'. The 'Field ID' column has a dropdown menu. To the right of the table are three buttons: 'New', 'Edit', and 'Delete'. Below the table, there are two input fields: 'Fill field with' and 'Link addfield to statefield', both with dropdown menus. At the bottom left, there is a checkbox labeled 'Document lifecycle'.

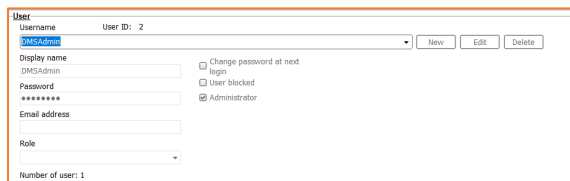
The Status fields area is for creating status fields. Proceed in the same way as when creating additional fields. The "Additional field link" field allows you to select an additional field from a drop-down menu to

which the status field is to be linked. With "Fill field with", you can fill the linked additional field

with various values. You can check the box "Document Lifecycle" if the status field should be responsible for the lifecycle of documents. The configuration then takes place in a later step. In the "Report, DLM" area, you can use the "Report" button to create various reports on authorizations, lifecycles and users and save them in a text file.

The "DLM active elements" button is intended for setting up Document Lifecycle Management and is explained in more detail in the [DLM](#) section.

The next area in the global settings is "Users". This area allows you to add, delete or change users. To do this, you can select the users already created in the "User name" drop-down field. The "Display name" field allows you to change the displayed name of the user, regardless of their login name. The password can be changed with "Password". You can also create users without setting a password and instead tick the checkbox "Change password at next login" and the user will automatically be asked to set a password the next time the application is started.



In the "Email address" field, you can define an email address for the respective user. The "Role" field allows you to preset a specific role for the user. This is divided into five roles:

- | | |
|------------------|--|
| Search: | The user can search for and list documents, as well as read annotations read comments on them. |
| Importer: | The user has the above rights and can also change and edit documents and documents and annotations, move and link documents as well as Import documents. |
| Standard: | The user has the rights of "Importer", as well as the e-mail sending, printing and viewing the history of documents. |
| Extended: | Has the rights of "Standard" and can also export documents, delete documents (NRS documents), cancel workflows and store them in an audit-proof manner. |
| Admin: | The Administrator group has all rights except "Read log" |

These roles are mainly intended to simplify changes in the "Assignment and rights" tab. Read more about this in the "Assignment and rights" chapter.

By selecting "User blocked", you can deny the respective user use of the DMS. A tick next to "Administrator" determines whether the user can view the administrator area and therefore carry out global administrative activities.

The last area is "Groups". Various groups can be created, changed or removed here, roles can be set (as for individual users) and even a cross-group e-mail address (for example, a distribution list) can be set for this group. In these groups, each user can be assigned (even in several groups) to make it easier to assign authorizations later on.

Finally, there are three buttons under the groups. These can be used to display the current status of the server and the currently logged in

users in a list. The third button can be used to import changes to configuration files without having to restart the bfaServer36 service.

The administrator can also log users out of the system using the "User status" button.

Caution: If you give a user administrator rights, they can also change global settings such as additional fields, archives or even group memberships and thus gain access to unauthorized documents. Therefore, only give this right, if at all, to selected users in IT.

3. Assignment and rights

In the "Assignment and rights" tab, you can assign rights to the individual users and groups for the various archives, additional and status fields. To do this, you can use the "Tree control" on the left-hand side to quickly select or deselect all archives or to open or close the tree.

In the area to the right, groups and users with various rights can then be assigned to the selected archive or archives. The roles set in the **global settings** help here to assign predefined rights.

However, you can also assign roles to individual users here. The respective rights are then automatically checked. Additional rights can be added at any time, given rights can be removed or completely unchecked using the "Reset" option shown in the drop-down menu.

The individual rights have the following meanings:

Search	Authorized to search in the respective archive
Show	Shows the user previews and thumbnails, or if only this right is assigned, the archive. These two rights are usually assigned together so that documents can be searched and displayed, as a kind of "minimum authorization".
Change/Edit	Additional and status fields can be edited, Document tool "Graphic" can be used
Writing	Editing the original file (NRS only)
Sending by e-mail	Sending the original, TIF or PDF file by e-mail
Move	Moving documents between archives. Requires the import right in the target archive
Delete	Delete documents from the DMS (NRS only)
Print	Allows you to print documents
Link	Allows the creation and deletion of individual documents from links
Import	Users can import documents into the system
Show history	Displays the document history in the "History" tab
Cancel workflow	Allows the user to interrupt the workflow, even prematurely.
Admin functions	Create global bookmarks, check in documents of other users, admin functions in the archive tree
Log reading	Logs the reading of the document by the respective user. Users in the history
Audit-proof filing	Allows the user to subsequently define documents as audit-proof.
Read annotations	Public notes and annotations can be read
Write annotations	Lets the user add notes and annotations
Change annotations	Lets the user change notes and annotations

Note: To move documents that have already been archived, you need the import right in the target archive.

Note: Links can be viewed and created without the link right.

You can also make changes to the additional and status fields in the area below. Here you define which archive displays which fields and who has which rights. Proceed from left to right and

The screenshot displays a web-based permissions configuration interface. It is organized into two main horizontal sections, each containing four panels. The top section is titled 'Permissions for addfields' and the bottom section is titled 'Permissions for statefields'. Each section has a 'Filter:' input field with a red 'X' icon. The first panel in each section lists available fields: 'Name', 'category', 'tax year', and 'trip' for addfields; and 'Name' for statefields. The second panel is a 'Selection' area with a list box containing 'document_date'. The third panel, titled 'Users and groups', shows a list of users: 'All (Built-in)', 'Marketing', 'DMSAdmin', and 'User'. The fourth panel, titled 'Field permissions', contains three checkboxes: 'Read', 'Write', and 'Edit'. The 'Write' checkbox is checked in both sections.

first select the archive(s), then the respective field and assign it to the rights of the two tables so that it is displayed, such as the fields "Document date" or "Checked" in the illustration. Various groups or users must then be defined with the respective field authorizations for this field. The field authorizations are divided into "Read" (user can read the field but not change it), "Write" (user can set status fields once or fill additional fields once) and "Change" (user can make changes as often as required). Write includes read and change includes write and read, even if these are not checked.

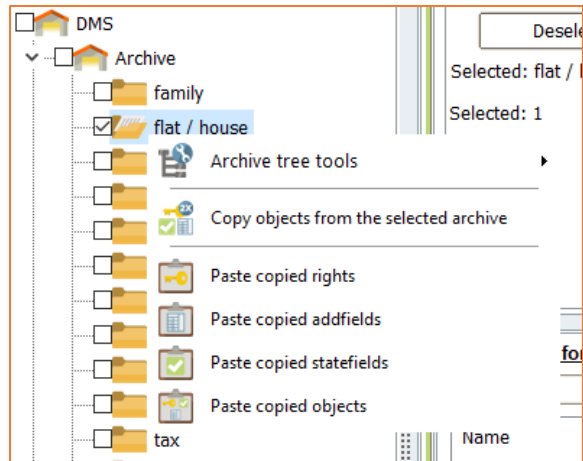
In principle, the following applies:

The authorizations are additive! This means that you always receive the sum of all authorizations assigned to you (including the groups you are in).

Field authorizations are also prioritized over field configurations. For example, if a user archives a document and there is a mandatory field to which they only have read access, then the mandatory field cannot be filled in by this user.

Please note: Additional fields with the same name should not be assigned to an archive in order to avoid keywording problems. In addition, only additional fields that are also available in the underlying archives should be set up at storage level in order to avoid search or editing problems.

If you create new warehouses and archives at a later date, you can copy existing authorizations or additional and status fields to the new archive. To do this, right-click on the existing archive from which the properties are to be copied. Select the second menu item "Copy objects from the selected archive". This copies all properties of the archive to the clipboard. You can now right-click on the newly created archive to paste the corresponding properties.



Paste copied permissions

Copies the group or user permissions to the new archive

Paste copied additional fields

Copies the additional fields with the corresponding field authorizations

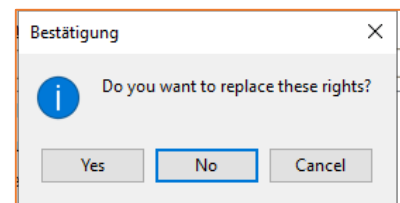
Paste copied status fields

Copies the status fields with the corresponding field authorizations

Paste copied objects

Copies all the above properties to the newly created archive

If you have already made configurations on the new archive, the program will always ask you whether the set properties should be overwritten. Clicking "Yes" will overwrite the properties, clicking "No" will retain them and clicking "Cancel" will cancel the process.



4. Resubmission

Under the "Resubmission" tab, you can search for resubmissions across all archives. You can either search by ID or by user. Use "Search" to start the search for the parameters entered, "Reset" to delete the values entered in the search fields and "Delete" to delete resubmissions.

Note: The resubmission should generally only be deleted if the task behind it has actually "expired" completely and requires no further action.

If you are searching by ID, you can enter the ID of the respective archive under Archive ID, under GdocID you can enter the respective GdocID of the document you are looking for and under Reference ID you can enter the ID of the resubmission to search for the desired resubmission.

The screenshot shows a search interface with a tab labeled 'Search'. Under the 'Search for ID' section, there are three input fields: 'Archive ID:', 'Gdocid:', and 'Reference-ID:'. To the right of these fields, there is a 'User:' dropdown menu and a 'Date:' field with a comparison operator dropdown (currently showing '='). On the far right, there are three buttons: 'Search', 'Reset', and 'Delete'.

In the "Search for editor" area, you can select a user from the drop-down menu and, if desired, add a date for the search and display the resubmissions of the respective person in a complete list.

5. History

The History tab allows you to view all changes in the administrator area (administrator log) as well as changes to documents (document history). You can use the three drop-down fields "User", "From" and "To" to make a further restriction. The results are then displayed in tabular form at the bottom of the screen. You can also use the GdocID field to search explicitly for a specific document.

The result contains various different pieces of information. The **date** of the history entry, the

The screenshot shows a search interface with two tabs: 'Administrator-Log' (selected) and 'Document-History'. Under 'Administrator-Log', there is a 'Gdocid' input field. Under 'Document-History', there is a 'User' dropdown menu, a 'from:' dropdown menu, a 'to:' dropdown menu, and an 'Entry' input field. Below these fields, there are 'Total:' and 'Range:' labels, followed by navigation buttons (left arrow, right arrow, and a refresh icon). On the right, there are 'Search' and 'Reset' buttons.

GdocID of the document, the **user** who made the change and the **entry** that describes the exact change in writing.

6. Document lifecycle management

Document Lifecycle Management offers you the option of controlling the lifespan of documents, for example using the additional and status fields, and deleting documents automatically. There are several options for this in the administration area of the application.

One option is the lifespan for archives. Under the "Administration" tab, in the **Global settings** area, you can assign a document lifecycle to each archive so that the archived documents automatically receive a purge date and are deleted accordingly. To do this, you must select the relevant archive

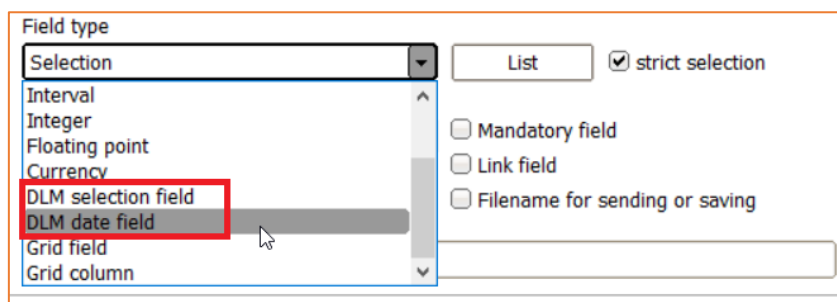
The screenshot shows a section titled 'Document lifespan'. It contains a dropdown menu for selecting an archive and a text input field for the lifespan value.

and assign a lifespan to it in Edit mode. The document lifespan is added to the archiving date. The newly created date is the purge date.

Example: If a document was archived on 12.10.2018 and the document lifecycle was set to 2 years, then the purge date is 12.10.2020.

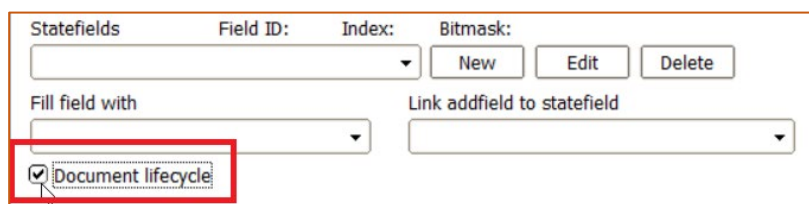
It is possible to configure each archive individually: Enter a number (max. 365) in the left-hand field and choose between day, week, month and year in the right-hand field. Both values then result in the **document lifecycle**. This must always correspond to at least one day.

If you do not enter a lifespan for an archive here, the documents in this archive will be perma-



nently retained if no further changes are made.

Another option is the additional and status fields in the **Report, Contract management, DLM** section, which change the lifespan based on these fields. To do this, click on the **DLM active elements** button and a window will open with all additional and status fields that have been marked as DLM fields. To do this, you must first create the corresponding fields (DLM selection fields, select DLM date fields as the type for additional fields and check DLM active element for DLM status fields).

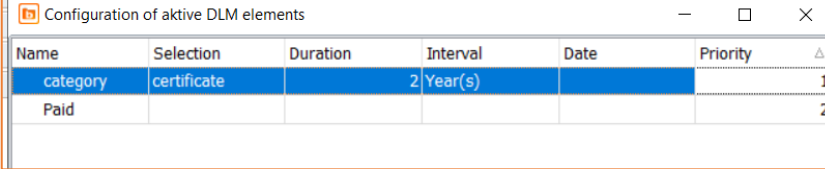


Configuration of DLM-active elements

In this window, each status and additional field can be given its own lifespan. To do this, select the relevant field and determine the lifespan using the "Duration" and "Interval" fields. You can also select "Never empty" to prevent deletion.

For selection fields, different lifecycles can also be set for the individual selection options.

Once you have determined the respective lifecycles for the fields, you can also determine the order for the additional fields. You can change the order of the status and additional fields by moving them and thus determine the priority for individual rules. The following applies: the higher up a rule is, the higher its priority.



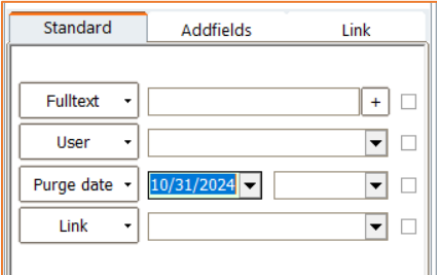
Name	Selection	Duration	Interval	Date	Priority
category	certificate	2 Year(s)			1
Paid					2

You can obtain information on the various status and additional fields, such as which archive they are in, by right-clicking on the respective field.

Example: The "Delivery date" is set for a document. The deletion period is 6 years, as we can see from the example table above. However, if we give the document the status "invalid", it will be deleted after just 1 month.

You can use the Date column in the "Configuration DLM active elements" window to assign a fixed purge date.

In addition to the methods mentioned above for defining deletion periods, you can also manually assign a deletion period to individual documents. This option is only available as an administrator and can be accessed in the **Storage and archives** tab under the **Standard** tab.



Standard	Addfields	Link
Fulltext		<input type="checkbox"/>
User		<input type="checkbox"/>
Purge date	10/31/2024	<input type="checkbox"/>
Link		<input type="checkbox"/>

The purge date can be viewed there by all users. The administrator can assign a specific purge date to the selected documents in edit mode.

You can also include this **purge date** in a bookmark with a search query. Use the bookmark editor for this.

Please note: The prioritization sequence corresponds to the following rule: The administrator's entry has priority over everything else. If no entry is made by the administrator, the additional or status fields are evaluated to determine a purge date. Only then is the evaluation of the archive's lifespan taken into account if none of the additional or status fields apply.

Another tool is to **recalculate** the **purge date**. The date set by the administrator is deleted and the new purge date is calculated using the additional and status fields or the archive information.

Attention: DLM deletes the documents from the viewer, database and file storage! Subsequent restoration is not possible. Please note that the deletion process is carried out daily by the bfaServer service - only a running service guarantees constant deletion of the desired documents.

There are also switches in the `CON file` for the DLM that can be used to set up the DLM. This requires an additional section called `[DLM]`. The following switches can be entered here:

<code>expired_dir</code>	Directory in which documents to be deleted are saved as a backup. are saved as a backup. The documents are packed as original file in ZIP packages. If no path is entered is entered, the backup is created in ... <code>\bitfarm-Archiv\bin\expired</code> . Final deletion must be carried out by the administrator.
<code>check_time</code>	Time at which documents are to be deleted. Specification in the following format: hh:mm
<code>dont_check_expired</code>	True or False . Determines whether the DLM is activated at all. If True , it is switched off.

Attention: Please note that moving documents between the archives also recalculates the deletion period of the documents. If a DLM element does not exist in the new archive, it will not be taken into account for the recalculation of the deletion period.

The bitfarm-Archiv DMS uses the **bfa-Server36** service to delete documents that have exceeded the defined lifespan. The documents are deleted every day at 06:00, unless another time has been configured via `check_time`. If the server service is not started at this time, it deletes the documents as soon as it is started. However, only documents whose lifespan has expired and of which a backup could be created are deleted.

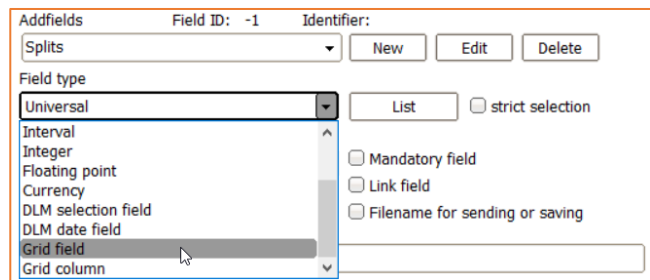
The administrator is responsible for deleting the corresponding backups.

Please note: Implementing the new configurations can take some time, especially if many documents are affected. It is therefore advisable to set the various deletion periods one after the other and wait until the configurations have been implemented. This can be found in the administrator area under "History" in the administrator log. An entry is automatically created there when the desired configurations have been completely applied.

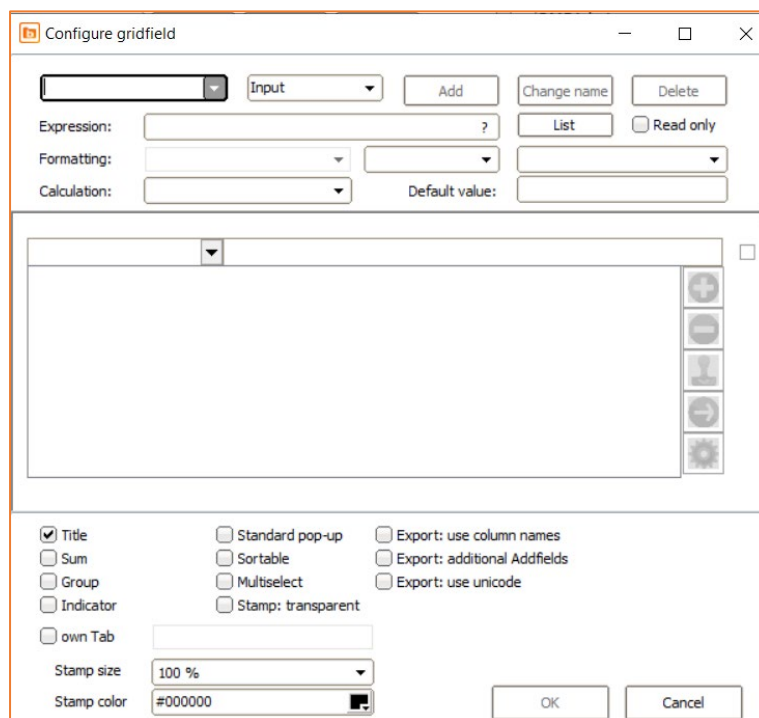
Attention: Please do not shut down MySQL or the bfaServer service under any circumstances during the implementation of the configurations in order to avoid possible sources of error. In the administration area, you can read when the deletion data for all documents was created in the History tab in the administrator log. An entry is automatically generated for this.

7. The grid field

The grid field is the new additional field introduced with version 3.6.2 of the bit-farm-Archiv DMS. It can be used to make splits, for example, or to add various values to a document in tabular form. The grid also offers the possibility of making smaller calculations. First create a new additional field and select the type "Grid field" in the field type list. This replaces the "List" button with the configuration button. Click on this button to access the configuration of the grid field.



Note: The selection also contains the grid column, which cannot be selected, but is intended



for the resulting columns in the grids.

The configuration can be divided into three areas. The top area is the actual configuration of the grid, with the various columns and corresponding formatting or even stored rules. The middle area shows the resulting grid, which the users will see later, and the bottom area defines the additional options for the grid. Let's take a look at the configuration first:

The top left field is used to create or select existing columns. Enter your column name here and then choose from the selection of possible field types.

There are eight different types to choose from:

Input	Corresponds to the universal field
Date	Corresponds to the date field
Number	Corresponds to the integer field
Currency	Corresponds to the currency field
List	Corresponds to the selection field. A list can be stored.
DB list	Corresponds to the selection field. A list from an existing selection field can be loaded.
AutoInc	Self-incrementing number field. Deleted values are not replaced.
Floating point	Corresponds to the floating point field

Click on "Add" to create the new column. The desired table can then be created bit by bit. The middle section should continue to grow with each column:

If you have made a mistake and want to change the field, you can change the name by selecting the relevant field and clicking on "Change name". You can also delete the column completely by clicking on "Delete".

Attention: The type of a field cannot be changed afterwards.

If the field is an amount field, for example, the resulting value in the field can be adjusted using the expression. Smaller calculations can be made here, such as multiplying the number by a basic amount to determine a total amount. Use the "?" to display further options.

A list for a list field can be stored under "List". The operation is similar to that of the selection field list creation. By ticking "Read only", you ensure that the user cannot fill in the field. This is advisable for AutoInc fields, for example.

Formatting is relevant for currency fields. Here you can decide how the value is displayed in the field. The default is always two decimal places and the euro sign.

If you have selected "Database list" for a field type, you can use the "Selection list" field to load the corresponding list. If you do not have a selection field

with a stored list, you can also use the values from a normal additional field. Simply select the value "Addfield values" and use one of the existing fields, as shown in the illustration.

A default value can also be entered below this, which is always added to the field as soon as a new line is added.

In the "Calculation", you have the option of adding up the respective values of the columns so that the total value is shown, for example. To do this, you must always check the "Sum" box, otherwise it cannot be displayed.

We have now completed the basic configuration of the grid. Further settings can still be made.

Title	Displays the column names in the header
Sum	Displays the footer so that totals can be calculated
Group	Allows the grouping of identical values in the table
Indicator	Displays a marker for the line currently in use
Standard pop-up	Enables a right-click context menu with additional settings
Sortable	Enables free sorting based on columns
Line marking	Highlights every second line a little for easier readability
Own tab	Displays the grid in its own tab instead of in the "Additional fields" tab. You can also define your own name.

Among the export functions:

Use column names	The header row is also exported
Other additional fields	Exports the other additional fields as well as the grid
Use Unicode	Set the encoding of the export file to Unicode
Stamp: Transparent	Removes the white background from the stamp

The stamp size and color can be used to administratively define the appearance of the stamp.

8. The Search Result Highlighting

The Search Result Highlighting is a tool for marking the search terms on the documents. This is only used without further configuration for image files; files that already have the full text integrated remain unaffected. However, if you also want to receive markings on the previews for such files, the following configurations must be made:

Open the `scripts.ini` in the [OCR] area. Add the `ocrxmlfor=` switch here. The equal sign is followed by the file types for which a Search Result Highlighting should also be created, such as `PDF` or `ODT`. Below is an example of how this switch is used:

```
ocrxmlfor=.pdf.odt.msg.eml.docx.doc.xlsx.xls
```

Adding these file types does not affect the full text of the documents. Only the reference marking is made possible by the `XML file`. The document therefore passes through the full text recognition process once, but only an `XML file` is created.

The terms you are looking for are then highlighted in the preview of the document in the viewer. These can be scrolled through by repeatedly pressing the F3 key. Several search terms are highlighted in different colors.

Note: The position of the search term is not changed when the preview is subsequently rotated.

III Client installation

9. Prerequisites

In order for a client computer to work smoothly with bitfarm-Archiv DMS Version 3.6, the following conditions must be met:

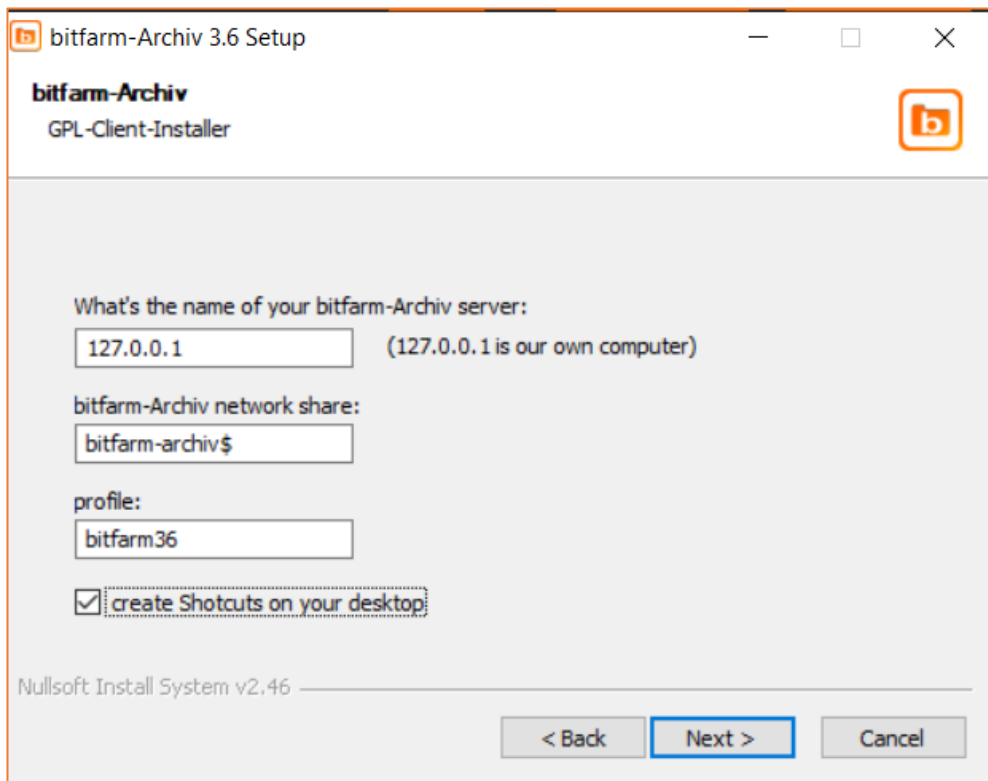
- Installed and configured Windows 10 or higher
- Current Windows Scripting Host (version 5.6 or higher)
- Access to the DMS server via Windows file sharing (domain preferred)
- Virus protection configuration so that VB scripts can be executed (also from other computers)
- Firewall must allow access to the set MySQL and bfaServer36 port
- Write access to "HKEY_CURRENT_USER"
- If necessary, enter the server in the Internet options under Local intranet in the format `file://Server name`

10. Installation via client installer

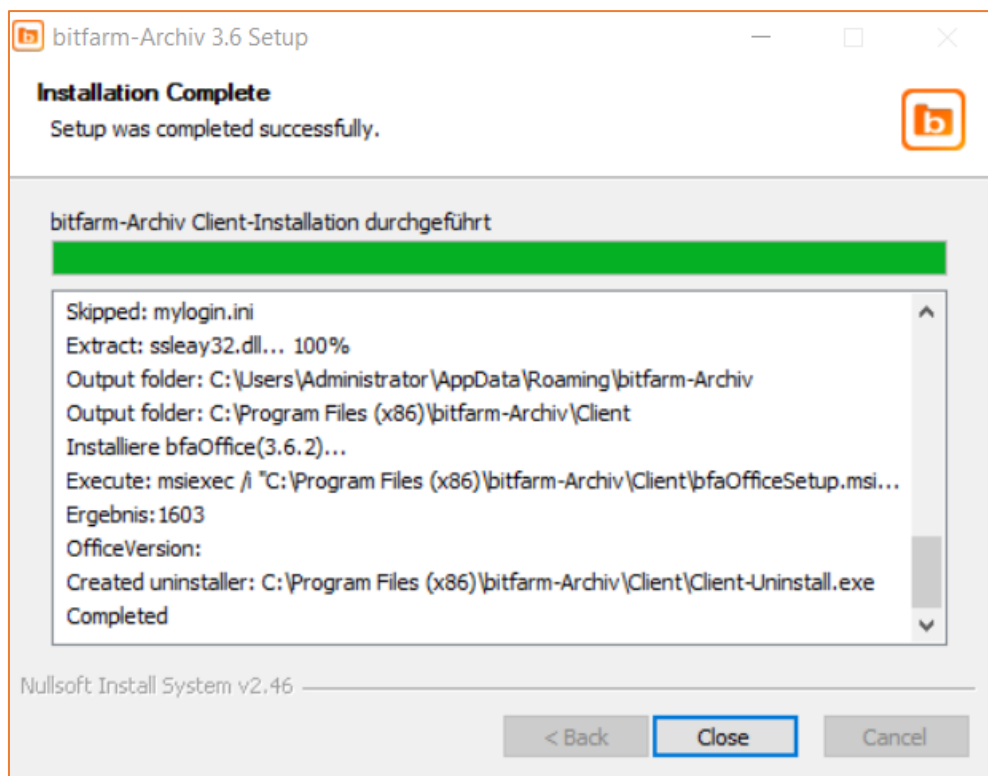
The bitfarm-Archiv-Client-Installer installs the following components on the respective workstation:

- Shortcut `ViewerV3.exe`
- Microsoft Office add-ins (Word, Excel and Outlook)
- Hotsearch tool
- "Send to" links
- Standard annotation package
- Special archive printer with fixed target archive (optional)

Use the client installer to install the components described above on each required computer. To do this, start the downloaded installer. First select the language and continue. Then enter the required information, the server name, the share and the profile name, as shown in the following illustration.



Then click on "Next". You can then define a special archive printer with which you can import documents directly into a special directory via the printer path, for example in incoming invoices, if necessary also with a parallel print output. After the desired configurations, click on "Install" and the client will be set up for use with the bitfarm-Archiv GPL version. The bitfarm client is now installed and the application can be closed with "Exit".



IV. Further configuration

This chapter deals with special configurations that are possible for the bitfarm-Archiv DMS, such as the duplicate check, the color schemes, but also with various special constellations that may be encountered during the installation.

1. Duplicate check

The bitfarm-Archiv DMS has the option of recognizing two completely identical documents (**binary identical, not just visually identical!**) and separating out duplicates before they are entered into the system. To do this, bitfarm creates a checksum for each document and checks the database for matches. If a match is found, the document is not archived, but is provided with an error file and moved to the duplicates folder in the "bitfarm-archiv" directory. To activate the duplicate check, simply set the switch `dublettenpruefung` to `true` in the CON file. If it is not already present, add it in the `[Options]` section.

Finally, you must restart the services so that the duplicate check becomes active.

2. Color schemes for the application

The administrator has the option of creating different farm schemes via the *skin files* so that users have different color palettes to choose from based on the skin. However, the locally configured `colorscheme.ini` is always prioritized.

In the respective file, which is located under `%bitfarm-Archiv%\Viewer-files\Skins`, the following changes can be made with the corresponding editor in the `[Skin]` area:

<code>clLime=\$00BDBDBD</code>	in processing of the document
<code>clRed=\$00E7EBEF</code>	Checkout of the document
<code>clBlue=\$00F1F6F9</code>	Display original file
<code>clYellow=\$00D4DBE0</code>	Link and put resubmission to work
<code>clProgress=\$00BDBCFF</code>	Document in resubmission
<code>clProgressSelected=\$00F1F6F9Document</code>	in resubmission, grade selected
<code>clWork=\$00BDBDBD</code>	Document in progress
<code>clWorkSelected=\$00E7EBEF</code>	Document in progress, just selected
<code>clDone=\$00B7C1CB</code>	Resubmission ready
<code>clDoneSelected=\$03D4DB23</code>	Resubmission ready, just selected
<code>clUrgent=\$00BCB7C1</code>	Resubmission overdue

clUrgentSelected=\$00333300

Resubmission overdue, just selected

The values behind the equal sign correspond to the desired color and can be adjusted using the color palette above.

```
1  [Skin]
2  Name=bitfarm-Archiv
3  Author=bitfarm GmbH
4  ColorBtnFace=clBtnFace
5  FloatingWindowBorderSize=4
6  OfficeIcons=0
7  OfficeMenu=0
8  OfficeStatusBar=0
9
10 clLime=$00BDBDBD
11 clRed=$00E7EBEF
12 clBlue=$00F1F6F9
13 clYellow=$00D4DBE0
14
15 clProgress=$00BDBCFF
16 clProgressSelected=$00F1F6F9
17 clWork=$00BDBDBD
18 clWorkSelected=$00E7EBEF
19 clDone=$00B7C1CB
20 clDoneSelected=$03D4DB23
21 clUrgent=$00BCB7C1
22 clUrgentSelected=$00333300
```

3. The WFD file

Please note: Additional fields that have already been filled are not overwritten by the WFD, values can only be added.

The WFD file is a way of automatically sorting and naming documents or sending them to a workflow. Your WFD file is located in the "bitfarm-Archiv" directory and has the name `bitfarm36.WFD`. It already contains a naming rule in which an additional field "Document date" is filled with a date using a [naming section](#) and a [search pattern](#) in the document. This rule also gives the imported documents the title of the original file.

The `WFD file` also contains keywording for the common IBANs with the option to exclude your own IBAN from recognition. Below you will find an example workflow for incoming invoices.

Note: Always open the `WFD file` for editing with a suitable editor program, such as Notepad++, to avoid possible difficulties. bitfarm stores a portable version of the tool under `...\\bitfarm-Archiv\\NPP`.

a) settings section

The WFD file is divided into different sections. The `settings section` allows you to make global settings. Here, known values, such as the sender of a mail or the name of the original file, can be written to various variables so that they can be used later. The `settings section` always has the highest priority of all sections and should therefore come first. You can see an example of the structure of the `settings section` in the adjacent illustration:

The section always begins with the name of the section, in this case `settings section`. You can then write the various values in variables. Use the `USE` command to write the existing information, such as the `sender`, to a virtual additional field. Use the `FOR` command to define the additional field into which the value is to be imported, such as the `sender` field. This is represented by bracketed `% characters`. You can create any additional field to be able to use it later. End the section with the `end section` command.

Note: The usable values for the `USE command` are original file, direction (inbox, outbox, internal), extension, file date, origin (fax, e-mail, scan, file, print, unknown), user, table (archive in DMS), author, title, size, fax number, recipient, sender, date received, date sent, time received, time sent, CC and BCC.

b) sorting section (automatic sorting)

You can use the `sorting section` to sort documents directly into different archives. You can use full text information to create conditions that are used to sort the documents in a targeted manner.

<code>sorting section</code>	Start section
<code>andindocument=Invoice number</code>	Invoice number in full text
<code>andindocument=bitfarm-Archiv</code>	bitfarm-Archiv in full text
<code>sortto=Incoming invoices</code>	Sort in archive incoming invoices
<code>end section</code>	End of section

The example above sorts documents containing the terms `invoice number` and `bitfarm-Archiv` directly into the `Incoming invoices` archive in the DMS. For each document that enters the DMS, the system checks whether the criteria are correct and whether the document needs to be moved. The `sortto` command can be used to specify several archives, separated by semicolons. The documents are then moved to all archives. To make further restrictions, the command `archivtabelle=` can also be specified. This only sorts documents that are archived in this specific archive, for example the undistributed archive. Instead of the `andindocument` command, for the explicit search of information in the full text of the document, the `notindocument` command can also be used, which checks whether a certain term is not present in a document, or even the `orindocument` command, which leads to a folder.

Attention: If you use several `andindocument` commands, your instructions will only be executed if all `andindocument` instructions apply. It is not possible to nest the `andindocument` and `orindocument` commands.

The `and/not/orindocument` commands can even be used with regular expressions. To do this, use the term `||regex||` before the regular expression to be searched for.

Example:

```
sorting section
andindocument=||regex||4711\D+
sortto=invoices
end section
```

This example searches for a term beginning with the numbers 4711 followed by at least one character, excluding the numbers 0-9.

There may be archives from which documents should not be sorted, even if the criteria apply. An example of this would be a `payroll` archive. To prevent sorting from taking place, the `nosorting` switch must be added in the settings section for the relevant archive. This is followed by the name of the archive from which sorting should not take place, for example `nosorting=wage & salary`.

```
settings section
USE [Originaldatei] FOR %Originaldatei%
USE [Extension] FOR %Extension%
USE [Benutzer] FOR %Benutzer%
USE [Autor] FOR %Ersteller%
USE [Betreff] FOR %Betreff%
USE [Empfaenger] FOR %Empfaenger%
USE [Absender] FOR %Absender%
USE [Empfangsdatum] FOR %Empfangsdatum%
USE [Versanddatum] FOR %Versanddatum%
end section
```

c) naming section (automatic keywording)

Automated keywording is carried out using the `naming section`. All desired information can be written in additional fields in this section. There are various ways to extract the desired information from the full text of the document. On the one hand, as with the `sorting section`, the command `and/or/notindocument` can be selected to apply the rule only to certain documents. The `archivtabelle` command can also be used to write explicit rules.

Example:

```
naming section Incoming invoices
archivtabelle=Incoming invoices
andindocument=invoice number
...
```

The above subsection checks whether the document has been entered into the Incoming invoices archive and whether the document contains the term invoice number. Several of these conditions can also be queried here, such as several archive tables one below the other, or several `and/or/notindocument`. If these conditions are met, information can then be extracted from the text or even fixed values can be entered in additional fields:

```
...
searchstring=invoice number
searchsteps=1
searchdirection=right
getstrings=1
additional field=invoice number

fixvalue=4711
additional_field=other_additional_field
end section
```

In this example, we use the `searchstring` command to search for an explicit word in the full text of the document, in this case invoice number. The following command `searchsteps` specifies how many steps away from the search term our desired word is, in this case only one step. Then specify the search direction with the `searchdirection` command. You can select `left` or `right`.

You can use the `getstrings` command to specify the number of words to be written in the additional field. If `getstrings` is not specified, exactly one word is always used. If you want to write several words in an additional field, the
Number of words corresponding to the statement `getstrings=`.

Note: With `getstrings=all`, everything up to the next line break is taken. Please note that spaces are removed by default.

Finally, the value found must be inserted into an additional field. Select the corresponding name of the field in the viewer after the `additional field` command and the value will be written to the additional field after archiving or updating.

As in the section below, you can also enter fixed values directly in an additional field. To do this, use the `fixvalue` command, which can also combine several pieces of information. Use the virtual additional fields for this, as shown below:

```
fixvalue=4711_%vendor_name%
additional field=vendor
```

The value from the Vendor name field is combined with a fixed value and then entered in the Vendor field.

However, it may also be the case that you are not (or cannot) search for a specific term, but a specific pattern. You know that the invoice number is always two numbers, followed by the three initial letters of the company, followed by a consecutive six-digit number. To find such information in documents, you can use the `searchpattern` command. This command can be used to extract almost any information from a document using regular expressions. Below is the structure of the regular expression with the invoice number mentioned in the text:

```
naming section Incoming invoices
archivtabelle=Incoming invoices
```

```
searchpattern=(\d{2}[A-Za-z]{3}\d{6})
patterngroup=0
additional field=invoice number
```

In this example, we search for exactly two numbers with the command `\d{2}`. We then search for three alphabetical characters with `[A-Za-z]{3}`. Finally, we search for the six-digit number with `\d{6}`. The individual commands for a regular expression can be found in the [Reg-ExpTest.tif](#) file in the *bitfarm-Archiv directory* or in a search engine of your choice on the Internet.

You can use the `patterngroup` command to define which round bracketing is to be written in an additional field. Counting starts from 0.

Instead of the `patterngroup`, you can also use `searchdirection` and `searchsteps` in the same way as the `searchstring`.

Another example is the document date, which is usually the first date in the document. Use the following `naming section` for this:

```
naming section
searchpattern=(\d{1,2}\.\d{1,2}\.\d{2,4}|\d{2}\/\d{2}\/\d{2}|\d{2}-
\d{2})-\d{4})
searchsteps=0
searchdirection=2
nodeletedots
nodeletedashes
date
additional field=document date
end section
```

A one- or two-digit number is searched for, followed by a dot, followed by another one- or two-digit number, followed by a dot and a two- or four-digit number. This represents exactly one date. The straight stitch gives you the option of entering further patterns. The first occurring pattern is searched for. The second part of the command searches for two-digit numbers, separated by a slash. The third pattern is formed with a minus sign.

The `date` command always converts the value found into a date value, as far as this is possible. You can also use `date-us` here if you know that it is an American date format.

Other processes may explicitly require numerical values or only letters. In this case, you can add `numeric` or `alphabetic` in the `naming section`. The values are adjusted accordingly if this is possible. This can prevent recognition errors, such as a 0 being recognized as a capital O.

If you pass the `value` command, numbers with separators will appear.

Note: The `patterngroup` command can only be used with the `searchpattern` command. In addition, the `takeonly` and `cutaway`, `fixvalue` and `maxvalue` commands do not work when using the `patterngroup` command.

Tip: There is not just one solution for a regular expression. Change your expression if the desired result does not appear.

Note: bitfarm recommends using regular expressions for extracting information, as the success rate is significantly higher with properly defined expressions compared to other methods.

Certain terms, such as a date, can contain special characters, such as a period, the slash character or a space. Commands must be used to ensure that these symbols are not lost when filling the additional field. Simply use `nodeletedots`, `nodeletespaces` or `nodeletedashes` for this. These commands appear as individual commands in the respective section and ensure that the individual information is not lost.

```
naming section Incoming invoices
archivtablelle=Incoming invoices
searchpattern (\d{1,2}\.\d{1,2}\.\d{2,4})
patterngroup=0
nodeletedots
additional field=invoice date
end section
```

By omitting `no`, you can also explicitly define that dots, spaces or slash characters are guaranteed to be deleted. This is also the default behavior.

You can also use regular expressions to extract your own IBANs from documents, or a date. We have put together a pattern for both in `bitfarm36.wfd`, which extracts the first date in the document.

Example:

```
naming section IBAN
searchpattern=([\\s|^]DE\\d{2}\\s?[a-zA-Z0-9]{4}\\s?[a-zA-Z0-9]{4}\\s?[a-zA-Z0-9]{4}\\s?[a-zA-Z0-9]{4}\\s?[a-zA-Z0-9]{2}[\\s|$])
patterngroup=0
zusatzfeld=IBAN
exclude=DE\\s12345678912345678912
end section
```

For a better overview, a name can also be written after the section. Here `IBAN` has been written behind it. The pattern searches for the first `IBAN` in the document. The content of the first bracket is inserted in the additional field `IBAN`. However, to prevent your IBAN from being written in the additional field, you can exclude it; also formulated as a pattern. The `exclude` command is used for this. If several terms are to be excluded, you can combine the terms behind an `exclude` using the pipe, i.e. `DE123...|DE234...`

If you only need part of a search term or want to remove something, you can use the `takeonlyleft`, `takeonlyright`, `cutawayleft` and `cutawayright` commands to remove a corresponding number of letters and numbers from the search term (only applies to the `searchstring` command):


```

naming section
searchstring=Invoice no.:
searchsteps=1
searchdirection=right
getstrings=1
cutawayleft=3
zusatzfeld=invoice number
end section

```

```

...
Testdokument
Rechnungsnr.: ABC0815
Weiterer Text des Dokumentes...

```

In the example above, the first three letters ABC are removed and only the four numbers 0815 are entered in the additional field `Invoice number`.

Some documents contain several identical values that are required in an additional field, for example the delivery note number. To enable you to extract all delivery note numbers from a document, we have included the `continue` command. This allows you to continue searching the full text, even after the first hit. All hits are entered in the respective additional field, separated by semicolons.

Example:

```

naming section
searchpattern=(LS\d{5})
patterngroup=0
zusatzfeld=delivery note number
continue
end section

```

The example above searches the full text of the document for delivery note numbers with the structure LS followed by a five-digit number. All hits are entered in the delivery note number field.

In the `naming section`, you can also use other commands for keywording. For example, you can change the title of the document or create links. Below you will find a compact summary of a few commands:

`linkstring` Gives you the option of creating the term you are looking for directly as a link. Simply enter this command as `continue` in the section. You can also shorten the link with `cutaway` or `takeonly`.

`createlink` Creates a link for a corresponding value. Fixed values as well as additional field information can be transferred:

```

createlink=RE_%Invoice number%
createlink=fixed_value

```

`displayname` Lets you change the title of the document. This only works if the title has not yet been changed. As with `createlink`, you can also enter fixed or variable values here:

```
displayname=Invoice
displayname=RE_%Invoice_number%
```

`maxvalue` Is a function that searches for the largest decimal number with decimal places in the full text of the document. Use this function without further parameters and transfer the value directly to an additional field:

```
naming section
maxvalue
zusatzfeld=amount
end section
```

Note: `maxvalue` searches for the largest decimal number with two decimal places. The final amount may not always be read out.

`rotation=76` Rotates the document counterclockwise (to the left) by the corresponding number of degrees, in this case 76°.

`rotation=-76` Rotates the document clockwise (right) by the corresponding number of degrees, in this case 76°.

exitUse `exit` to skip further `naming sections` in the WFD file if you are sure that all information on the document has been found. Pass the value without parameters.

`form=name.tif` Specifies a Tif file that is to be merged with the document, for example stationery. The file must be located in the *bitfarm-Archiv\forms directory*.

`CASE` Specifies a condition for the `naming section`. Additional field values can be queried. Additional field values with `<`, `>`, `=`, `#` (not equal), `=$String` (is exactly string), `#$String` (is not equal to string). The value must have been entered in the field beforehand.

4. Set up workflows via WFD

The task of an administrator also includes setting up workflows in which a specific person or group carries out a specific activity with incoming documents and these are then forwarded to other persons or groups for further processing. To set up an automatic workflow, we need the WFD file. Open this file, preferably with Notepad++. Add a `workflow section` or use the workflow already provided and adapt it to your requirements:

```
workflow section Invoices
archivtabelle=Supplier invoices
```

```

sendmailto=m.meier@musterfirma.de
sendheadr=new incoming invoice
sendmsg=Check for correctness
nextworkflow=release
date=0
alarm=3
bearbeiter=#Processor
controller=m.meier
end section

```

`archivtabelle` is the condition that this workflow is only triggered when the document is archived or moved to the respective archive. `sendmailto` enables an email to be sent with the subject in `sendheadr` and the message in `sendmsg` if the SMTP server has been set up. In the field `nextworkflow` you enter the next step of the workflow, which is set up in a `continue section`. A deadline for the resubmission can be set with `date`, in this case `0` days. The `alarm` command specifies the time when the task is considered overdue. This happens for both the processor and the controller of the task and is visualized visually by highlighting the document in red in the hit list. Use the `controller` command to specify the user who should also receive the task on the "controller page" of their resubmission list in order to check the activity of the processor. This user can be notified with the command `options=mailon-alarm` if the resubmission is not processed in good time. `bearbeiter` designates the person or group for whom the document is currently on resubmission.

Groups can also be set for `agents`, whereby a `#` or a `$` is entered before the name of the group, depending on whether only one (`#`) or all persons in the group (`$`) must set the resubmission to complete/continue.

As a workflow does not usually consist of just one step, this must also be continued here. The next step is created in the WFD file with a `continue section`. In this section, you define the conditions for when a user should receive the document on the resubmission after it has entered the workflow. Status buttons or changes to additional fields are ideal for this. For this purpose, we use the `CASE` command, with which we can query conditions:

```

continue section
continue=release
CASE Status_checked=true
CASE employees#$
sendmsg=Please release document
date=0
alarm=3
nextworkflow=pay
bearbeiter=#GF
controller=controller user

```

```
end section
```

The `continue section` is structured similarly to the `workflow section`. The name of the step must also be specified. This is done with the `continue=` command. Here you enter the step to which you have referred in the `workflow section` with the command `next-workflow`.

Note: You can have several continue sections that are separated from each other by different conditions.

Tip: To catch incorrect user behavior, you should build loops by having the section refer to itself until the user has corrected the error.

You can use the `CASE` command to specify conditions for the workflow that must already be fulfilled for the respective step to be executed. Both additional and status field information can be queried:

```
CASE Status_released=true
```

In this example, a status called `released` is checked for its value. The workflow step is only executed once this status has been set (`true`). Status fields can be set to `true` or `false` for CASE queries.

However, additional fields can also be queried. You have the following options for checking these:

<code>CASE Amount > Value</code>	<code>Amount greater than value</code>
<code>CASE amount < value</code>	<code>Amount less than value</code>
<code>CASE Amount = Value</code>	<code>Amount equals value</code>
<code>CASE Amount # Value</code>	<code>Amount not equal to value</code>
<code>CASE Processor = \$String</code>	<code>Processor is exactly String</code>
<code>CASE Processor # \$String</code>	<code>Processor is not equal to String</code>
<code>CASE Processor ~ \$StringString</code>	<code>is part of the additional field Processor</code>

The first four operators can be checked for greater than, less than, equal to and unequal to. Here, the additional field Amount has been checked for a value in each case. However, you can also check additional fields, such as selection fields, for a specific value. This allows you to set up dedicated workflow steps.

Below are a few examples of the individual conditions:

```
CASE Processor =$
```

The condition applies if the additional field Processor is not filled in (empty).

```
CASE Processor =$M.Mueller
```

The condition applies if `M.Mueller` is entered in the additional field Processor.

```
CASE invoice amount > 1000  
CASE invoice amount < 10000
```

You can also make several `CASE requests` to the section, but you must bear in mind that each `CASE` must then be true for the subsequent instructions to be executed. Here the amount must be between `1000` and `10000`.

Note: `CASE queries` can only be used in `workflow`, `late-workflow` or `continue sections`.

Note: The 24-hour system time is required on the server for the proper creation of workflows.

In some cases, it makes sense to send an e-mail when a task is received. Use the `sendmailto` command for this. Enter the user's e-mail address or the collective address as a parameter so that a mail is sent. You can also specify a group name (always with a `$` in front of the group name) to which the mail should be sent:

```
sendmailto=m.mueller@bitfarm-archiv.de  
sendmailto=$group name
```

You can also write several commands one below the other in one section so that several mails can be sent.

You can even freely define the subject of the mail. To do this, use the `sendheadr` command. Enter the text to be included in the subject as a parameter.

```
sendheadr= There is an invoice on your to-do list.
```

The `options` command can be used to set two further options for workflows. The first is to return the resubmission after completion with the parameter `returntosender`. The second option is to alert the controller by email if the task has not been processed in the relevant time. You can see both in the following example:

```
options=returntosender  
options=mailonalarm
```

Note: The options must be entered before the commands `processor` and `controller`.

The switches are written in a single section below:

```
continue section
continue=Release
CASE Status_checked=true
sendmsg=Please release document
sendheadr=You have a new document on the task list
date=0
alarm=3
sendmailto=peter.meier@testfirma.de
sendmailto=verteilermail@testfirma.de
options=returntosender
options=mailonalarm
nextworkflow=pay
bearbeiter=#GF
controller=controller user
end section
```

If you have documents in your system that only need to go into a workflow later, for example after additional fields have already been entered, you can use the `late workflow`. This only triggers when you manually start a workflow in the system. Only then is it checked whether the `late workflow` can be started. The structure of the `late workflow` is exactly the same as the normal workflow.

Example: A table is entered into the DMS as a document and is filled with data in the first step. Only after completion can the document be calculated and then entered.

The first step of the calculation must be carried out as a manual workflow. Use a resubmission favorite here, for example. After the user has calculated the document, the system automatically checks for a `late workflow`. This would look as follows:

```
late-workflow section
CASE Status_calculated=true
CASE Status_captured=false
sendmsg=Please enter document
date=0
alarm=3
nextworkflow=NIL
bearbeiter=G.Schmidt
controller=controller user
end section
```

Mr. Schmidt receives the document on his resubmission as soon as the document has been costed. The status calculated is set, the status created is not yet set. Further steps can be configured accordingly with `nextworkflow`.

Note: The `andindocument/orindocument/ notindocument` commands cannot be used in a `late workflow`.

5. Setting up graphic filters

Documents are not always transferred from the scanner in the exact form (e.g.) in which they are to be permanently archived in the DMS. Filters can therefore be defined for various graphical adjustments. These are saved in the `filter` directory.

A filter always consists of a `FAD` file that specifies which actual filter file (= `TXT`) is responsible for processing. There are differences between OCR and archive filters.

Example of the corresponding different parameters:

<code>RES=200</code>	→	Downsample resolution to 200dpi
<code>Contr=10</code>	→	Change in contrast value (between -255 and +255)
<code>BW=-2</code>	→	Convert to "black and white"
<code>RemPix=1</code>	→	Remove single pixels of size 1
<code>RemPix=2</code>	→	Remove single pixels of size 2

The name of the filter file must be entered without the extension (= `FAD`) as the third parameter of the AutoScan link of the client (see the corresponding chapter in the "Client installation" section). Alternatively, the name can also be entered directly in an archive template file under `filter=`.

Filtering documents can improve their quality for the OCR run and thus lead to greater reliability of text recognition. It can also reduce the storage requirements in the archive. However, the filters require a certain amount of computing time depending on their type and application. In some cases, the processing time of documents can therefore increase. The order in which the individual filter instructions are set also has an influence on this.

For documents for which the DMS generates the preview TIF itself (e.g. print data, Office files, etc.), a meaningful filter definition is already pre-programmed and therefore does not need to be taken into account.

If available, use the color dropout on your scanner, which significantly improves performance. In addition, these scanners can remove isolated pixels on documents for better full-text recognition. Therefore bitfarm recommends using a real document scanner. Further information on our website:

<https://www.bitfarm-archiv.com/document-management/glossary/document-scanner.html>

Two further commands are `compauto` and `SavePage`. The former automatically determines the best compression method (JPG is still not recommended), the latter determines a maximum number of pages that should be saved for the document in question.

6. Setting up resolution guidelines for TIF files

To configure directives for documents in .TIF format, a corresponding file must be created and edited in the bitfarm-Archiv program directory. This **directives.ini** makes it possible to define up to three directives for each archive of the DMS. The structure of such a directive definition is explained in the following example:

```
[unverteilt]
BordersX1=200-300
BordersY1=200-300
```

The `[unverteilt]` section specifies the archive to which the following guidelines apply. The name of the template assigned to the archive must be used here. The character string `BordersX1=` or `BordersY1=` defines the color space that applies to the corresponding guideline, depending on the number specified. This can be one of the following three values:

- `1` (black and white documents)
- `8` (documents in grayscale)
- `24` (color documents)

Finally, the lower and upper limits for the respective resolution are set after the equal sign. The guideline described here therefore states that black and white documents to be archived, which enter the archive "undistributed", must have a horizontal resolution between 200 and 300 dpi and a vertical resolution between 200 and 300 DPI in order to be treated as valid.

The system works according to the following rules:

- If no guideline is defined for a color space, documents that are scanned in this color space are considered explicitly invalid and are moved to the "Garbage" directory.
- An attempt is always made to preserve the original color space of a document.
- If a document has a higher resolution than specified in the guideline, the its resolution down to the upper limit (X/Y) of the directive.
- If the resolution of the document is too low (or if it falls below one of the lower limit values), the system checks whether the corresponding TIF can be transferred to the next smaller configured color range.
- If the TIF is too small for all configured color ranges, it is moved to the "Garbage". At the same time, a notification to this effect is sent to the administrator.

It is also possible to create a universally valid section called `[Global]`. This must be entered as the first section. The policies configured there are valid for all archives. If a policy definition explicitly written for an archive is found in the rest of the `ini` file, this will be treated with higher priority. It is also possible to create a policy configuration for several archives. The "*" character must be used for this, for example `[Invoices*]` for the InvoicesEK, InvoicesVK and InvoicesProkura archives.

In addition, there is a switch called `notificationconverttif` in the `scripts.ini` under the `[Alerts]` section. If this is set to `true`, the system administrator receives notifications when a scan has been converted to a different color space or its resolution has been downscaled by adhering to guidelines. The `directiveextensions` switch can also be set in the `[Rendering]` section to define the file types for whose previews the directive processing should be active. The file extensions are specified separated by dots, e.g. ".tif.ps" etc. If this switch is not set, policy processing only applies to archived TIFs by default.

V. Troubleshooting

1. General

Even in the best case, a manual cannot point out and solve all possible errors or malfunctions. So if you still have a problem creating an executable bitfarm-Archiv DMS despite this short section, or if other problems arise in connection with bitfarm, please contact the corresponding [Source-Forge forum](#) with your problem. This is monitored by experienced users and our software support and questions and problems are answered.

2. Special features of the terminal server

In order to save the viewer logs, which are usually saved in the user temp directory (`%temp%`), centrally on terminal servers, a path for the logs can be specified in the `CON` file. A subdirectory to `%bitfarm-archiv%` is **suitable** for this; this must have the same share and NTFS rights as the transfer directory:

```
[Options]
logdir=\\Servername\\bitfarm-archiv\\log\\
```

However, since the system administrator has access to the logs of the connected clients regardless of this, it should be considered in individual cases whether it makes sense to activate central logs. bitfarm recommends using this option exclusively **for debugging purposes**.

Note: If central logs are activated, all connected viewers write their log to a data carrier. This significantly increases the IO throughput of the network and data carriers and can have a negative impact on their performance.

To set up archive printers, "RedMonEE" from the ...`\bitfarm-archiv\install\Programme\common\RedMonEE` directory is required for 32-bit systems in terminal server environments. If necessary, AutoScan must be executed with the `useowntemp` parameter.

Windows-integrated authentication on the Viewer is not possible with terminal servers. If a user has nevertheless made this setting, **the viewer will crash**. The option can be undone in the registry under `HKCU\Software\bitfarm\Archiv_V3.6\Viewer\Options` by resetting the `mslogon` key from "1" to "0".

3. Troubleshooting server problems

Problems that occur on the server are often related to incorrectly processed documents. For example, it can happen that the text recognition software runs in an endless loop with such "poor quality" documents or other programs involved in archiving cause an error. In this case, the server queue (= directory *queue*) no longer empties. It is then essential to remove the document(s) in question from the queue immediately so that other documents can pass through unhindered. To accomplish this, proceed as follows:

- Stop the server services via `TERMALL.bat` (as administrator).
- In the ...`\bitfarm-archiv\temp` directory, delete the files `lock`, `directlock` and `superlock`, if present.
- Open the task manager or `procexp.exe` and terminate the processes `OmniPage.exe`, `filterv3.exe`, `dbimpv3.exe`, `winword.exe`, `excel.exe`, `powerpoint.exe`, `gswin32.exe` and `gsview.exe`, if available.
- Delete the affected document(s) from the *queue* and, if necessary, from the *direct* directory by removing the corresponding `temp` or `direct` files. `OCR.tif` and `OCR.txt` must also be deleted.
- Restart the bitfarm services as administrator via `STARTALL.bat`

The following generally applies to all server problems:

First stop all services via `TERMALL.bat` and restart them after rectification. A restart of the computer should also be considered if necessary. Incidentally, the server records error messages in the event viewer with the source *WSH*, which can be viewed via the Windows administration.

a) Constantly checking the accessibility of the database

From version 3.6.0 of the archiving service, `bfa_mysqlcheck.exe` checks the accessibility of the database each time the archiving script is started.

Default settings in the script: `checkmysql=true`, controllable via the `CON` file, section `[Scripts]`.

They are also stored there by default:

```
loginterval=  
mailinterval=
```

These values can only be changed in the script. `loginterval` is used to set the time intervals at which entries are made in the Windows event log/event display if the database is no longer accessible. `mailinterval` is used to set the intervals at which relevant e-mails are sent to the (system) administrator.

b) Missing authorizations

Often the lack of permissions at NTFS and share level for the bitfarm service user or the user is the reason why operation cannot be started during a new installation. These messages can be easily checked in the event log.

4. Troubleshooting client problems

Most possible problems with the client can be resolved by reconfiguring it. To do this, the registry must be edited with `regedit`. `HKEY_CURRENT_USER\Software\bitfarm` contains all settings for the behavior of the DMS components that are executed under the corresponding user. To correct the error, close the bitfarm-Archiv programs, delete the individual parts of the above-mentioned branch or the entire branch and then restart the `ViewerV3.exe` application. Any special client configurations (such as stamps) must be recreated.

Other problems are usually caused by missing user authorizations. If, for example, all functions are active under the Windows administrator login, but not under the login of the respective user, the user usually lacks Windows system authorizations for certain processes. In most cases, the user has no authorization to read or write a file on the server. Therefore, check the corresponding authorizations by trying to open files via the DMS share as a user via `Start → "Execute"`. You can view the required rights in the [server installation](#). Also check whether group policies or local policies prevent the execution of the DMS programs.

Note: Virus scanners and/or firewall settings can also pose a problem for the accessibility of bitfarm-Archiv DMS. You should therefore check these on the bitfarm server.

bitfarm generally recommends that all DMS users have main user rights on the clients (= include the group of domain users in the group of local main users).

If there are problems with the transfer of documents to the server, check whether the user has "Write" authorization for the transfer directory. Stop and start the server services on the server with `TERMALL.bat` and `STARTALL.bat`. If `TIF files` remain in the directory after archiving and the documents have no full text in conjunction with messages in the event log that archiving was unable to copy or delete the files concerned, they may be being processed by DSO at the time in question. An entry of `useDSO=false` in `scripts.ini` can help here.

If some documents are not displayed in the application and the information "Document cannot be read" appears in the footer of the application, this is often due to a lack of network permissions (NTFS, share) of the Windows user logged in.

VII Appendix

1. DMS planning aid: concepts and data structures

In order to implement the best possible DMS structure for a company or institution, vital knowledge of the existing company and document processes is just as important as knowledge of the possibilities and limitations of the software. Roughly speaking, all companies work in the same way, but there are often major differences in the details. However, these details are often sticking points, as certain workflows have proven to be useful over time and should often be transferred to the DMS. The aim of bitfarm-Archiv is to be able to display as many different workflows as possible in the software. Ideally, there is more than one way to fulfill each task with bitfarm-Archiv.

Unfortunately, software development is doomed to never be able to fully achieve the absolute ideal. Therefore, there are also restrictions and limitations in bitfarm-Archiv, which mean that not every document concept can be implemented equally well in the software.

In the following, we would therefore like to give you our most important conceptual considerations for the use of bitfarm-Archiv:

a) Document storage

The basic concept of bitfarm-Archiv is the organization of documents in a tree structure. This structure is specified by the DMS administrator and cannot be changed by the user.

The tree structure basically describes storage locations for formally identical documents. Invoices are stored in a directory for invoices, delivery bills in a directory for delivery bills, inspection reports in a QM directory, etc. The DMS archives are referred to as directories. Documents should therefore be classified according to the same or similar attributes or properties. Avoid an excessive number of archives with similar meanings. Avoid the following trees:

-
-
- Invoices 2012
- Invoices 2013
- Invoices 2014
-
- Müller invoices
- Meier invoices
- Schmidt invoices

It is better to use additional fields in a single invoice archive for differentiation, such as an additional field Customer (for Meier, Müller, Schmidt) and an additional field Year (for the different years).

In addition to the formal assignment of documents to their corresponding document classes, from which the archives are derived, there are also content-related connections that go beyond the archive levels. When assigning commercial elements, for example, the order number is a central element in purchasing. The cross-archive combination of all documents of an order process is then carried out via a correspondingly named additional field "Order number", which must be available in all affected archives. This field is configured as a so-called "link field". The function behind it forms cross-archive "files", which are easily accessible via the viewer. When accessing the files, authorizations at archive level are taken into account, while authorizations via global bookmarks or temporary authorizations of the re-submission or task list are not.

Caution: If several link fields use similar number ranges, the links may not be unique. This means that it is not possible to tell from the link name whether it is an "order link" or an "order link", for example. Incorrectly linked documents can also occur if an order number and an order number are identical. In such cases, the link or, even better, the corresponding link field should be filled with a "prefix" to ensure uniqueness.

In individual cases, there may of course be good reasons to deviate from the concepts recommended here. However, this is usually associated with additional configuration work or a loss of convenience for users.

Also bear in mind that for the document-oriented view, the so-called "SymbolicLinks" make it possible to store a document in several archives at the same time. This is nevertheless a single "physical" document - annotations, history and everything associated with it are "taken along".

b) Document import

The import of documents can be adapted very precisely to the requirements of a company or institution. Small quantities of documents can be captured via the GUI tools such as the Importer (= e.g. "Send to"). For larger quantities of documents or automated processes, monitored folders or AutoScan can be used.

The POP3 retrieval service can also be installed for e-mails instead of Outlook integration.

Document scanners should be used when capturing paper documents. bitfarm recommends devices from KODAK, Canon or FUJITSU. Although devices with a network connection are flexible in terms of space, they are less suitable than scanners connected directly to a PC with a USB connection and TWAIN interface in terms of the DMS functions and the requirements of the capture processes. The best results in mass processing are achieved with the TIF format at 300dpi and 1bit black and white if the connected scanner has "intelligent image enhancement". For occasional color scans, 200dpi or higher is recommended.

Note: The document scanners mentioned only perform to their full potential if the TWAIN driver is configured accordingly.

c) Document search and indexing

If the recommendations for document capture are implemented, bitfarm-Archiv offers a powerful full-text search in its Enterprise version thanks to the "Tesseract" text recognition software and the fast MySQL database. Many tens of thousands of documents can be searched in seconds. This represents a simple approach, as is familiar from Internet search engines. This should be taken into account when naming an archive and its additional fields. Some additional fields are less necessary than others, at least when it comes to the pure search function.

Example: Incoming invoice

The name of a supplier is present several times on the document in question. It can therefore be used very reliably for the full text search. In addition, an analogous additional field called "Supplier name" could be created. This would have to be filled in either manually by the user or automatically by rules created by the DMS manager. The full text of the document is determined automatically regardless of this. It can be assumed that the name of the supplier can be easily searched for and found via the full text, so an additional field for search purposes would only represent an avoidable effort. The situation is different, however, if the purpose of the field is not primarily to search, but to save and pass on key data. If, for example, a financial accounting system is connected downstream, which is to transfer data records, the "supplier name" may be required. In this case, it would make little sense to transfer the entire full text of the document to the financial accounting system. In this case, it would therefore be necessary to maintain the corresponding additional field.

The full text search also has restrictions with all area searches: It is not possible to search for and list all invoices with an invoice date between 01/01/2017 and 12/31/2017 using the full text. Only an exact character string can be queried via the full text search. It would therefore only be possible to search for invoices for a specific date, e.g. day, by specifying the analogous string. If a supplier only writes "01.09.17" instead of "01.09.2017", for example, this will not be included in the search for "01.09.2017".

Is a "from - to" date search even needed?

Yes, because the tax authorities may require access to documents from a specific financial year. It must be possible to filter the search accordingly. Filling a date field with the document date is easy to implement automatically using regular expressions in the DMS and requires little user interaction. Automatic keywording can therefore be used here instead of manual keywording.

However, the following applies to all field content automatically generated by the DMS from the full text: Since 100% accuracy of the OCR can only be achieved approximately, regular checks are necessary to ensure the correct keywording of a field.

However, this check is quite simple, at least with regard to the date fields filled using regular expressions:

- If a regular expression is not found, the field remains empty. Empty fields can be found using the bookmarks or manual searches. Bookmarks can be used to define exactly what incompletely indexed documents are and how they are to be updated.
- If the field is filled in, it only contains numbers (date field). The risk of confusion with numbers tends towards zero with well-set fill mechanics (e.g. [searchpattern](#)).

The default setting for the full text search is set to "word components". The characters, words or numbers entered are therefore preceded and followed by a "wildcard". This enables convenient searches, but increases the search time for large archive structures. In such a case, you should first test with the option "Limit search period to the last year" and a small return quantity, e.g. max. 500 documents. If this is not successful, the search must be switched to "Start of word" globally, i.e. for all users. The search strings are then no longer preceded by a wildcard, which represents a change for users and may make additional fields necessary. If large volumes of documents are expected (e.g. more than 1 million documents) or rapidly growing volumes of documents, this should be taken into account at the planning stage.

2. Workflow concept

Workflows are a defined sequence of work steps that must be carried out when certain events occur. There are automated workflows that also send notifications, but there are also manual workflows and mixed scenarios. bitfarm-Archiv offers various functions for this.

If, for example, a user or group is to be actively notified of a document, the resubmission or task list is best suited for this. Each user has their own resubmission. If a new document is added to this list, a notification is issued via the HotSearch tool even if the viewer is not open. Each user can manually add documents to the resubmission for other users and groups. Favorites can be defined for frequent manual distribution processes. In this way, manual distribution processes can also be implemented.

Automatic distribution processes, on the other hand, can be defined as workflows in the WFD file. Various triggers and conditions are available here, which enable the flexible design of individual steps as well as complex process chains and branches. Recurring events can also be used as a workflow for contract management, for example.

For mass tasks, which occur regularly for the user in the course of work anyway, the notification via the resubmission list for each new document is rather annoying. Such tasks are therefore better defined as global bookmarks. Another advantage results from working in the hit list, as this list provides a better overview and can be filtered more conveniently.

Mixed scenarios with the handling of partial workflows via the resubmission list and further parts via global bookmarks are also possible and are recommended by bitfarm. For example, the incoming invoice workflow implemented in many companies with the DMS is such a mixed workflow.

The workflow concept in bitfarm-Archiv in its entirety makes it possible to file documents in the archive immediately after they have been captured, where they remain for their entire "life span". The documentation of the status in the editing process is illustrated by configurable status buttons or, in individual cases, by additional fields. The implementation of workflows should be avoided by moving documents to different archives, which imply the status of the documents via the names given to them. The concept of leaving documents in an archive throughout their entire "life cycle", on the other hand, helps to eliminate the problems of traditional document handling. This approach means that every employee knows where a document they are looking for is located. The possibility of losing documents is also significantly reduced. Transparency and traceability increase along with employee motivation, while search times and document management costs are reduced.

3. Security

bitfarm develops and tests its DMS software to the best of its knowledge and belief and always on the basis of the current state of the art. The bitfarm development department and bitfarm-Archiv software support make every effort to eliminate any errors detected before installation, but also during operation. However, as with all complex software today, a state of complete freedom from errors can only be achieved in theory. Program errors that may still exist but

have not been detected and corrected can be used by criminals to gain unauthorized access to information and documents. This is why bitfarm strongly advises all system administrators responsible for the DMS:

Attention: Under no circumstances should you place your DMS server unprotected on the Internet if the confidentiality, security and integrity of the documents stored on it are important to you! This applies to all versions and components of the bitfarm-Archiv DMS software.

bitfarm expressly declares the DMS software to be unsuitable for such scenarios!

If the DMS must be accessed via a public, non-secure connection (= Internet connection) from one or more clients to a bitfarm server, then this may only be done via a sufficiently secure connection (= VPN). Other, unsecured connections may not be used.

Furthermore, the security of the documents and information stored in the DMS stands and falls with the security of the host system used on servers and clients, as well as the security of the network connections. Establish this security with all the necessary measures.

Regular backups are also essential to protect documents and data against loss. bitfarm recommends regular checks of backups for completeness and integrity. You should also carry out a "disaster" scenario as a test for your backup and restore strategy.

Below are some general tips and advice on carrying out backups:

- Use media that you can remove from access after the backup. This prevents data manipulation by malware. A permanently accessible NAS or permanently inserted USB hard disk is not a sufficient backup medium.
- Always move the data backups to other premises, preferably to another building or a safe deposit box. This ensures the availability of a backup even in the event of a fire/burglary.
If possible, back up the entire database at regular intervals. In some cases, daily backups cannot be performed as full backups due to the time window, but must be performed incrementally or differentially. Regular full backups must still be carried out.
- Back up to alternating media. A scheme with several rotating daily, weekly, monthly and possibly other media allows you to look back in time if a data loss does not become apparent immediately, but only after weeks or months.
- Bring the database into a consistent state before the backup. Like other databases, the MySQL database also stores parts of the data in the computer's working memory. These are only written to the storage medium (hard disk) after a certain period of time. However, snapshot tools such as "Acronis" and others only back up the data that has been written to the hard disk during operation. Data in the memory is not backed up. By stopping the MySQL service, however, a consistent database state can be created on the data carrier.

After the backup, MySQL must be restarted. The Enterprise version of bitfarm-Archiv DMS includes a corresponding program (`bf-a-backup.vbs`) for local backup of the MySQL database. If possible, use this program as a "scheduled task" before your actual main backup.

In addition, the use of MySQL enables the support of binary logs to enable restores "to the point". Activate this to be able to remove harmful transactions without having to reset the status to the last backup. This may save you a whole day's work or even larger amounts of data. These options were activated by default for DMS projects carried out by bitfarm from 2016 onwards.

To increase the traceability of actions in the DMS, each user should have their own account with a password known only to them. Avoid accumulating collective accounts.

4. Further information for system administrators

- a) Deactivating the DFS (Distributed FileSystem) on the data carrier of the MySQL database
The "Distributed File System" feature of the Windows server must be switched off for the data carrier on which the MySQL database is stored. Failure to do so may result in irreparable damage to the database in the long term. Please check this and deactivate DFS for this data carrier.
- b) Do not activate the Windows feature "Data deduplication" on the data carrier of the MySQL database and the data carrier of the archive storage directories.
For the following workloads, the use of data deduplication is not recommended due to the frequency of changes to large files.
- c) Write permission on the document storage and in the bitfarm-Archiv program directory only for the bitfarm-Archiv service user
The bitfarm-Archiv program parts on the server are typically executed under a separate service user. Only this service user should or must have write access to the document repository and the bitfarm-Archiv program directory.

Due to the simpler configuration of the DMS, system administrators may also have write access to the bitfarm-Archiv program directory, but only read access to the document storage. The backup user also requires read-only access to the document storage. Otherwise, no user should be allowed either read or write access there.

If you run bitfarm-Archiv under the standardized "Administrator" account (this can be easily determined via the service administration) and you also perform other activities with this "Administrator" login - such as reading e-mails, opening unknown file attachments or surfing the Internet - it is recommended to customize the bitfarm-Archiv services and permissions via a

separate service user. However, this involves some effort and should only be done by experienced administrators and ideally with a backup.

The background to the recommendation is, on the one hand, that users must not gain unauthorized access to documents via the "back door" of incorrectly set permissions. On the other hand, the threat posed by encryption Trojans (ransomware) is now particularly high. Encryption Trojans, which are currently mostly activated via e-mail attachments (misleading e-mails, e.g. disguised as "job applications", sometimes with very good text and hardly distinguishable from real, expected documents), encrypt all files that can be accessed with write permissions of the user who accidentally started the Trojan. However, if the bitfarm-Archiv program and data directories are not writable, data loss can be prevented. Therefore, please check the correct configuration of the permissions to the bitfarm-Archiv program and data folders. All installations that have been carried out according to the specifications of bitfarm GmbH should already have a correct configuration.

5. Inspection and maintenance work

bitfarm-Archiv is largely maintenance-free. The program parts installed on the server are designed as a service, so that the program can resume its work without administrator intervention even after the server is restarted. bitfarm-Archiv does not require an Internet connection for operation, but can also be operated in a network that is closed to the outside world.

In the past, there have been problems with the function of the DMS in individual cases because data carriers of the server have reached their capacity limits. bitfarm therefore recommends checking the data carriers for sufficient capacity from time to time. In addition, the garbage *folder* and also the duplicate *folder* of the DMS should be checked to see whether documents that are not to be processed have been stored there.

6. Restrictions

The following restrictions should be known when planning structures and workflows in the DMS:

- Authorizations for shortcuts cannot (yet) be set.
- The search for links is currently global and exclusive; there are no combination options with other search criteria.
- There is no tree or corresponding list for displaying and managing the links - the nomenclature of the links must therefore be defined and known to the users. Alternatively, you can jump from linked documents to other documents in the same "file".
- There is currently no "real" inheritance of additional field configuration and user rights.

- It is not possible to show automatically generated user lists in additional fields.

7. Final recommendations

When planning a DMS (sub)structure, it is advisable to briefly and concisely document the status quo in a workshop with a few participants who are familiar with the existing processes within the company or institution in question. Our experienced DMS consultants may be able to put forward suggestions for improvement for discussion at this point and thus show what is possible with the new system. Overall, the workshop should not take longer than 2-3 hours for one area. The collected information is then poured into a DMS structure with the help of the aforementioned concepts and, if necessary, implemented using electronic workflows. These workflows make no claim to perfection, but must be examined and further optimized in a refinement process. In most cases, one or two iterations are sufficient to arrive at good solutions. This approach leads to the goal more quickly than extensive theoretical planning. On the one hand, such an approach would be lengthy and, on the other, difficult, as the lack of practical application knowledge on the part of the customer can lead to misjudgements and incorrect decisions. A pragmatic approach with subsequent optimization builds up the expertise of all those involved more quickly, usually leads to better results and is more cost-effective. This also results in a recommendation to introduce bitfarm-Archiv as a DMS "step by step" in a company or institution.

8. Switch Scripts.ini and Profile.con file

The bitfarm-Archiv DMS can be adapted, optimized and reconfigured in many areas. This applies to the configuration files `scripts.ini` and `Profile.con`, among others. Below is a list of the possible switches and their meanings.

Attention: Changes to the switches should only be made by experienced administrators, as the functionality of the DMS may be impaired. The spelling of the switches and section names is CASE-SENSITIVE.

a) Profil.con - [Connection]

Switches	Default value	Example value	Function / property
server	--	SRV-DMS 192.168.0.1	The host name of the bitfarm-Archiv MySQL server.
port	3307	3307, 3308	The TCP port of the MySQL database.
db	--	DMS	Database name of the MySQL for bitfarm-Archiv.
user	--	0C8T3B7F	The encrypted name of the sa-MySQL database user.
pass	--	C09K6F33	The encrypted password of the sa-MySQL database user.
suuser	--	8T3B7F6B	The encrypted name of the su-MySQL <i>database user</i> .
supass	--	69K6FB	The encrypted password of the su-MySQL database user.
db_encoding	utf8	utf8	The character encoding of the bitfarm-Archiv MySQL database.

b) Profil.con - [Server]

Switches	Default value	Example value	Function / property
version	36	36	Version number of the existing bitfarm-Archiv installation.
server	--	SRV-DMS	The host name of the bitfarm-Archiv MySQL server.
port	50001	50001 50002	The TCP port via which the bitfarm-Archiv server can be reached.
auto_reconnect	--	true false	Improves the handling of short-term connection interruptions in the network.
user_timeout	90	30 false	This can be used to control the time that a user has to wait after logging out until their login is released again. This is specified in seconds. Note: Only active if <code>auto_reconnect</code> is set to <code>true</code> . However, if this switch is set to <code>false</code> , there is no delay.
nossll	false	true false	<code>false</code> ensures that communication between server and client is encrypted. Requires an SSL certificate.

c) Profil.con - [Scripts]

Switches	Default value	Example value	Function / property
storages	--	%bfastore0%	System variable that refers to the bitfarm data directory. The entry for the storage variable is set when the database is created.
archive_rs	--	Data-RS	Entry for the audit-proof file storage below bitfarm-data. Is set when the database is created.
archive_nrs	--	Data NRS	Entry for the non-revision-proof file storage below bitfarm-data. Is set when the database is created.
serverprogram	--	C:\bitfarm-archiv\	Local path to the bitfarm-Archiv program directory.
clientprogram	--	\\SRV-DMS\bitfarm-archiv\$\	UNC path to the bitfarm-Archiv program directory.
clientspooler	--	C:\bitfarm-archiv\uebergabe\	Local path to the file transfer directory.
uncclientspooler	--	\\SVR-DMS\handover\$\	UNC path to the file transfer directory.
ghostscript	--	C:\Program Files\gs\gs9.06\bin\gswin64c.exe	Local path to and file name of the Ghostscript installation.
gsview	--		Local path to and file name of the GSView installation.
templates	--	\\SRV-DMS\bitfarm-archiv\$\templates\	UNC path to the bitfarm-Archiv templates directory. The automatically generated import templates are located there.
workflowfile	--	\\SVR-DMS \bitfarm-archiv\$\muster-gmbh.wfd	UNC path to and file name of the central WFD file (only required for a multiqueue environment).
masks	--	\\SVR-DMS \bitfarm-archiv\$\masks\	UNC path to the central clipping mask directory (only required for a multiqueue environment).

undistributed	undistributed	undistributed	Template name of the undistributed archive in the archive tree. Serves as a collective archive.
workflows	--	\\SVR-DMS \bitfarm-archiv\$\workflows\	UNC path to the central bitfarm-Archiv workflow directory (only required for a multiqueue environment).
checkmysql	true	true false	Checks whether the database is accessible before each execution of the archiving script.
tempdir	C:\bitfarm-archiv\temp\	C:\bitfarm-archiv\meinverzeichnis\	The temporary directory required for archiving.

d) Profil.con - [Client]

Switches	Default value	Example value	Function / property
bfauser	--	AQAAANCMnd8BFdERjHoAw...	Bitfarm users for the registration of various tools on the bitfarm server 36.
bfapass	--	AQAAANCMnd8BFdERjHoAw...	Bitfarm user password for logging in to the various tools on the bitfarm server 36.

e) Profil.con - [Backup]

Switches	Default value	Example value	Function / property
backuppath	--	D:\backup\ \\SRV-03\Backup\	Target path under which the files created by the backup script are to be stored.

sqldatapath	--	D:\MySQL\data\	Local path to the MySQL database files.
backuparchiv	false	true false	If set to <code>true</code> , the audit-proof file storage is included in the backup (archive_rs).
backupnrsarchiv	false	true false	If set to <code>true</code> , the non-revision-proof file storage is included in the backup (archive_nrs).
backupversion	false	true false	If set to <code>true</code> , the bitfarm-Archiv directory is included in the backup.
filesize	20000	40000	Maximum size in KB that a backup .rar or .zip file can have before a new one is created.
backupzeitraum	5	7 n	Period in days for which the backups are stored before they are automatically deleted.
use7zip	false	true false	If set to <code>true</code> , the backup files are stored in zip format instead of rar format.
stoponfail	true	true false	If set to <code>true</code> , MySQL as well as the bfaServer36 and archiving are not started if an error occurs during the backup.

f) Profil.con - [Options]

Switches	Default value	Example value	Function / property
BugReportEmail	crashlog@bitfarm- archiv.de	admin@muster-gmbh.de	E-mail address to which viewer crash logs are sent.

logdir	--	\\SRV-DMS\logs\$\	UNC path to the central directory for logs of the client application.
logsavedirectory	--	\\SRV-DMS\logs\$\	UNC path to the central directory for logs of the client application.
savepass	false	true false	If set to true , the client can save the login password.
LinkChars	3	4 n	From the number of characters specified here, the viewer starts autocomplete for links.
dublettenpruefung	false	true false	Activates the duplicate check of the archiving script <code>Archiving.vbs</code> . This checks for equality at bit level (SHA1 sum) and stores a duplicate in the duplicate folder.

g) Profil.con - [DLM]

Switches	Default value	Example value	Function / property
expire_dir	C:\bitfarm-archiv\bin\expired\	D:\expire\ \\srv\expire\$\	File system path for storing documents whose lifespan has expired.
check_time	06:00	00:00 01:23	Time at which the documents are checked for their lifespan.
dont_check_expired	false	true false	Deactivates the DLM deletion tool.

h) Scripts.ini - [Scripts]

Switches	Default value	Example value	Function / property
Hostsprache	German	German English	Operating system language of the bitfarm-Archiv server.
Profil	--	DMS Archive	Name of the profile file. Specification without file extension.
Typ	--	OMP, OCR TXT	Default type for OCR recognition. No full text recognition is performed for TXT.
allownonrevisionsave	true	true false	When set to false , all incoming documents are stored in a revision-safe manner
archquelle	true	true false	If set to false, the original document files are not saved.
acceptallfiletypes	true	true false	Allows archiving of all file formats. Preview and full text may not be generated.
dontconvertcommatopoint	true	true false	Converts additional field values determined in a na- ming section in the wfd file from comma to point.
dropshortstrings	false	true false	If set to true , determined additional field values under 3 characters are subsequently discarded.
dontnormdokname	false	true false	If set to true , invalid characters in the original file name are removed.
mapexif	true	true	If set to true , the exif values are transferred to additional fields of the same name.

		false	
doknamefilter	--	\d{10} archiveprinter.pdf	If one of the specified regular expressions (separated by " " or "Pipes") matches the determined file name, its name is reset to "Document".
globalacceptnoextension	false	true false	If set to true , documents without a file extension can also be archived.
globalblacklistxtensions	--	.db.err.bin.part	The file types listed here are discarded during import.
recasesensitive	false	true false	If set to true , regular expressions are evaluated case-sensitively.
setprintermethod	--	printui.dll	Is set if an alternative method for setting the default printer is to be used.
useDSO	false	true false	Determines whether the <code>dsofile.dll</code> file is used to read the properties of MS Office documents.
undistributed	undistributed	undistributed	The template name of the undistributed archive.
normftx	true	true false	If set to true , special characters are converted to other special characters during archiving, so 123_456 becomes 123-456
normstring	true	true false	Set to true to replace special characters in the title and keywords, see also normftx .
normzusatzfeld	true	true false	Set to true to replace special characters in additional fields, see also normftx .

i) Scripts.ini - [Converter]

Switches	Default value	Example value	Function / property
CustomPDFtoTIFFConverter	--	bfa_pdf2tif	Name of the routine for creating TIFFs from PDFs.
exifreader	--	C:\bitfarm-archiv\exiftool.exe	Local path to and file name of the exif tool for reading EXIF data from JPG files.
emlconverter	--	%bitfarm-archiv%\bfa_eml_unpacker.exe	Tool for unpacking EML files.
foppath	--	--	Local path and file name to the fop tool.
htmlconverter	--	%bitfarm-archiv%\wkhtmltopdf\wkhtmltopdf.exe	Path to wkhtmltopdf.exe. Converts html to PDF files.
javapath	--	--	Is required to run the fop tool.
msgconverter	--	%bitfarm-archiv%\MsgText\bin\msgtext.exe	For converting MSG files.
opensslpath	--	C:\Bitfarm-Archive\Viewer-files\OpenSSL\bin\openssl.exe	Path to the openssl.exe
openofficepath	--	C:\Program Files\LibreOffice\program\	Path to the installation directory of LibreOffice.
pcltotif	--	--	Path to the pcltotif converter.
xsltconverterpath	--	--	Path to an xslt converter, which can generate PDFs from XML files using appropriate templates. Example: <i>Altovaxml</i> .
xslttemplate			The XSLT template for the above switch.

j) Scripts.ini - [Email]

Switches	Default value	Example value	Function / property
archmsg	true	true false	Set to true to archive e-mails.
attachmentarchiv	--	Appendix archive	Name of the archive in which all e-mail attachments are to be archived.
attachmentdontuseoriname	false	true false	At true , e-mail attachments are called "e-mail attachments".
dontextractmsgattachments	false	true false	Deactivates the additional archiving of e-mail attachments
mailattachments	--	changable	If the switch is not set to changable , all email attachments are stored in an audit-proof manner.
emailwhitelistextensions	--	.zip.tif.pdf	Attachments with the file extensions they contain are archived separately and linked to the mail. Has priority over the following switch.
emailblacklistxtensions	--	.html.gif.bmp.png	Attachments with the file extensions they contain are not archived.
emailacceptnoextension	false	true false	If set to true , attachments without a file extension are also archived.
filterinlineattachments	false	true false	When set to true , it prevents the separate archiving of inline attachments.
loadimages	true	true false	Set to false to prevent images from being reloaded from the Internet.

removepretag	false	true false	If set to true , all <pre> tags are removed from the HTML code of the mail.
ftxaddrawheader	false	true false	If set to true , the header of the mail is visible in the Full text tab.

k) Scripts.ini - [Import]

Switches	Default value	Example value	Function / property
ScannerImportPath	C:\bitfarm-archiv\import\	D:\myfolder\	Import directory to be monitored.
ExtendedImportPath	--	E:\furtherDirectory\	Second import directory to be monitored.
readuserfromfilename	false	true false	If set to true , the bitfarm-Archiv user is determined based on the file name.
readuserfromfolder	false	true false	If set to true , the bitfarm-Archiv user is determined based on the folder name.
readuserfromfileowner	true	true false	If set to true , the bitfarm-Archiv user is determined based on the file owner.
readarchivfromfilename	false	true false	If set to true , the import archive (template) is selected based on the file name (without extension).

readarchivfromfolder	true	true false	If set to true , the import archive (template) is selected based on the subfolder in the import path.
scannerpagecountinfo	false	true false	If set to true , a pop-up window is activated for Auto-Scan-vbs, which shows that documents and how many pages are being transferred.
delayedscannerimport	false	False true	If set to true or number , the retrieval of documents from the import directory is delayed by 30 seconds or number of seconds.

I) Scripts.ini - [OCR]

Switches	Default value	Example value	Function / property
dontuseocrforgif	false	true false	Set to true to deactivate text recognition for GIF files.
dontuseocrforjpg	false	true false	Set to true to deactivate text recognition for JPG files.
dontuseocrforbmp	false	true false	Set to true to deactivate text recognition for BMP files.
dontuseocrforpng	false	true false	Set to true to deactivate text recognition for PNG files.
pdftextminsize	--	100 n	If the text read from a PDF file is shorter than the specified number , new full text is generated.

pdftextverifyregex	1	\n.*\n.* Regular expression	If the full text from the PDF text does not correspond to the specified regular expression, new full text is generated.
ocrxmlfor	--	.doc.docx.txt.pdf.msg.sml.odt	Defines a list of file types that should also receive an XML file from the OCR job for the integrated location marking.
usetesseract	true	true false	If set to true , Tesseract is used for full text recognition.
tesslang	deu	deu+eng+...	Sets the languages in which Tesseract should perform full-text recognition. The + serves as a separator, the training files must be in <i>tessdata</i> .
tessmaxpagetime	--	60 n	Defines the timeout in seconds for Tesseract full text recognition.
tessprocs	--	4 n	Defines the maximum number of Tesseract processes running in parallel. Each process requires one core.

m) Scripts.ini - [Rendering]

Switches	Default value	Example value	Function / property
Defaultresolution	hires	hires	 hires generates a 300dpi preview, otherwise 200dpi.
archofficeincolor	false	true false	When set to true , the previews for Office files are generated in color.

archpdfincolor	false	true false gray	If set to <code>true</code> , the previews for PDF files are generated in color, <code>grey</code> in greyscale, <code>false</code> in black and white.
archHTMLincolor	true	true false	When set to <code>true</code> , the previews for HTML files are generated in color.
archJPGincolor	false	true false	When set to <code>true</code> , the previews for JPG files are generated in color.
emailcolor	bw	Bw color gray	Defines the color depth for the previews of emails between color (<code>color</code>), black and white (<code>bw</code>) and greyscale (<code>grey</code>).
useOMPforOffice	false	true false	When set to <code>true</code> , Office documents are always read by OmniPage full-text recognition.
deletesourcefiles	--	true false	If set to <code>true</code> , the source files for document imports are deleted by <code>direktimport.vbs</code> and <code>quick-import.vbs</code> .
extractPDFdirect	true	true false	If set to <code>true</code> , the full text of PDF files is read out and full text recognition is only activated if necessary.
checkexistingdocpreview	false	true false	If set to <code>true</code> , the supplied preview TIF is used instead of a newly generated one.
removepscopies	false	true false	If set to <code>true</code> , the copies are removed when importing PS files (print job with multiple copies).
JPGNRS	false	true	When set to <code>true</code> , JPG files are not archived in an audit-proof manner.

		false	
PDFNRS	false	true	When set to true , PDF files are not archived in an audit-proof manner.
		false	
GIFNRS	false	true	When set to true , GIF files are not archived in an audit-proof manner.
		false	
PNGNRS	false	true	When set to true , PNG files are not archived in an audit-proof manner.
		false	
BMPNRS	false	true	When set to true , BMP files are not archived in an audit-proof manner.
		false	
PPTNRS	false	true	When set to true , PPT files are not archived in an audit-proof manner.
		false	
XMLNRS	false	true	When set to true , XML files are not archived in an audit-proof manner.
		false	
EMLNRS	false	true	When set to true , EML files are not archived in an audit-proof manner.
		false	
MSGNRS	false	true	When set to true , MSG files are not archived in an audit-proof manner.
		false	
NOEXTNRS	false	true	If set to true , files without a file extension are not archived in an audit-proof manner.
		false	
pdfAutoRotate	true	true	When set to true , the preview of a landscape format PDF is automatically rotated.
		false	

tifAutoRotate	true	true false	When set to true , the preview of a landscape TIF is automatically rotated.
autoshrinkjpg	200	100 n	JPG files above the specified KB size are compressed.
changeresolution	hires	pdf,150 File extension,number	Specifies the file types for which the resolution is to be changed. Up to 100 changeresolution entries can be stored.
xlsmaxpages	10000	Number	The maximum number of pages of an Excel file that is created for the preview of a document.
maxpdfpages	10000	Number	The maximum number of pages of a PDF file that is created for previewing a document.
usejpgtotif	false	true false	If set to true , a TIF preview is generated on the basis of the JPG file.
archpsincolor	false	true false gray	Archives PS files in color (true), black and white (false) or grayscale (grey).
xmltotext	true	true false	If set to true , TXT previews are generated for XML files.

n) Scripts.ini - [ZIP]

Switches	Default value	Example value	Function / property
zippath	--	C:\Program Files\7-Zip\7z.exe	Local path and file name of the installed 7Zip version.

deletezipafterdecomp	false	true false	If set to true , ZIP packages are discarded and only the content is archived.
zipacceptnoextension	false	true false	If set to true , files without file extensions in ZIP packages are not archived.
zipwhitelistextensions	--	.tif.txt	File types that are extracted from a ZIP file.
zipblacklistxtensions	.exe	.bin.exe.pdf	File types that are not extracted from a ZIP file.
dontdecompzipattachments	false	true false	If set to true , ZIP files in emails are not extracted.
dontdecompzipatall	false	true false	ZIP files are generally not extracted if set to true .
extractrecursive	false	true false	If set to true , ZIP files are extracted recursively.
zipuseoriname	true	true false	If set to true , the title of a ZIP file becomes the original file name. If set to false , the title becomes Document.

9. Support bitfarm-Archiv GPL version

If you have any questions or problems regarding the GPL version, you can always find support in [the SourceForge forum](#) provided for this purpose. If your question has not yet been addressed, you can easily generate a new post. Experienced users and our software support will help you with your problems.

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