

ARCHIVE CONNECTIONS Administration and Configuration

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1. Overview

DOCUMENTS 4 can be used for revision-proof archiving of DOCUMENTS files and for searching/retrieving archived documents using so-called archive servers. Archive servers may come in different versions; they are generally connected via the corresponding interfaces:

Archive server	Communication via
DOCUMENTS Archive	Rest Interface (Web service)
EASY ENTERPRISE.x (EE.x)	EASY XML Server EE.x
EASY ENTERPRISE.i (EE.i)	EASY XML Server EE.i

Depending on the type of license, you can also use multiple archive servers at the same time; however, currently only exactly one EE.x archive server can be configured. When integrating an EE.x or EE.i archive server, these can also be used for authentication, given the corresponding configuration, i.e. the users defined in the archive and/or the authentication type entered in the archive (e.g. LDAP) is used to log in the user. DOCUMENTS is generally used for authentication when using DOCUMENTS Archive.

This documentation discusses the following essential issues on correct integration of archive systems in particular:

- General archive settings in DOCUMENTS
- General archive server configuration in DOCUMENTS
- Additional configuration options via configuration file
- Important information on archive structure import on using EE.x or EE.i
- Options of archiving DOCUMENTS files

Frequently used DOCUMENTS settings for the different archive systems are additionally represented in a special section.

In some sections this documentation shows only briefly specific options, referring to the respective detailed documentations which discuss the corresponding procedures in detail (e.g. documentation on DOCUMENTS Scripting, DOCUMENTS Workflow, etc.).

2. General Archive Settings

General Archive Settings are made via the DOCUMENTS Manager by logging in the DOCUMENTS principal via the DOCUMENTS/Settings menu item on the "Archive (basic)" tab:

Documents - Settings *	? <mark>- ×</mark>
Global Settings Documents (basic) Archive	(basic) List export Documents (display) Locale/format Logbook Lic
Global	
	Vew users with automatic archive access
	Full text search in archives
	Quick creation of archive files
	Creation of archive files
Search method	2
DOCUMENTS meta-data file type	DMI
Delete temporary hits	
- Hit list	
Maximum count archive hits	250
	PDF creation (Print)
	Export
	V Delete
	Enable the display of file names
Ad hoc imports	
	🔽 Update schema at login
Minimum length of multiline fields	256
OK Apply Cancel	Delete file pool

Figure 1. DOCUMENTS settings – Archive basic

2.1 Global settings

New users with automatic archive access

When enabling this checkbox, newly created users will automatically be granted the "Archive access" permission. Depending on user licenses (named or concurrent), the corresponding error message will be output on creating users if the licensed number of users has been exceeded.

Full text search in archives

This checkbox enables a full text search field in the Web interface that allows users to perform full text searches in all accessible archives.



Figure 2. Full text search in archives

Quick creation of archive files

When enabling this checkbox globally, archive files can additionally be created via the quick creation of archive files option. This option can additionally be limited for individual archives on the "Actions" tab for imported EE.x schemas or EE.i archive types.

Creation of archive files

When enabling this checkbox globally, archive files can additionally be created via the normal archive file creation option. This option can additionally be limited to individual archives on the "Actions" tab for imported EE.x schemas or EE.i archive types.

Search method

The values 0, 1 or 2 can be entered in this field. The parameter will only be used for searches against EE.x archives. In archive searches this parameter influences search in such fields that were archived only via database index and not via full text. In the affected fields, the parameter determines at which positions wildcard searches are automatically used in the entered search terms:

Value	Meaning	Pattern
0	searches the term as any part of the field	*expr*
1	compares the entire term	expr
2	searches the term at the beginning of the field	expr*

DOCUMENTS meta-data file type

The file name extension for special *documents meta information* (DMI) entered here is used while archiving EE.x or EE.i files to enable displaying the tabs and graphic annotations during searches as they existed at the time of archiving. Since a special format is used during archiving for this additional data, other attachments with this file extension may not be archived. If another application is using this file extension, you can enter an unused extension here; however, you may not make any changes to it later, because otherwise this meta information can no longer be evaluated correctly.

Delete temporary hits

On opening archived files from hit lists, temporary search hits are generated which, among others, are used for faster access (caching). Specific actions (e.g. when designing forms or file views) may require that you delete these temporary search hits; they can be deleted via the corresponding button. All temporary search hits are generally deleted on restarting the DOCUMENTS server; timed deletion can additionally specified via an option and the *documents.ini* file (\$DeleteTempArchiveFilesAt <Hour>). Moreover, temporary archive hits can also be manually deleted for a selected archive server.

2.2 Hit list settings

The hit list settings shown below apply, with their settings, to users with archive access only. For users with both DOCUMENTS and archive access the settings selected on the "DOCUMENTS (basic)" tab are additionally evaluated because hybrid hit lists (current processes and archive files) can also be created, i.e. if the option to export (see Exporting) has been disabled, but enabled for current processes, and the logged-in user has both DOCUMENTS and archive access, for example, the hit list action for export will appear also for simple archive search.

Maximum count archive hits

This information limits the displayed number of hits in hit lists during archive searches. This does not include hits in current processes with cross-archive searches (DOCUMENTS files). In dynamic folders with archive links this limit is not evaluated unless the additional DOCUMENTS property "MaxArchiveHitsFolder" with the corresponding number has been additionally configured. If a hit list contains more archive hits, the user will be output the corresponding note message. A very high value may have negative influence on performance during archive searches.

PDF creation (Print)

When enabling this checkbox, PDF creation can be globally set from the hit list view for users. When creating PDFs, the users can afterwards select PDF printing (index information and attachments) or PDF printing – attachments only. This global setting can be overridden for individual EE.x / EE.i archives.

Export

When enabling this checkbox, export of the entire hit list or parts of it can be globally set for users. This gives users the option to export this data as CSV or XML files. If hit lists are to be exported as CSV or XML files, you will have to make additional settings for this under DOCUMENTS/Settings/List Export.

Delete

When enabling this checkbox, deletion of DOCUMENTS files from the hit list will be globally allowed. On deleting, the respective archive permissions will be additionally checked and, if necessary, a note message will be output saying they cannot be deleted.

Enable the display of file names

This checkbox only applies to EE.x. When this setting is enabled, additional properties of the attachments will be queried via the EASY XML Server on generating the hit list and, if available, displayed in the hit list. You need to additionally turn on indexing the file properties on the corresponding EE.x pool via the *IndexBlobs* property. If you turn on indexing only subsequently on the EE.x pool, archived file properties will not be available; in this case you would have to ensure reindexing first.

2.3 Settings for ad hoc imports

The settings for ad hoc imports only apply to EE.x.

Update schema at login

When enabling this checkbox, EE.x schema settings will be reimported every time a user with archive access logs in. In doing so, changed EE.x schema information may be overwritten (a checksum comparison takes place). Attributes of an already imported schema that have been deleted from the archive system are not deleted here (EE.x schema attributes can, by default, only be changed when schema publishing has previously been retracted). Since additionally the login process of users may take a longer time on enabling this setting, it is recommended that you disable this setting and perform schema updates as administrative action via the DOCUMENTS Manager (see also chapter "Additional Information on Archive Structure Import").

Minimum length of multiline fields

This field is used to define from which field length the import function should assign the DOCUMENTS type *Text* instead of *String* to a text attribute. The default value 256 is selected in such a manner that an attribute stored as *meta-data* in EE.x with a maximum length of 255 characters is still considered single line, whereas an attribute of the *Content* type is usually created multiline.

3. Archive Server Configuration

The next step in setting up archive communication is setting up an archive server. This is performed using the DOCUMENTS Manager via the tree view on the DOCUMENTS/Archive Server node. Depending on the existing license, multiple archive servers can be configured for DOCUMENTS Archive; however, exactly on Archive server for EE.x.

The connection configurations for the archive server are defined in the Archive server dialog. If an archive server is to be deleted via the corresponding menu item, you will have to disable the "Locks and limitations" tab first. On deleting an archive server no archived data will be lost; only the connection configuration to an archive system will be removed.

The following settings are made:

3.1 The General tab

General User accounts Loc	ks and limitations Archive server access Propertie:	s
Name		Main server
Label		
Archive software	DOCUMENTS (EAS)	
Hostname		Port
Site (root page)		
EE.x Unit	Default	
	EASY ENTERPRISE authentication	
Report server	Active	
HostArchiveReport	localhost	Port 8081
Import archive structure	_	
Delete temporary hits		

Figure 3. Archive server, General tab

Name

The technical name for the archive server is entered in this field. This field is required. The specified name must be unique; it may not contain any special characters. The technical name of an archive server can no longer be changed after it has been saved.

Main server

This checkbox allows defining an archive server for the main server. Only exactly one main server can exist in the system. This server's archive structures can later also be accessed without specifying the archive server name by defining on a file type, for example, that archiving for DOCUMENTS files is generally performed via the main server. This allows, for instance, defining annual archives and simple conversion of the main server at the corresponding time or archiving in workflows created via earlier DOCUMENTS versions.

Label

A label for the archive server is specified in this field. This label is displayed to users in the DOCUMENTS Web client in Advanced Search with the corresponding configuration (see DOCUMENTS/Settings/Properties \rightarrow "EASSearchClustered"). You can also specify the label in multiple languages using the common DOCUMENTS notation.

Archive software

This selection list is used to define the archive software with which an archive server should communicate. You can choose DOCUMENTS ARCHIVE (EAS), EASY ENTERPRISE.x (native), or EASY ENTERPRISE.i. Depending on the selection, other fields are activated for editing or default settings are made in the archive server configuration.

Hostname

You need to specify a DNS name, an IP address or a NetBIOS name as the host name via which communication is performed. In case of DOCUMENTS Archive, this is the configuration for the Apache Web server of the installation. When using EE.x or EE.i, this is the configuration for the station on which the EASY XML Server is installed.

Port

In this field you enter the port via which to access the host and which was specified for the Apache Web server (DOCUMENTS Archive) or the EASY XML Server during the installation of the archive system.

Site

In this field you enter the basic path for http access to the archive system.

- Default for DOCUMENTS Archive /eas/archives/<StoreName>
- Default for EE.x /eex-xmlserver/eex-xmlserver
- Default for EE.i
- /eex-xmlserver/eex-xmlserver /.

Archive Integrations - Administration and Configuration

EASY ENTERPRISE authentication

This field will only be editable if EE.x or EE.i have been selected as the archive software and the corresponding EE.x or EE.i archive server has been defined as the main server. This field is disabled when using DOCUMENTS Archive. When enabling the checkbox in case of EE.x or EE.i, the user accounts created in the archive system will also be used to log in to DOCUMENTS. Users which the system is not yet aware of are automatically created with correct login information. An additional note is made for these users that this is an automatically created user account (Users / DOCUMENTS/Archive settings 1). This tab allows enabling/disabling EASYWARE authentication for the user. To users automatically created and for whom EASYWARE authentication has been enabled, the permissions stored in the archive system generally apply for searches. The password of such a user can no longer be changed in the DOCUMENTS Manager; such a change must be made in the archive system or with the LDAP interface. To users that have not been automatically created and for which EASYWARE authentication has been disabled, the permissions stored on the archive server for the default user in the archive system apply for searches.

Report server active

This setting can only be enabled if EE.i has been selected as archive software. When enabling the Report server, you will also need to specify host name and port for the Report server. After the settings have been enabled correctly, users can select the "Print report" action in archive hit lists and archive file view. An additional selection dialog is displayed here from which you need to select the corresponding template.

Report server host name

In this field, with the Report server enabled, you need to enter the name or IP address of the computer on which the EASY Report server is installed and executable.

Report server port

In this field, with the Report server enabled, you need to enter the port on which the EASY Report server can be reached.

The Import archive structure button

This button is only enabled on configuring EE.x or EE.i archive servers. When pressing this button, depending on the archive server (EE.x or EE.i), a mask opens which lets you specify additional parameters for archive import. Important, detailed information on archive structure import are described in chapter "Additional Information on Archive Structure Import".

Uni	t Default 👻
Instance	e Default 👻
Mode	e all schemas 🔹
Schema identifie	r 🔤
	📝 Do not reload known schemas
	📝 Do not reload known fields
	📝 Release new schemas immediately
Minimum lengt	h of multiline fields 256

Figure 4. Archive server, archive structure import on using EE.x

🐓 Import archive st	ructure
Mode	all archives
Archive identifier	
	📝 Do not reload already known archives
	📝 Do not reload known fields
	🔽 Release new archives immediately
Field types	import text fields as 'String' (single line)
OK (Cancel

Figure 5. Archive server, archive structure import on using EE.i

Unit

This selection list only appears in EE.x. If multiple EE.x units are enabled, you can select accordingly from the list.

Instance

This selection list only appears in EE.x. If multiple EE.x instances are enabled, you can select accordingly from the list.

Mode

For EE.x, you select "all schemas" or "single schema"; for EE.i, you can select "all archives" or "single archive".

Schema identifier/archive identifier

If a single archive structure should be imported, you will need to select this afterwards via the "Schema identifier" or "Archive identifier" field. The viewer that opens displays a list of already imported/available schemas/archives.

Do not reload (already) known schemas/archives

This button controls whether already imported archive structures (schemas/archives) are made read-only during import or not.

Do not reload known fields

This button controls whether already imported archive structures (fields) are made read-only during import or not.

Release new schemas/archives immediately

This button controls whether new archive structures are marked as released immediately or not. Whether automatic release is a useful idea depends on the expected scope of subsequent manual edits (see also chapter "Additional Information on Archive Structure Import").

Minimum length of multiline fields/field types

By default, the corresponding DOCUMENTS data types are assigned to the attributes present in the archive system. Attributes of the "Text" type are assigned the DOCUMENTS data type "String" (256 characters). When using EE.x, you can extend the minimum length of multiline fields, if necessary; during import these fields are then created using the DOCUMENTS data type "Text". When using EE.i, you can select from one of the following options for field import:

- Import text fields as "String" (single line)
- Import text fields as "Text"
- Import all fields as "Text"

Erroneously selected import settings can be subsequently corrected manually; depending on the expenditure (number of archive structures), the option to delete the imported data files and re-import is also available.

Archive fields containing an enumeration list are always imported as DOCUMENTS data type "Enumeration".

The Delete temporary search hits button

When pressing this button temporary archive hits for the selected archive server will be deleted (see also *General Archive Configuration / Delete Temporary Search Hits*).

3.2	The	User	acco	unts	tab
-----	-----	------	------	------	-----

eneral User accounts Locks and	limitations Archiv	e server access	Properties	
Archive im	port user			
Import user's p	assword		Test	
Default user account in the archiv	e system			
Default user's p	assword		Test	
Trusted server	account			
Trusted user's p	assword		Test	

Figure 6. Archive server, User accounts tab

Archive import user and import user's password

The user ID configured here is only used for EE.x or EE.i for archive structure import. Within the archive system, this account must have at least read permissions on the structure data; archives on which there are no permissions cannot be imported. The *Test* button allows performing a connection test to the archive system; if successful, a message with the recognized version number of the respective EASY XML server will be output; otherwise, an error message will be output.

Default user and password for archive system

The user ID configured here is used for archive accesses for users with activated archive access and who have been authenticated on login by DOCUMENTS (not by the archive system), i.e. the users where *EASYWARE authentication* and *automatically created user account* are enabled. The account specified here is also used for workflow steps to be executed asynchronously or for job scripts with archive access. These permissions may continue to be configured with the corresponding settings, if necessary. The *Test* button allows performing a connection test to the archive system; if successful, a message with the recognized version number of the respective EASY XML server will be output; otherwise, an error message will be output.

"Trusted server" account and password

The user ID configured here authenticates the DOCUMENTS server against the archive software. These settings must be made in the following scenarios:

- the archive server to be used is an EAS server
- in EE.x, the DOCUMENTS server must authenticate a user without knowing the password, e.g. when using single sign-on (SSO); in this case, the user specified here must be assigned the *trusted_server* role within the EE.x system

The *Test* button allows performing a connection test to the archive system; if successful, a message with the recognized version number of the respective EASY XML server will be output; otherwise, an error message will be output.

New - Archive server *				2 2
General User accounts	Locks and limitations	Archive server access	Properties	
		V Released		
	Locked since			
Upper bound of sim	ultaneous requests	64		
	Canaal			
	Lancei			

3.3 The Locks and Permissions tab

Figure 7. Archive server, Locks and Permissions tab

Released

This checkbox is used to configure whether an archive server is released or not. Archive servers that have not been released cannot be accessed during searches and archive operations (nor via workflow or scripting).

Locked since

This field is not editable. This field displays the time since when an archive server has been disabled (released = false).

Upper bound of simultaneous requests

The number of simultaneous accesses via the EASY XML server can be entered in this field. If more archive accesses are concurrently requested through user actions, workflow or scripting, the surplus accesses must wait until running requests have been completed. The default value for all archive software connections is "64". When using EE.i, licenses may be exceeded in operation if this value is set too high. The guideline here is that you should enter a minimally smaller value than the number of freely available archive licenses. Moreover, if other client programs are simultaneously used for the EASY XML server or *Easy Link Objects*, the licenses designated for this must be deducted.

3.4 The Archive server access tab

🔋 New - J	Archive server *	k				? X
General	User accounts	Locks and limitations	Archive server access	Properties		
					🍐 🖄	· X 🛃 🚯
Read	Access profile	e create	ed on c	hanged on		Principal
ОК	Apply	Cancel				
OK	Apply	Cancel				

Figure 8. Archive server, Archive server access tab

This tab allows further limiting access to an archive server in addition to other permission regulations (DOCUMENTS internal or archive-side). By default, no access settings are configured, i.e. users with the "Archive access" option can access all configured archive servers (EAS) or authorized archives (EE.x, EE.i). By creating a new archive server access (New or F2), an additional mask opens which allows selecting DOCUMENTS access profiles to be authorized. Inasmuch as a permission has been set, the configured additional regulations apply.



Figure 9. Archive server, configure archive server accesses

4.1 General

Some general settings for archive access of the DOCUMENTS server are configured via the *ArchiveXML.ini* file in the server directory. This file will only be evaluated on starting the DOCUMENTS server, i.e. all changes therein will only take effect on restarting the DOCUMENTS server.

The file is subdivided into four sections which allow configuring the respective archive software settings. Some of the parameters listed below may not be changed.

The following archive servers are currently supported:

DOCUMENTS Archive	Section [EAS]
EE.x native	Section [EEX]
EE.i	Section [EEI]

The previous EE.x emulation mode is no longer supported. The [COMMON] section currently contains no parameters; the previous parameter *MaxConcurrentRequests*, via which the maximum number of simultaneous accesses to the respective archive server could be configured, is available as a setting on the "Locks and limitations" tab of the archive servers in DOCUMENTS 4 or higher.

4.2 Settings on using DOCUMENTS Archive

Settings for DOCUMENTS Archive are made in the *[EAS]* section. The parameters may generally not be changed, with one exception:

CommonRequestTimeout

The default value for this parameter is "60". This parameter is used to specify the time, in seconds, after which requests of any type will be canceled if DOCUMENTS Archive does not return a response. It may be increased or reduced, as necessary.

This parameter can additionally be defined as a property on the archive server in DOCUMENTS.

4.3 Settings on using EE.x

Settings for EE.x are made in the *[EEX]* section. Parameters displayed below are available:

TitleRead

The default value for this parameter is "TITLE". This parameter may not be changed; it is assigned to the EE.x system attribute TITLE (Document title).

TitleWrite

The default value for this parameter is "TITLE". This parameter may not be changed; it is assigned to the EE.x system attribute TITLE (Document title).

CreationDate

The default value for this parameter is "CREATE_DATE". This parameter may not be changed; it is assigned to the EE.x system attribute CREATE_DATE (Date created).

LastChangeDate

This parameter does not have a default value. It is not archived by default. It can be logically customized via the EE.x system attribute MODIFIED_DATE (Date modified). Since this system attribute is, by default, not present on the EE.x schema, it must be created beforehand.

Owner

The default value for this parameter is "CREATOR_USERNAME". This parameter may not be changed; it is assigned to the EE.x system attribute CREATOR_USERNAME (Created by).

LastEditor

This parameter does not have a default value. It is not archived by default. It can be logically customized via the EE.x system attribute MODIFIER_USERNAME (modified by). Since this system attribute is, by default, not present on the EE.x schema, it must be created first.

DirectFileTransfer

The default value for this parameter is "1". This parameter may not be changed; it enables binary transfer of BLOB data (attachments) to the EE.x system via getblob or putblob request.

CommonDefaultHitlist

The default value for this parameter is "Default". This value is also normally used in EE.x systems for default hit lists. If another default hit list, particularly with cross-archive searches, should be used, this parameter can be customized using the corresponding name.

DetectMimetypesInBlobnames

The default value for this parameter is "0". This parameter may not be changed.

ImportHiddenHitFields

The default value for this parameter is "0". This parameter may not be changed.

AutoReLogin

The default value for this parameter is "0". When using the DOCUMENTS Web client as a simple search/retrieval client using EE.x, this parameter should not be customized because in this case, by default, the timeout defined in the EE.x system applies for a user session (ContextId) that has not been used for a longer time. When using DOCUMENTS additionally as a workflow application, this parameter can be customized to the value 1. It will then cause DOCUMENTS to initially execute a trial request (<INFO>) via EASY XML server on a user session that has not been used for a longer time and to automatically log in the user again before re-transmitting the main request. This ensures the user does not have to log in again. Expiration of the DOCUMENTS Web session (Tomcat setting), however, always causes logging the ContextId out. In addition to this parameter, you can also add the *ReLoginCheckInterval=<Seconds>* parameter. The default value for this parameter is "600"; it can be increased or reduced, as necessary.

LoginTimeout

The default value for this parameter is "60". This parameter is used to specify the time, in seconds, after which a request of the Login, Logout, Units or Instances type will be canceled if the EE.x system does not return a response. It may be increased or reduced, as necessary. This parameter can additionally be defined as a property on the archive server in DOCUMENTS.

RequestTimeout

The default value for this parameter is "60". This parameter is used to specify the time, in seconds, after which a request of all types (see LoginTimeout) will be canceled if the EE.x system does not return a response. It may be increased or reduced, as necessary.

HitPositionsAreByteOffsets

The default value for this parameter is "0". It defines whether the "hit positions" transmitted by the EASY XML server (use with Hit highlighting option) are interpreted by DOCUMENTS as a character index or as a byte index within a UTF-8

code string. This parameter should not be customized in production environments.

SchemeImportGrouping

The default value for this parameter is "10". This parameter determines how many schema descriptions are requested via the EASY XML server during archive import. This parameter can be customized; logical values are 5 to 20. Values that are too small will slow import through too many individual queries. Values that are too large will degrade response of the progress indicator in the DOCUMENTS Manager and may result in that XML response information can no longer be processed.

TrustedLogin3Steps

The default value for this parameter is "0". This parameter may not be changed.

SendGroupingNumeric

The default value for this parameter is "0". It causes that thousands separators are not transmitted to the EASY XML server during archiving for numerical fields. This must be considered in particular when the language settings for the EE.x user differ from those for DOCUMENTS or when different EE.x format patterns are configured for these fields. If these settings are irrelevant (e.g. for German-only or English-only installations), this parameter can be changed to the value 1; in this case, the format settings for numerical DOCUMENTS fields will be transmitted to the EASY XML server.

4.4 Settings on using EE.i

Settings for EE.i are made in the [EEI] section. Parameters displayed below are available:

TitleRead

The default value for this parameter is "110". This parameter may not be changed; it is assigned to the internal EE.i field 110 (.Title).

TitleWrite

The default value for this parameter is "TITLE". This parameter may not be changed.

CreationDate

The default value for this parameter is "103". This parameter may not be changed; it is assigned to the internal EE.i field 103 (.ArchiveDate).

LastChangeDate

The default value for this parameter is "104". This parameter may not be changed; it is assigned to the internal EE.i field 104 (.ModificationDate).

Owner

This parameter does not have a default value. It may be changed to the EE.i field, if necessary, which is used for archiving the owner of the DOCUMENTS file in DOCUMENTS. This field must be created in EE.i first.

LastEditor

This parameter does not have a default value. It may be changed to the EE.i field, which is used for archiving the last editor of the file in DOCUMENTS. This field must be created in EE.i first.

DirectFileTransfer

The default value for this parameter is "1". This parameter may not be changed; it enables binary transfer of BLOB data (attachments) to the EE.i system.

CommonDefaultHitlist

The default value for this parameter is "DEFAULT". In EE.i systems, this value is normally also used for default hit lists. If another default hit list, particularly with cross-archive searches, should be used, this parameter can be customized using the corresponding name.

DetectMimetypesInBlobnames

The default value for this parameter is "1". Some EE.i tools in the SAP environment archive a MIME type name, not a file extension, in the file name field. If the parameter in these cases has the default value 1, DOCUMENTS will reformat the file name accordingly; when changing the value to 0, no reformatting will be performed.

ArchiveLicenseType

The default value for this parameter is "EasyWeb". Another valid value is "LinkObjects". This parameter defines whether DOCUMENTS transfers the license key (GUID for EasyWeb) via the EASY XML server. For LinkObjects, a Link Objects license is used for incoming parallel requests.

ImportHiddenHitFields

The default value for this parameter is "0". This parameter may not be changed.

LoginTimeout

The default value for this parameter is "10". This parameter is used to specify the time, in seconds, after which a request of the Login or Logout type will be canceled if the EE.i system does not return a response. It may be increased or

reduced, as necessary. This parameter can additionally be defined as a property on the archive server in DOCUMENTS.

RequestTimeout

The default value for this parameter is "60". This parameter is used to specify the time, in seconds, after which a request of all other requests (see LoginTimeout) will be canceled if the EE.i system does not return a response. It may be increased or reduced, as necessary.

SchemeImportGrouping

The default value for this parameter is "10". This parameter determines how many archive description are requested via the EASY XML server during archive import. This parameter can be customized; logical values are 5 to 20. Values that are too small may generate too many individual queries, while values that are too large will degrade the progress indicator's response during archive import in the DOCUMENTS Manager, and the result may be that XML response information can no longer be processed.

PhraseQuoteStyle

The default value for this parameter is "single". Another valid value is "double". This parameter defines how default masking during phrase search is performed for enumeration values (single quote = single, double quote = double). This parameter should not be changed in production environments.

PhraseQuoteExceptionChars

This parameter does not have a default value. A sequential list of characters where the respective other mask should be used when it occurs (see PhraseQuoteStyle) can be specified as a value for this parameter.

FCPQuoteStyle

The default value for this parameter is "double". Another valid value is "single". This parameter defines how default masking for comparison values in DOCUMENTS file class protection filters (also ACL and GACL) is performed (double quote = double, single quote = single), see also PhraseQuoteStyle. This parameter should not be changed in production environments.

FCPQuoteExceptionChars

This parameter's default value is "/,". A sequential list of characters where the respective other mask (see FCPQuoteStyle) should be used when it occurs can be specified as a value for this parameter.

5.1 General, and preparations

When using DOCUMENTS Archive, importing archive structure information will not be necessary because the settings of the respective file type apply here with DOCUMENTS archiving. When using EE.x or EE.i the archive structures defined and administered there must be imported to DOCUMENTS using the above import function. For reasons of efficiency and to hold archive file appearance in DOCUMENTS exactly configurable as with the file types, DOCUMENTS preferably uses its own records to describe the archive structure instead of newly querying this data for each use case via EASY XML server.

Since archive import might be a time-consuming operation, you should ensure in regular operations that all structures within the archive system be configured as intended prior to import. Specifically for multilingual EE.x installations, you should verify already prior to the first archive import that all required language settings or format patterns have been configured. Moreover, all necessary configurations to support multiple languages should have been completed in the DOCUMENTS Manager (e.g.: DOCUMENTS/Settings/Locale and format or principal settings). Otherwise, the display names of the different structure elements will not be imported in all languages.

If specific EE.x schemas or EE.i archives should be read-only for new imports (regardless of the selected import settings this structure data will then not be overwritten), the additional property *ImportLock* can be configured with the value *true* on the corresponding EE.x schema or EE.i archive.

After importing the structure data, you must/should make adjustments to the import data, if necessary, e.g. to:

- clearly design document views in DOCUMENTS (height, width)
- change field data types or hide fields
- define special selection lists (e.g. via scripting)
- define special permissions (e.g. file class protection),
- etc.

The following archive structure elements are created on archive import:

- Schema (EE.x) or archive type (EE.i)
- Field
- View (EE.x only)
- Search mask, search field
- Hit list, hit field

The archive import function does not automatically delete already existing structure data that has become invalid from the system (apart from a special feature on refreshing view data). On one hand, conflicts between the delete operation and parallel read accesses of users to this data should be avoided in production mode, while on the other the possibility that manually subsequently processed parts of the archive structure might be lost through an automated delete operation should be precluded. So, it is the duty of the DOCUMENTS administrator in the first place to choose an appropriate time for deleting archive structure data that is no longer valid and, if needed, to temporarily lock Web access. The DOCUMENTS Web client displays a full text search field, including the option to search all released archives at the same time, when full text search is enabled. If this search function is to be used later, a special condition must be adhered to already when creating the archives in the archive software. Archive searches via DOCUMENTS can only be performed by using an archive hit list. Since each archive or each view has its own set of hit lists, a specific hit list with identical name must be defined as the default hit list for all archives for the global search function. This should contain, respectively, those index fields or schema attributes that match the DOCUMENTS file attributes "Title", "Owner" (or "Creator"), "Date created", "Editor", and "Last edited". Any other fields can be added; however, these are not displayed by the global full text search function in the DOCUMENTS Web client. The names of the default hit lists usually are "Default" (EE.x) or "DEFAULT" (EE.i). If a different name should be used for the default hit list, this can be defined in the configuration file ArchiveXML.ini under the CommonDefaultHitlist label.

5.2 Subsequent edits to the archive structure data

After successful archive import, the two entries *Views* and *All schemas* (EE.x) or the *Archive type* entry (EE.i) will be available in the DOCUMENTS node (tree view of the main window), depending on the archive software used. Most adjustments can be made for an archive type or schema, starting with the edit dialog. Some subitems are also directly accessible via the main window's tree structure. The edit dialog is similar to that for file types.

To be able to work with the archive structures in DOCUMENTS, these must respectively be released.

Fields that contain an empty value in the "Type" field are not displayed in the DOCUMENTS Web client.

Document tabs are created with EE.x schemas by the import function, depending on the existing file attributes. If several tabs are available, file attachments will be assigned based on the attribute name under which they are saved. EE.i archive types allow manually creating a single document tab.

5.2.1 Correcting the field types and customizing file view

If the archive import function has not assigned the optimum field type for DOCUMENTS, this can be subsequently edited and customized. As with file types, the display parameters can also be subsequently edited in the field dialog. However, you need to consider the archive-side field properties for all changes. If the import function has already hidden a field from file view, search mask or hit list, this may indicate that the archive system does not permit the corresponding operation using this field. If the Mandatory field or Read-only properties are enabled after initial import of a field, this has been thus predefined on the archive side; making changes to this when archiving documents may cause errors. The Display in search mask or Display in hit list options will be ineffective, except on using DOCUMENTS Archive, when searching using a named search mask or hit list. Therefore, these options EE.x or EE.i in this case have no meaning. The Exits tab in the field dialog is of no function for imported archive structures. As with file types, the order of fields in file view can be changed. For further designing archive file view for the DOCUMENTS Web client, field tabs and horizontal separators can be created in the schema or archive type dialog when required.

5.2.2 Defining tabs for file attachments

You can create individual document tabs with archive types for EE.i as above if you want to determine the tab name yourself. Otherwise, a default tab will be created, as required, when editing files in the DOCUMENTS Web client.

With EE.x schemas, the document tabs are already created by the import function. Inasmuch as a schema contains only the *File (any)* entry as the only file attribute, the option to define other tabs manually with metadata archiving enabled will be additionally available.

5.2.3 Changing the default hit list sort order

During archive structure data import, the corresponding sort criteria defined in the respective archive system are transferred to DOCUMENTS as hit list sort order. Due to the versatile options while allocating permissions, particularly on integrating EE.x, it may be possible that specific users may not sort by specific columns although all sort settings have been imported correctly. In such cases, users would receive the corresponding error messages in the DOCUMENTS Web client. The following variants are available to resolve this issue:

- The EE.x Configuration Manager resorts the hit list columns in such a manner that only fields on which all users of the view have read permission appear on top of the list (first four fields). After that, you need to repeat view import.
- For the affected EE.x user roles, read permissions on the attributes of the first four columns are configured.
- Automatic sort column default is turned off via property. To do this, you can configure the *AutoEEXSortColumns* property with the value *0* or *false* under DOCUMENTS/Settings.
- The problematic sort criteria are manually removed from the hit list in DOCUMENTS. This adjustment must be repeated after each archive structure reimport.

🔹 Default - Hitl	ist			8 X
Name	Defeut			
Name	Derauk			
Label	Default			
Description				
				*
				-
Instance				
valid from	18.08.2011 08:12:2	:4		
Hash				
L				
Columns			🔚 🗷 🗶 K	> 😔 👩 🔂
Field	Sort priority	Sort order	Label	
F0 (String)	1	Ascending	de:Feld0;en:field0	
F1 (String)	2	Descending	de:Feld1;en:field1	
F2 (String)	3	Ascending	de:Feld2;en:field2	
F3 (String)	4	Descending	de:Feld3;en:field3	
F4 (String)	5	Ascending	de:Feld4;en:field4	
ОК	Apply	New Ca	ancel	

Figure 10. Sorting the hit list on the EE.x view / EE.i archive type

The overview in the above figure shows that the hit list is sorted in ascending order by the *FO* column first. The value in the *F1* column determines equality of the field values. Even if this is not a difference, the *F2* and *F3* columns respectively are also included here to determine the order of the hits.

If, for instance, the *FO* column is to be defined unsorted because some users do not have read permission for it, two steps are necessary. First, the hit list field *FO* opens and the input field Sort priority is cleared.

< de:Feld0;en:field0 - Column	? ×
Field F0 (String) Label de Feld0 en field0	• 2
Sort priority Sort order @ Ascending	
OK Apply New Cancel	

Figure 11. Changing hit list sort order

The second step requires that you set the priority value from 2 to 1 in the *F1* field, because the sort columns from 1 must be sequentially numbered.

6.1 General

The configurations previously represented allow performing retrieval of archived documents and, provided the corresponding permissions are available in DOCUMENTS or the respective archive system, also archiving using the imported archive structures via direct file creation or quick file creation of so-called archive files.

Archive operations via DOCUMENTS are additionally possible as follows:

- File creation or quick file creation for DOCUMENTS files using the corresponding archive actions
- Archiving via workflow (e.g. via send signal shape "Archiving", or at start and end shape
- Archiving via scripting
- Direct archiving while importing DOCUMENTS files (e.g. import via DOCUMENTS Soap Proxy or import via Docimport using the respective parameter call)

Particularly for the above archive operations via file creation, quick file creation, workflow and scripting, various settings options are available on the DOCUMENTS file type; these are described below. These options partially also affect direct archive operations during import which, however, may depend on additional configurations, and are also described in the corresponding chapter.

6.2 Linking archives and file types

To facilitate archiving of DOCUMENTS files and particularly archiving for DCOUMENTS Archive, you can carry out more configurations on the DOCUMENTS file type on the "Archiving" tab.

Archiving					
Destination server	No archiving	•]		
	Archive status	Archive monitor	Archive document meta-data		
Actions					
	Create archive files	Quick creation	of archive files 📃 Reactivate		
EE.i / EE.x settings					
Write pool			🚈 📰 🍝 🛛 Active archive 👘		
Reactivation			×∎.£	Create suitable file type for archive	
Archive ID			Location	Archive server	

Figure 12. File type, Archive settings

6.2.1 Archiving

Target server

This selection list lets you choose the *No archiving, Main server* and *Scripting* variants. Moreover, all configured archive servers are available as the target server. The variants have the following meanings:

- No archiving

When this selection is made, DOCUMENTS files of this file type cannot be archived. The "Archive" or "Archive and delete" actions are not available for DOCUMENTS files. The options for archive operations via workflow or via scripting, as well as archiving during import are available if the corresponding configurations are available.

- Main server

If an EE.x or EE.i archive server has been configured and released in the system, and at least one released DOCUMENTS Archive is also present, *Main server (Warning: requires EAS main server)* rather than *Main server* is specified as selection option. If only an EE.x or EE.i archive server is configured, this option cannot be selected. This means that only a DOCUMENTS archive server that has additionally been defined as the main server can be used as the main server for the archive operations. When this option is enabled in this case, this server (store) will always be used for manual archive operations via the corresponding actions. This server will also be used when the archive operation has been enabled within the workflow on the shapes at the start or end.

- Scripting

If this option can be selected (only if at least one DOCUMENTS archive server is present) and if a selection is made, you will have to select an existing script to be used to perform the archive operations in the newly displayed *Script* field. This script then allows performing the archive operations in different stores based on the DOCUMENTS file's index data, for example.

<Archive server>

On selecting a named archive server, that server will be used to archive the DOCUMENTS file. When specifying a specific EE.x or EE.i server, you will need to additionally specify an *Active view* and an *Active archive* (for EE.x) or an *Active archive* (for EE.i) using the buttons then enabled. When using EE.x or EE.i you need to additionally consider that fields to the DOCUMENTS file to be archived are present in the corresponding archive if they have a value at the time of archiving, because otherwise an error message will be output (the archive operations will be performed for fields that have an empty value and that are not present in the archive system).

Archive status

This option allows selecting whether the status of the DOCUMENTS file should also be archived. By default, the status is archived in HTML file format and as an attachment in the respective archive system. If the additional property "ArchiveStatusAsPdf" is configured with the value "1", a PDF file will be created from the HTML file prior to archiving; that PDF will be archived. This property can also be configured on imported EE.x schemas or EE.i archive types.

Archive monitor

This option allows selecting whether the DOCUMENTS file monitor should also be archived. By default, the monitor is archived in HTML file format and as an attachment in the respective archive system. If the additional property "ArchiveMontiorAsPdf" is configured with the value "1", a PDF file will be created from the HTML file prior to archiving; that PDF will be archived. This property can also be configured on imported EE.x schemas or EE.i archive types.

Archive document meta-data

This option lets you select whether meta-data should also be archived, see also DOCUMENTS/Settings/Archive (basic) – Document meta-data data type.

6.2.2 Actions

The properties displayed below can only be configured when a DOCUMENTS archive server (or main server or scripting) has been selected as the target server.

Create archive files

When selecting this option, archive files can be directly created via the "Create new file" function.

Quick creation of archive files

When selecting this option, archive files can be directly created via the "Quick file creation" function.

Reactivate

When selecting this option, archive file can be reactivated, i.e. you can create a current process from a DOCUMENTS file of this file type which has already been archived.

6.2.3 EE.i / EE.x settings

Active view

The corresponding button next to the field allows selecting an imported EE.x view which will then be automatically used for archiving when selecting the "Archive" or "Archive and delete" actions. With processes to be archived in this manner (manual archiving) you need to ensure that all fields configured on the file type are also present in the respective archive system or all required information and formats match those of the archive. If this is not the case, the corresponding error message will be output while attempting to archive. This field is required for the use of EE.x.

Active archive

The corresponding button next to the field allows selecting an imported EE.x schema or an EE.i archive to be used for archiving. This field is required; when using EE.x you need to additionally consider the above notes on the "Active view".

Reactivation

This setting cannot be configured for a file type (deactivated). On an imported EE.x schema or an EE.i archive type, the selection button allows selecting an existing file type to be used for re-enabling archived EE.x or EE.i documents as a template for creating a current process from the archived process.

Create suitable file type for archive

This button cannot be used on a file type (deactivated). This button can be used on an imported EE.x schema or an EE.i archive type; you will have to enter the name of the file type to be created in the prompt that follows. From the imported archive template a new file type that already contains the most important settings is then automatically generated; however, that file type should be subsequently edited with regard to special settings.

Archive ID

This field cannot be edited. This field is irrelevant to DOCUMENTS file types. The internal ID is displayed on an imported EE.x schema or an imported EE.i archive in this field.

Location

This field cannot be edited. This field is irrelevant to DOCUMENTS file types. The location is displayed in this field on an imported EE.i archive.

Archive server

This field cannot be edited. The archive server to be used is displayed in this field.

Specific attributes such as file title are always present with DOCUMENTS files; unlike fields, the cannot be deleted from the file type, but they can be hidden from various Web views. The respective archive systems are also aware of some system fields or system attributes that are always present. The allocations between these system fields are configured in the "archivexml.ini" file (see also the corresponding chapter of this documentation).

6.3 Archiving via scripting

DOCUMENTS files can also be archived via scripting. This enables, for instance, performing archive operations in different archives depending on specific field values. Archiving via scripting can be directly defined on the file type ("Archiving" tab); this applies to manual control of actions. Scripting can additionally be used in the workflow as send signal using the "Javascript" type. The following default script functions are available for archiving; detailed information emerges from the corresponding documentation on DOCUMENTS scripting:

- Simple archiving
- Simple archiving and deleting
- Archive using archive key
- Archive using archive definition

Simple archiving

The archive operation is triggered via the *DocFile class* using the *docFile.archive()* function. The corresponding target archive must already be defined on the file type; the same additional conditions apply as with manual archiving via the "Archive" action.

Simple archiving and deleting

The archive operation is triggered via the *DocFile class* using the *docFile archiveAndDelete(9* function. The corresponding target archive must already be defined on the file type; the same additional conditions apply as with manual archiving via the "Archive and Delete" action.

Archive using archive definition

The archive operation is triggered via the *DocFile class* using the *dcoFile.archive* (*<archiveKey>*) function. You need to specify the complete archive name as the archive key here.

Archive using archive description

The archive operation is triggered via the *DocFile class* using the *docFile.archive* (*<description>*) function. This function is the most powerful archiving function because the scripting class *ArchivingDescription* enables the use of additional parameters here.

In addition, DOCUMENTS files can be archived via direct communication with the respective archive server; the functions necessary for this emerge via *context.getXMLServer()* and the additional script classes *XMLServer, XMLServerBlob* and *XMLServerBlobIterator*. These functions and classes can be used both for communication with the EASY XML server and with DOCUMENTS Archive. For more details, see the corresponding documentation on DOCUMENTS Scripting.

6.4 Archiving in the workflow

DOCUMENTS files can also be archived from a workflow. The following environment variables are available:

- Archiving on the start shape
- Archiving on the end shape
- Archiving via send signal using the "Archiving" type
- Archiving via send signal using the "Javascript" type and replication of the archive operation via scripting as specified above

To archive via start or end shape, you need to ensure that the user starting the workflow (start shape) or the user executing the last action on the workflow (end shape) has permissions to archive when EE.x or EE.i should be used. For archiving on the end shape, the settings named below for asynchronous archiving may also apply. In combination with EE.x or EE.i, both variations also require that the corresponding target server and active view/active archive have been entered on the file type. In this archive operation all index data of the file type and, if necessary, existing attachments are archived, so the archive configuration must match the corresponding file type in terms of the fields and formats.

For archiving via send signal using the "Archiving" type, you need to additionally specify the corresponding archive name that has been imported to Microsoft Visio through the previous list import:

	ITS WORKFLOW Version 2.00	×
Label	Workflowname	
Name		Version 1
General Des	cription	(
Language	O German 🕫 English	
<u>S</u> hape-Text	Technical Name	•
	Write shape autocomments	
	Remove exclusive write lock	
	Release	
File Type	ftInvoice	-
	Import from Documents	
	Export to Documents	
	Download	
	Create new workflow version	
Ok	Cancel	

Figure 13. List import

🖻 Send Signal		x
Label	Send Signal	
Name	SendSignal_6	
Туре	Archive	
Comment		
Exclusive write lock	workflow	
Archive Escalation Fi	eld Values Fields Tabbed Pages Connections Description	1
Type 💿 Stati	c 🔿 Dynamic	
Archive hema=C	uickview Unit=Default/Instance=Default/View=Quickview@EEXSERVER	
@store Unit=De	; fault/Instance=Default/DocumentSchema=QuickviewjUnit=Default/Instar	

Figure 14. Send signal archiving

The archive name can be specified, as above, "statically, or be "dynamically" determined as the value of a file field.

This type of archiving allows selecting the fields or tabs that are also to be archived on the "Fields" or "Tabbed Pages" tab. By default, all fields and tabs are included; however, by selecting "All fields" after "Selected fields", you can set restrictions to not include internal status fields in archiving, for example, because otherwise this type of archiving will try to archive all fields containing a value.

If the fields are not present in the archive system, the corresponding error messages will be generated. This type of archiving additionally provides the option to not transfer documents (attachments) to the archive system (checkbox).

Archiving is always performed within the user context of the user last active within the workflow (last action). So, you need to ensure that when using EE.x or EE.i in combination with EASY ENTERPRISE Authentication, this user has the corresponding permissions in the archive system.

When executing scripts, escalation transitions or delays prior to archiving, these operations will be *asynchronous archive operations*, where it is not the last involved user but the job user defined in DOCUMENTS that triggers the process of archiving. In this case, it is always the configured *default user within the archive system* that is used as the user for archiving on using EE.x or EE.i. In addition, the following configurations must be made or ensured:

- The defined default user in the archive system must have the corresponding permissions
- The defined DOCUMENTS job user must have archive access (user setting); that user does not need to be present as user in the archive system
- The following properties must be configured for the defined DOCUMENTS job user when using EE.x:
 - jobUserEExInstance, value = <EE.x instance name>, e.g. "Default"
 - jobUserEExUnit, value = <EE.x unit name>, e.g. "Default"

In order for DOCUMENTS files to be properly forwarded particularly during asynchronous archiving, you should additionally ensure through useful workflow design that users or administrators are notified or other workflow steps follow (e.g. through evaluating a status field and decision archiving successful/not successful) when errors occur (e.g. EASY XML server not reachable).

6.5 Archiving during import

6.5.1 General

Archive operations can be directly triggered already while importing DOCUMENTS files, without using additional controls via DOCUMENTS scripting or workflow send signals. Import allows you to either check the data to be imported against the file type to ensure, for example, that required fields and formats are correct prior to archiving, or to sidestep these checks by initiating direct archiving without validation via specific parameters.

The parameters for import via DOCUMENTS SOAP Proxy or the DocImport tool required for control can be located in the corresponding documentation.

6.5.2 Special features with early archiving

If DOCUMENTS files are created during DocImport and if DOCUMENTS files that have already been archived and linked are also to be displayed on these current processes, special configurations on the file type will be required, and the import data must also be processed accordingly.

On the file type, you initially need to create an additional tab with the tab type "Early archived documents".

Additionally, the import data must be processed as follows:

- For each DOCUMENTS file to be imported, you need to additionally specify the keyword .*ArchiveID*
- Notation of the identifiers depends on the respective archive system used

For details, see the corresponding documentation.

If such a file is transferred again to the same target archive after editing in DOCUMENTS, DOCUMENTS will import the early archived documents into the new archive file version. On archiving the same DOCUMENTS file to another archive, DOCUMENTS also copies, by default, the linked archive documents to the new archive file. Cross-archive copying can be disabled by adding the additional property NoArchiveDuplicates with the value "true" on the file type. After archiving DOCUMENTS overwrites, by default, the imported archive file name with that of the new archive file. Accordingly, the original documents no longer appear in the specific file tab but only those of the new archive file. Additional properties on the file type allow writing the previous archive file identifier to write in an index field or in a data file of the new archive file. This enables you to track the history of a DOCUMENTS file right back to the early archived documents during search/retrieval from other applications. To enter the identifier in an index field, you can add the ArchiveReference property with the field name as a value. To create a text file with this identifier as content, you can define a property named ArchiveReferenceFile. In this case, the value is the document name. If you do not specify a file name extension, DOCUMENTS will, by default, use the ".SRF" extension. The named settings and configurations apply in particular when using EE.x or EE.i; when using DOCUMENTS Archive, these so-called "Level2 archives" or "SRF links" are irrelevant.

7.1 Using archives in dynamic folders or tabs

In dynamic public DOCUMENTS folders and link tabs, you can select archives in addition to file types. For tabs, you need to select the "Link" tab type; public folders must be configured with the "Public (dynamic filter)" type. Following this, you need to enter the corresponding sources (for DOCUMENTS Archive, EE.x or EE.i), and specify filter conditions.

When using DOCUMENTS Archive you need to consider that in addition to specifying the store (archive server), you must in any event also specify a file type on the "Filter (file type)" tab on which filtering should take place.

When using EE.i, restrictions apply for the comparison operators in the defined filter conditions ("Query" tab), because only the operator "included" is supported here by default. For range searches, you can also use the "less than" or "greater than" operators, where "greater than" in EE.i is always interpreted as "greater than or equal to", and "less than" as "less than or equal to". For ranges searches, you always need to additionally specify the bottom range limit prior to the top range limit.

In a combination of file types and EE.x or EE.i archives within a dynamic folder or tab you should preferably use only the "contains" operator to avoid problems through different interpretation of the filter conditions. When in doubt, you should use separate dynamic folders or tabs for file types and archives.

7.2 Allocating permissions for archives and file class protection

When using EE.x or EE.i, permissions on archived documents and other related settings are defined in the respective archive system, and evaluated accordingly in combination with the above authentication mechanism with actions in DOCUMENTS.

In addition to available additional settings for permissions, including for EE.x and EE.i directly in DOCUMENTS (e.g. display views, directly create archive files, script-controlled hiding of archives, defining additional file permissions, etc.), additional settings are available which can be configured on using EE.i as so-called file class protection. Detailed information can be obtained from the corresponding documentation which describes file class protection, particularly for DOCUMENTS files, but which can also be applied to imported EE.i archives in a similar manner. Here you should always consider that the settings listed here will only essentially impact on the DOCUMENTS Web client (and on DOCUMENTS Scripting, if

necessary). When accessing the archive system from other applications, these settings do not apply.

Since all manually created DOCUMENTS user accounts use the same archive login for archive access (by default, EASY ENTERPRISE Authentication not activated), all users initially have the same permissions on accessing the archive. In addition to the above options, so-called file class protection, i.e. a read permission check based on the content of an index field can be defined. Unlike the EE.i systeminternal file class protection function, the permissions for DOCUMENTS file class protection can also be subsequently changed for existing DOCUMENTS files. The DOCUMENTS protection is only based on automatically added search conditions.

In addition to normal file class protection, special formats are also supported, called *ACL* (access control list) *or GACL* (group access control list). For details, see also the relevant documentation.

To define file class protection on an EE.i archive type (or file type), you need to define the field, the content of which should determine the access permission, first. This field must be selected on the imported file type as file class protection field. In the archive, this must be an indexed, i.e. searchable, field. After selecting the field, the bottom dialog section will display a tab named "File class protection" that allows further configurations for so-called protection classes. A protection class binds a specific field content to selected users and access profiles. In the example below, only users from the *Directors* group may view the DOCUMENTS files which contain the *released* text in the selected protection field. All other users may no longer access these DOCUMENTS files.

٠	secure1, relea	sed - File class	protection	? <mark>×</mark>
	Class name Field value	secure1 released		
	Access profile	User		
	Portal Language	1	Portal Language 2	
	Geschäftsführung]	Directors	
	•			+
	ОК	Apply	New Cancel	

Figure 15. File class protection definition

The name of a protection class can be arbitrarily chosen. Only the keywords for the specific types of protection, ACL and GACL, are reserved.

8. Frequently Used Settings for Archives

The settings illustrated in this chapter are only an excerpt of available configurations for the respective archive system. Other settings emerge from separate documentation, such as the overview of DOCUMENTS settings, Portal Scripting or Workflow user guides.

8.1 Additional information on using DOCUMENTS Archive

8.1.1 Configuring search sources

When using DOCUMENTS Archive, an advanced search mask provides, by default, all configured archive servers (stores) for search/retrieval, depending on access permissions. In doing so, searches are provided via the defined file types in combination with the selection of search sources "current processes" (active files) and the archive servers (stores). This search setting corresponds to the default value for the DOCUMENTS property *EASSearcClustered =0*. The different archive servers are combined for full text search:

File types		
Employee		
Invoice		
Order		
Record		
Sick certificate		
Vacation Application		
Search sources		
actual processes	Willi Schreiber	
Store 1		
Store 2		
Store 3	Search term	
	active files	
Stored searches	active files archived files	
Selection 👻 🗙	active and archived files	
Save search as		
Save search as		

Figure 16. Advanced and full text search (DOCUMENTS Archive), default

When defining the *EASSearchClustered* property and changing it to the value "1", multiple archive servers (stores) will be combined into a search source; users can

now select "current processes" (active files) and "archives" as search sources, and the different archive servers are combined again with full text search:

File types	
 Employee Invoice Order Record Sick certificate Vacation Application 	
Search sources actual processes Archives	Willi Schreiber Image: Search term
Stored searches	active files active files archived files active and archived files
Save search as	

Figure 17. Advanced and full text search (DOCUMENTS Archive), EASSearchClustered = 1

When setting this property and changing it to the value "2", all search sources will be combined; users can now only select file types as search sources; additional differentiation by current processes and archived files is no longer necessary. In full text search the different archive servers and current processes become searchable in combination:

File types		
Employee		
Invoice		
Order		
Record		
Sick certificate	Willi Schreiber	
Vacation Application	Z 🗳 🚈 🔍 I	* 1
	Search term	
Stored searches	active and archived files	•
Selection 👻 🗙		
Save search as		

Figure 18. Advanced and full text search (DOCUMENTS Archive), EASSearchClustered = 2

8.1.2 Delete rights for archived files

All permissions for files archived via DOCUMENTS Archive are defined directly via the file permissions of the corresponding file type and, if necessary, other settings. By default, archived files cannot be deleted, even if not a single file permission for access profiles or users has been defined. The right to delete must be created explicitly; it can, for example, be configured unlimited, i.e. for current and archived processes or only for processes archived in DOCUMENTS Archive, via the "File permissions" tab.



Figure 19. File permissions

8.1.3 Origin in hit list

After a cross-archive search (multiple file types, multiple stores), the origin of the hit is, by default, not visible. When configuring the additional property *ShowHitTemplate* with the value 1 under DOCUMENTS/Settings, an additional hit list field will be shown which outputs the internal identifiers of the file type and the store per hit (e.g.: "ftInvoice@peachitStore1").

8.1.4 Archiving attachments

When archiving processes of a file type to DOCUMENTS Archive, creation of attachments after archiving to a DOCUMENTS file will, by default, also be possible if no document tab exists on the file type (the default document tab's name will then be "Attachments"). If you want to generally prevent attachments from being added to an archived process, or if you want to define specific rights to attachments, it is useful creating a specific document tab prior to initial archiving. This tab can be limited in terms of permissions in such a manner that only specific access profiles or users have permissions. When naming a new document tab "Attachments", this automatically replaces the default document tab.

8.2 Additional information on using EASY ENTERPRISE.i

8.2.1 Grouping views

In earlier DOCUMENTS versions, the option to configure EE.x view for the advanced search mask via the "viewgrousp.ini" configuration file was available. This version allows managing EE.x view grouping via DOCUMENTS Manager under the DOCUMENTS/View folders node.



Figure 20. DOCUMENTS Manager, View folders (1)

When creating a new view folder, the following configurations are available:

🗐 New - Folder			-	8	23
General Containe	d Views Properties]	-		
Parent folder				.2 =	~
Name				C	
	Released	Invisible			
Name					-1
Tune	Archive folder				-1
lcon					-1
Context					=1
					-1
					_
Folder access rights	:				
				📥 🖒	<u>× </u>
Group	User	Read	Write	Remove	

Figure 21. DOCUMENTS Manager, View folders (2)

The General tab

Parent folder

This field is read-only; you cannot make any entries here.

Name

In this field you enter a technical name for the view folder; technical names may not contain any special characters.

Released or Invisible

The *Released* or *Invisible* parameters must be considered in tandem; they can be combined, with the following variants being available:

Parameter/Value	Display View Folder	Display Assigned Views
Released = Yes, Do not display = No	Yes	Yes (in view folder)
Released = Yes, Do not display = Yes	No	No
Released = No, Do not display = Yes	No	Yes (under Other)
Released = No, Do not display = No	No	No

Label

In this field you enter the label of the folder which the DOCUMENTS Web client users will be displayed. The familiar formats (de:<German label>;en:<English label> or via properties file) allow specifying the labels in multiple languages. If you do not make an entry in this field, the value specified under *Name* will be used as the display name.

Туре

This selection list is used to preselect the "Archive folder" type; changes are not allowed.

Icon

Entries in this field will not be evaluated.

Context

Entries in this field will not be evaluated.

The Contained Views tab

This tab facilitates selecting from a selection list of existing views via the corresponding button or F3 and assigning them to the view folder under which they are to be displayed in the DOCUMENTS Web client. Views not assigned to a view folder are automatically sorted into a special view folder named "Other" (see also configuration options for *Released* or *Invisible*).

The Folder access rights tab

This tab allows further restricting the permissions for DOCUMENTS access profiles or individual users (regardless of permission settings in EE.x) via the corresponding button or F2; if nothing is configured, EE.x permissions apply.

The advanced search mask in the DOCUMENTS Web client might look as follows after configuring the EE.x view folders (in addition to the file types for current processes, archive searches can be performed via the EE.x view):

File types
Employee
Invoice
Order
Record
Sick certificate
Vacation Application
 incoming documents delivery notes invoices miscellaneous outgoing documents contracts delivery notes offers outgoing invoice
Stored searches
Save search as

Figure 22. DOCUMENTS Web client, advanced search via EE.x

8.2.2 Additional settings for EE.x views

Additional properties can be defined for imported EE.x views on the "Actions" tab:

Distance=Default/ Angebot	
General Actions Properties	
Common search requests	🔽 Create + save
	📝 Create + archive



Common search requests

When this checkbox is disabled, the view will no longer be provided for search in the DOCUMENTS Web client. Preconfigured searches, e.g. dynamic DOCUMENTS folders, however, can continue using it.

Create + save

When this checkbox is enabled, DOCUMENTS files with the life state "enabled" can be created via the view. These already exist in the archive system; however, they are not subject to revision security. They can be subsequently edited until the state is reset to "archived" in a later save operation. Only then will the version count start.

Create + archive

When this checkbox is enabled, DOCUMENTS files with the life state "archived" can be created via the view. If "New creation + save" is allowed at the same time, "Archive" will appear next to the "Save" button on the Web interface. This enables the user to determine the initial life state.

If no new creation is allowed, the view will disappear from the corresponding selection lists. The quick file creation list, however, will only change upon renewed login to the system.

8.2.3 Specific EE.x settings

Version search

By default, all versions of a document are always searched during searches. If the hit list should always display only the latest version of a document, the additional *LatestVersionOnly* property can be configured with the value *true* under DOCUMENTS/Settings. When opening the document from the hit list the earlier versions of the document will be additionally displayed in the version tab (if multiple versions are present). This parameter can also significantly increase search performance.

Index search using special characters

In earlier EE.x versions, a search in EE.x index fields using special characters such as "%", "_", "!"", "[" and "\" does not yield any hits. To remedy this problem, the additional property *EQLStyleForLIKE* can be configured with the value *GenericSQL* under DOCUMENTS/Settings. As of the current EE.x versions, this setting must be removed or configured to *Backslashed*.

Influencing the search mode

According to schema definition, EE.x attributes can be indexed in various ways (database index, full text index, or both). If a special index is to be preferred with searches, the additional property *SearchIndexSelectMode* can be configured under DOCUMENTS/Settings. The following valid values can be assigned to this property:

- 0 Generally, the full text index is preferred when searching
- 1 During search, the database index in numerical fields is preferred while the full text index is preferred in other fields
- 2 Generally, the database index is preferred during search

Attachment information in folders and link tabs

The above setting "Enable the display of file names", in combination with the corresponding EE.x pool configuration, displays additional attachment information in hit lists. If this display should also be performed in static and dynamic folders as well as link tabs, the following properties can be defined under DOCUMENTS/Settings: *HitlistWithBlobInfo* value 1 (general setting, must be set), *StaticFolderWithBlobInfo* value 1, (for static folders), *DynamicFolderWithBlobInfo* value 1 (for link tabs).

Origin in hit list

After cross-archive search the origin of the hits is, by default, not visible. When configuring the additional property *ShowHitTemplate* with the value 1 under DOCUMENTS/Settings, an additional hit list field will appear which also outputs the origin per hit.

Running as Web deployment via EE.x JBoss

An additional deployment named "eew.war" comes with a DOCUMENTS installation in the <DOCUMENTS4_Install>\webapps directory; this can, by default, be used to use JBoss with embedded Tomcat, frequently used with EE.x, instead of the deployed servlet container *Tomcat*. To configure this in this manner, the following steps are necessary:

- Shutdown DOCUMENTS server, DOCUMENTS Tomcat and JBoss
- Copy the "eew.war" file to <JBoss_Install>\server\default\deploy
- Start the DOCUMENTS server, and then the DOCUMENT Manager (login as administrator)
- Change the following server settings/system parameters:
 - Server name/host name of Portal server → Change port to JBoss port (e.g. 8080)
 - \circ Server settings/servlet zone \rightarrow set the entry to "eew"
- Exit DOCUMENTS Manager, restart DOCUMENTS server, start JBoss

The DOCUMENTS Web client can then be launched via the following URL:

http://<Servername JBoss>:<Serverport JBoss>/eew

You must then shutdown Tomcat of a DOCUMENTS installation.

When JBoss and DOCUMENTS server are running on different computers, you will have to make changes prior to deploying the "eew.war" file; the following steps are necessary:

- Rename the file (e.g. to "eew.zip")
- Extract the renamed file using an appropriate extraction tool
- After that, the extracted file will be equivalent to the default deployed www directory of a DOCUMENTS installation
- Make all necessary changes, e.g.:
 - o web.xml (web-inf directory) → Customize the values (<param-value>) for "portalServerName" or "portalServerPort" to the respectively valid values of the DOCUMENTS installation
 - \circ web.xml (web-inf directory) \rightarrow Define the UserExits
 - Customize index.html or documents.html (main directory) with regard to the principal names
 - o Other project-specific customizations
- Pack the completely extracted directory, and rename the packed file to "eew.war"

8.3 Additional information on using EASY ENTERPRISE.i

Archiving fields with large content

Index fields with contents > 32 KB cannot be archived in EE.i; when archiving them via DOCUMENTS, the corresponding error message would be output. However, the option to automatically initiate splitting field contents into multiple EE.i index fields is available. To do this, the additional property *AutoSplitFields* can be configured on the imported EE.i archive type. You specify a comma-separated list of EE.i index fields as a value for the property (e.g.: AutoSplitFields = FieldA,FieldB,...). The specified fields must be present in the EE.i archive structure and must have been imported to DOCUMENTS.

DOCUMENTS automatically performs splitting the content into the specified fields during the archive operation. When searching, a transparent merge of the content is performed in representation.

Define file names for attachments

As a rule, names of file attachments of EE.i archive file are composed of the internal EE.i property fields "Original file name" and "Document title". Since archive operations from other systems to EE.i (e.g. ERP applications) cause problems here, the option to configure an additional property named

EEIBlobNaming is available. This property can be defined both globally (DOCUMENTS/Settings) and specifically on the imported archive type, and accept the following valid values:

- 0 (Default) The "document title" is used as the file name. If this contains at least a dot, all characters from the recent dot are considered an extension. Otherwise, the extension is determined and appended from the "Original file name" field.
- 1 The "Document title" is interpreted as a file name without extension, and the extension from "Original file name" is always appended at the end.
- 2 The extension from "Original file name" is initially determined. If the content from "Document title" ends with the same characters, it will be imported unchanged; otherwise the extension will be appended.
- 3 Only the "Original file name" is displayed.

Define sort options in hit lists

If a date format other than "English", "German" or "international" has been configured for EE.i hit lists, problems may occur with the DOCUMENTS default sort function. This problem can be fixed when configuring the additional property *EEIHitlistDateFormat* under DOCUMENTS/Settings. The value of the property is specified with a template consisting of four characters. It starts with a separator used between the date components. This is followed by the three lowercase letters 'd' for day, 'm' for month and 'y' for year in the order in which it is output by the archive.

Caching archive hits

DOCUMENTS uses a cache to enable faster access to archive hits. When editing EE.i archives using different clients (e.g. EE.i File Manager and DOCUMENTS Web client), archive hits residing in the DOCUMENTS cache may be displayed again, even if they have been deleted in the meantime using another client.

This problem can be fixed by executing the "Delete temporary hits" function globally or on the configured archive server.

Origin in hit list

After cross-archive search the origin of the hits is, by default, not visible. When configuring the additional property *ShowHitTemplate* with the value 1 under DOCUMENTS/Settings, an additional hit list field will appear which also outputs the origin per hit.

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