VERIFICATION REPORT

MoReq2 Certification for Electronic Records Management Systems (ERMS) according to MoReq2 Specification (Version 1.04)

for

Fabasoft Folio 2009 Governance Spring Release (Version 9.0.3)
(hereafter referred to as Fabasoft Folio 2009)

a product of

Fabasoft R&D GmbH, Honauerstraße 4, 4020 Linz, Austria
(hereafter referred to as Fabasoft)

The verification report was created by the imbus MoReq2 Test Centre.

The imbus MoReq2 certification services are provided in cooperation with the European Commission and the DLM Forum (MoReq Governance Board).

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1 Purpose

This verification report describes all results of the MoReq2 certification test implemented in May 2009 for Fabasoft Folio 2009.

For this purpose, all test results[1] were evaluated, referenced and presented in a summary. The verification results are therefore the basis of this Verification Report.

Furthermore, the overall assessment is made regarding the conformity of Fabasoft Folio 2009 with MoReq2. Only this assessment is decisive for issuing a MoReq2 certificate. This verification report is thus also the basis for issuing the MoReq2 certificate.

1.1 Background

MoReq (Model Requirements for the Management of Electronic Records) was published in 2001. The success of MoReq in the European Union, the rapid changes in information technology, and the strong demand for a uniform certification test for Electronic Records Management Systems (ERMS) resulted in the successor version, MoReq2.

MoReq2 was published in 2008.

In addition to revising the catalogue of requirements and creating the test framework, the MoReq2 project order also included the establishment of a MoReq2 test regime. According to the project order, the DLM forum created the MoReq Governance Board in October 2008, which among other things is responsible for the administration of the MoReq2 certification test regime.

Another important milestone when establishing the MoReq2 test regime was the accreditation of imbus as a MoReq Test Centre. imbus was accredited on **December 12, 2008** by the DLM Network EEIG as a representative of the DLM forum.[2]

imbus was thus granted the rights to

- test Electronic Records Management Systems for conformity with MoReq2 and
- issue the official MoReq2 certificate to software manufacturers after successfully passing the certification test on behalf of the DLM forum.

The MoReq2 test regime has thus been fully established.

Furthermore, the MoReq Governance Board released the MoReq2 certification procedure (including certificate) in July 2009. It was also decided that the certificate and the verification report will be published on the official MoReq website following the successful completion of a certification.

1.2 Contents of the Verification Report

Chapter 2 of the following verification report contains a summary of the MoReq2 certification test. This chapter includes information about the verification result, the verification amount, the system configuration at the time of testing, and the statistics. Chapter 3 summarizes the evaluation for each MoReq2 core module. The optional MoReq2 modules to be tested are then evaluated in Chapter 4. Chapter 5 contains general information and concludes the verification report.

[1] The test results include, for example, all executed test cases, screenshots, and other test results such as the XML export result from the certification test. All verification results were stored in the secure area of imbus AG.

[2] An accreditation confirmation has been issued, which can be viewed at imbus at any time.

2 Summary of the Certification Test

2.1 Verification Result

The basis of the certification test was the MoReq2 catalogue of requirements (including Appendix 9, Metadata Model) in Version 1.04. The verification basis is described in detail in Chapter 2.5 of this verification report.

Within the scope of the MoReq certification test, Fabasoft has furnished proof that the product Fabasoft Folio 2009 meets the MoReq2 requirements in the MoReq2 core area.

In addition, Fabasoft has had its product Fabasoft Folio 2009 tested against six of a further twelve possible optional MoReq2 modules. Fabasoft Folio 2009 also fulfils the MoReq2 requirements of these six modules. The exact verification amount is described in chapter 2.3 of this verification report.

The MoReq2 certification test resulted in a positive verification result.

There are no objections to the issue of the **MoReq2 Certificate *Cores & Options***.

The certificate (including indication of the optional modules) was issued on July 31, 2009.

2.2 Verification Remarks

Deviations were neither discovered in the mandatory tests of the MoReq2 core area, nor in the mandatory tests of the tested optional MoReq2 modules.

The fact that Fabasoft not only focuses on fulfilling the mandatory MoReq2 requirements for each module, but also meets a large number of optional requirements, is also evaluated in a particularly positive light. The optional export, for example, was implemented to conform to the MoReq2 XML schemata.

It must furthermore be pointed out that key MoReq2 concepts, such as the hierarchical classification scheme, the access rights concept, or the “vital records” concept have been consistently and continuously implemented. This was verified multiple times based on the implemented MoReq2 conformity tests.

Furthermore, the preparation of the certification test, utilization of test tools and the use of test automation by Fabasoft were all convincing, and were instrumental in the problem-free execution of the MoReq2 certification test.

2.3 Test Criteria

A positive verification result is required for issuing a MoReq2 certificate.

A positive verification result is achieved if all mandatory test cases to be executed for each MoReq2 test module have been evaluated as "passed". It is compulsory that all mandatory tests for the MoReq2 core modules are carried out.

Note: In some cases it is only compulsory to carry out certain test cases if an optional requirement has been implemented and it has thus been possible to carry out the test associated with it. This circumstance results from the wording of the MoReq2 requirements and/or from the test case precondition. The following extract from Chapter 1.12 of the MoReq2 specification in the version 1.04 should clarify the issue:

> *"In some cases, a requirement is mandatory only if a desirable requirement is met. This is always clear from the context; for example the following:*
>
> - *3.1.17: The ERMS should support the export of all or part of a classification scheme.*
> - *3.1.18: Where the ERMS supports the export of all or part of a classification scheme (as in 3.1.17) this must include associated metadata […]*
>
> *means that the functionality required by 3.1.18 is mandatory if, and only if, the desirable functionality required by 3.1.17 is provided."*

If the optional requirement is not implemented, the mandatory test can also not be tested. In such a case, the test is also referred to as being not applicable (n/a). The same applies to tests to be carried out optionally.

2.4 Verification Amount

Testing for conformity with the MoReq2 core modules:

Testing of the conformity of Fabasoft Folio 2009 with the MoReq2 core modules comprised the execution of all certification tests of the following MoReq2 test modules:

- T3 Classification Scheme
- T4 Control and Security
- T5 Retention and Disposition
- T6 Capturing Records
- T7 Referencing
- T8 Searching, Retrieval and Presentation
- T9 Administrative Functions

Testing for conformity with optional MoReq2 modules:

Testing of the conformity of Fabasoft Folio 2009 with optional MoReq2 modules comprises the execution of all conformity tests of the following optional MoReq2 test modules:

- T10.1 Management of Physical (Non-electronic) Files and Records
- T10.2 Disposition of Physical Records
- T10.3 Document Management and Collaborative Working
- T10.4 Workflow
- T10.5 Casework
- T10.10 Distributed Systems

2.5 Verification Basis

2.5.1 Official Documents

The basis of the certification test is the last released version of the MoReq2 standard at the time of the application.

MoReq2 Standard:

No.	Name	Version
[1]	MoReq2 Specification (including Appendix 9 Metadata Model)	1.04
[2]	MoReq2 XML Schema	1.04.01
[3]	MoReq2 Test Framework	1.0

In addition, there are further documents published by the MoReq2 Governance Board.

MoReq2 Governance Board:

No.	Name	Version
[4]	MoReq2 Testing and Certification	1.04

2.5.2 Documents of the MoReq2 Test Centre

The following document was generated by the MoReq2 Test Centre, and was a prerequisite for a MoReq2 certification test.

Verification plan:

No.	Name	Version
[5]	Verification Plan - Prüfplan zur MoReq2 Zertifizierung für Fabasoft	1.02

2.5.3 Product Documentation Submitted for Testing

The documentation submitted by Fabasoft for the certification test is listed below.

Books:

No.	Name	Version
[6]	Hell, R.; Albl, O.; Fallmann, H; Jerschitz, Chr.(2005): Die Fabasoft Referenzarchitektur im red hat Linux-Umfeld	16.04.2009
[7]	Fallmann, H.; Albl, O.; Gell, R.; Jerschitz, Chr. (2004): Die Fabasoft Referenzarchitektur im microsoft Windows-Umfeld	16.04.2009
[8]	Hofmann, A.; Katzinger, P. (2006): Geschäftsprozess- und Workflowmanagement mit Fabasoft	16.04.2009
[9]	Grasl, E.; Katterbauer, K. (2006): Sicherheit mit Fabasoft: Autorisierung, Authentifikation und Authentizität	16.04.2009

White Papers:

No.	Name	Version
[10]	Fabasoft White Paper: Workflow-Konfiguration (2009)	26.05.2009
[11]	Fabasoft White Paper: Multi-Tenant Operation (2009)	26.05.2009
[12]	Fabasoft White Paper: Use-Cases zur Fachanwendungsintegration (2009)	15.06.2009

Presentations:

No.	Name	Received at
[13]	Jerschitz, Chr. (2009): Backup & Recovery	26.05.2009

Others:

No.	Name	Received at
[14]	Fabasoft Folio 2009: Software Product Information, Governance Edition.	15.06.2009

2.6 System Configuration at the Time of Verification

A certification is generally always a "snap shot" with regard to a concrete system configuration. For this reason, it was discussed first of all which ERM system configuration existed at the time of the certification test.

The tester checked the system configuration at the time of verification, prior to initiating the certification test. This system configuration was as described below.

2.6.1 Hardware Components

Fabasoft Folio 2009 was virtualised on a VMWare ESXi 3.5 server and comprised the following:

- Dell PE2950 III Quad-Core Xeon E5440 2,8 GHz/2x 6MB 1333 FSB
- 32 GB RAM
- 64 Bit

2.6.2 Operating Environment

The following operating environment existed:

- Server Operating System: Microsoft Windows Server 2003 R2
- Database System: Microsoft SQL Server 2005
- Web-Server: Microsoft Internet Information Server (Part of Windows Server 2003)
- Conversion Server: Microsoft Office 2007 SP1, Ghostscript 8.64

2.6.3 Software Components

The following Fabasoft software products were used in the certification test:

- Fabasoft Folio 2009 Governance Spring Release in Version 9.0.3 (Product to be certified)
- Fabasoft DUCXtest in Version 2008 (Product Add-On to support automation of Use-Case Tests)
- Fabasoft DUCX in Version 2008 (Product Add-On as development platform for Domain Specific Applications and Customisations)
- Mindbreeze Enterprise Search in Version 4.0 (Product Add-On for Enterprise Search and e-Discovery)
- app.strudl Software-Telemetry in Version 2009 (Product Add-On for application management)

2.6.4 Integrated Productivity Tools

The following productivity tools were used:

- Web-Browser(AJAX): Internet Explorer 7
- Office: Microsoft Office 2007 SP1
- e-Mail: Microsoft Exchange 2003
- Scanning: Kofax Capture 8.0

2.7 Statistics

The following table lists the verification results for each tested MoReq2 module. The table should be interpreted as follows:

The T3 Classification Scheme test module has 70 mandatory test cases. 67 of these test cases were carried out and evaluated as "passed". No test cases were evaluated as "not passed". Three test cases were not applicable (see also chapter 2.3).

MoReq2 test module	test case priority	total	executed	passed	failed	n/a
T3 Classification Scheme	Mandatory	70	67	67	0	3
	Optional	23	13	13	0	10
	not testable	2				
T4 Control and Security	Mandatory	51	48	48	0	3
	Optional	5	5	5	0	0
	Not testable	2				
T5 Retention and Disposition	Mandatory	57	56	56	0	1
	Optional	15	5	5	0	10
	Not testable	1				
T6 Capturing Records	Mandatory	59	57	57	0	2
	Optional	33	19	19	0	14
	Not testable	3				
T7 Referencing	Mandatory	11	11	11	0	0
	Optional	3	1	1	0	2
	Not testable	2				
T8 Searching, Retrieval and Presentation	Mandatory	31	31	31	0	0
	Optional	23	14	14	0	9
	Not testable	2				
T9 Administrative Functions	Mandatory	36	35	35	0	1
	Optional	23	14	14	0	9
	Not testable	1				
T10.1 Management of Physical (Non-electronic) Files and Records	Mandatory	14	14	14	0	0
	Optional	10	4	4	0	6
	not testable	0				
T10.2 Disposition of Physical Records	Mandatory	4	4	4	0	0
	Optional	0	0	0	0	0
	Not testable	0				
T10.3 Document Management and Collaborative Working	Mandatory	30	28	28	0	2
	Optional	11	2	2	0	9
	Not testable	3				
T10.4 Workflow	Mandatory	20	20	20	0	0
	Optional	28	19	19	0	9
	Not testable	1				
T10.5 Casework	Mandatory	16	16	16	0	0
	Optional	5	2	2	0	3
	Not testable	1				
10.10 Distributed Systems	Mandatory	6	6	6	0	0
	Optional	8	4	4	0	4
	Not testable	3				

3 Evaluation of the MoReq2 Core Modules

3.1 Test Module 3 - Classification Scheme and File Organisation

3.1.1 Configuring the Classification Scheme

The configuration of the classification scheme required in MoReq2, and its restrictions was verified based on the executed tests with Fabasoft Folio 2009.

The fact that Fabasoft Folio 2009 also supports the optional export is to be evaluated positively. Both the import and export conform to the MoReq2 XML schemata. This fact was very helpful for a smooth execution of the certification test. Fast set-up and resetting of the test environment could thus be ensured.

3.1.2 Classes and Files

The implementation of all mandatory requirements for classes and files was verified in Fabasoft Folio 2009. In addition, Fabasoft Folio 2009 also supports optional requirements.

Fabasoft Folio 2009 permits, among other things, the management of classes through selective users/user roles or user groups. This is implemented by delegating the access rights and associated configuration of functions. Figure 1 shows the administration view.

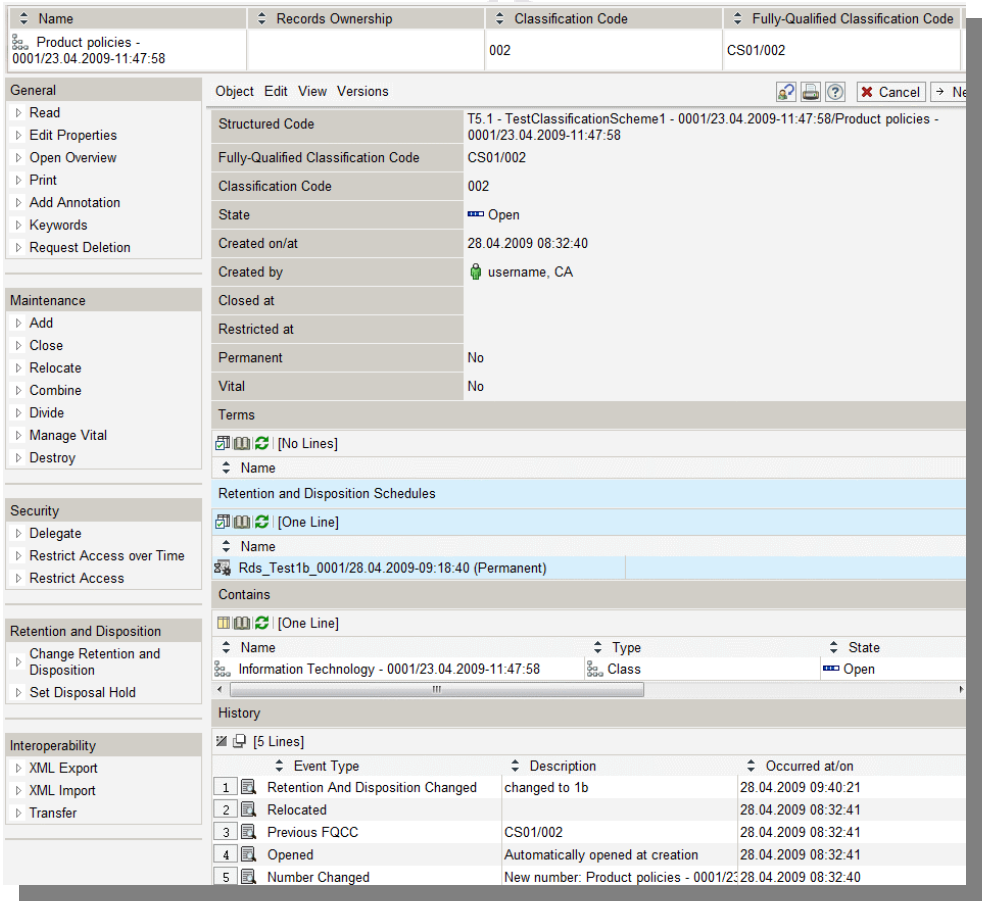

Figure 1: Administrative view in Fabasoft Folio 2009

Beyond the scope stipulated in MoReq2, Fabasoft Folio 2009 implements activities such as the creation, configuration or even closing of classes and/or files in a structured and replicable process. The aggregation concept from MoReq2 is used as the basis for this.

3.1.3 Volumes and Sub-Files

The implementation of all mandatory requirements for sub-files and volumes was verified.

Here it is also to be evaluated positively that activities such as creation, opening and also closing of sub-files and volumes are implemented in a structured and reproducible process based on the MoReq2 aggregation concept.

3.1.4 Maintaining the Classification Scheme

The implementation of all mandatory requirements for maintaining the classification scheme was verified in Fabasoft Folio 2009.

It is to be evaluated positively that it is possible to relocate, combine, and divide aggregations within the framework of a structured and controlled process. Relocating, combining and dividing, for example, are initiated via the menu item "Maintenance" (see also Figure 1).

It was verified that Fabasoft Folio 2009 adheres to the restrictions of the hierarchical classification scheme with regard to relocating, combining and dividing of aggregations. The passing-on of metadata can be activated as an option.

3.2 Test Module 4 - Controls and Security

3.2.1 Access

Users can be created and assigned to user roles and/or user groups. Selective functionalities can be assigned to each user role. This assignment is implemented on the abstraction level stipulated in MoReq2.

Based on the implemented MoReq2 conformity tests, it was verified that access to the classification scheme or parts of it is restricted to only those users, user roles or user groups that have the required authorization. With the "Delegate" function, access rights to aggregations can be granted flexibly.

Furthermore, it was verified that the assignment of functions to users, user roles or user groups in MoReq2 is possible on the stipulated abstraction level. In Fabasoft Folio 2009, only administrative roles can access administrative functions such as maintenance of the database and storage space.

3.2.2 Audit Trails

Fabasoft Folio 2009 features an audit trail. In addition to system-related information, sequence-oriented information is also stored in the audit trail. The latter is also referred to as the “History”.

Based on the implemented MoReq2 conformity tests, it was verified that the information to be stored in the audit trail is configurable. The audit trail can be inspected separately and can be evaluated individually. It was also verified that only users, user roles and user groups with access authorization can access the audit trail.

Figure 2 shows an example of stored system-related information in the audit trail of Fabasoft Folio 2009.

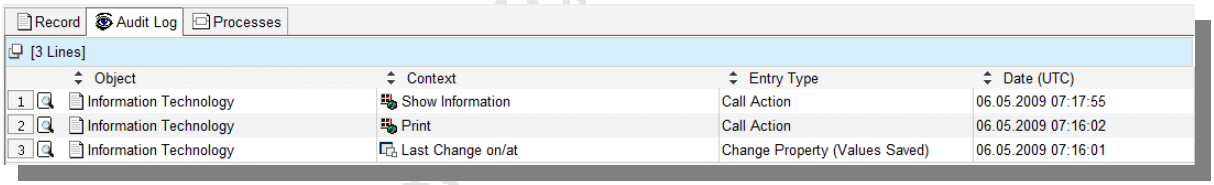

Figure 2: Storage of system-related information in the audit trail

3.2.3 Backup and Recovery

The requirements regarding backup and recovery described in MoReq2 are supported by Fabasoft Folio 2009. They are implemented based on the operating system functionality.

It was verified that Fabasoft Folio 2009 can be configured in such a way that backup and recovery can be executed manually or automatically at regular intervals. It was verified that data integrity is maintained following backup and restore.

3.2.4 Vital Records

Fabasoft Folio 2009 supports the "vital records" concept stipulated in MoReq2 to the extent required.

It was verified that aggregations and/or records can be marked as "vital" and that this marking can be removed again whenever required.

Vital records are stored in a separate store. It was verified that all vital records can be restored first in the worst-case scenario. Fabasoft Folio 2009 also permits "vital" backups and recoveries.

3.3 Test Module 5 - Retention and Disposition

3.3.1 Retentions and Disposition Schedules

The implementation of all mandatory requirements was verified in Fabasoft Folio 2009.

It was verified that each retention and disposition schedule features a disposition period and a trigger event or disposition date. Furthermore, each retention and disposition schedule features a disposition action and a reason.

The supported disposition actions, as well as the combination of disposition period and trigger event provided by Fabasoft Folio 2009, meet the requirements. The fact that Fabasoft Folio 2009 supports disposition periods of 100 years and longer is to be evaluated positively.

It was verified that each retention and disposition schedule has a unique identifier and title in Fabasoft Folio 2009. Moreover, each aggregation in Fabasoft Folio 2009 has at least one retention and disposition schedule.

The fact that Fabasoft Folio 2009 can display the properties of several retention and disposition schedules for comparison is to be evaluated positively.

Figure 3 shows the retention and disposition schedule for an aggregation.

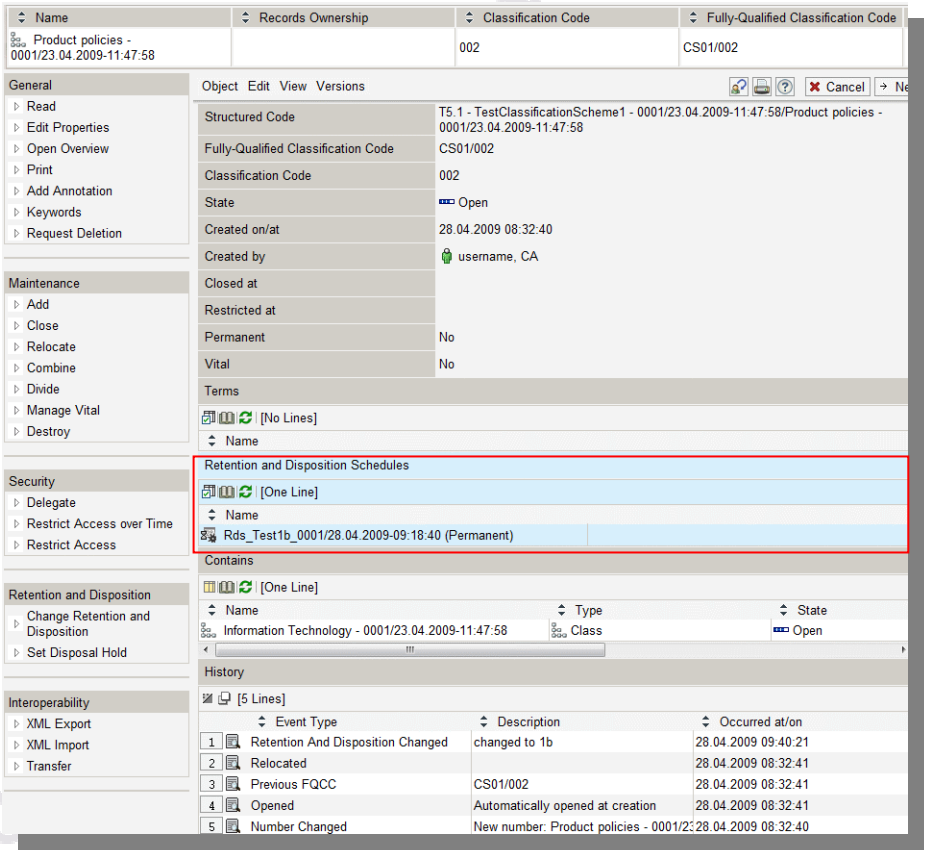

Figure 3: Information on an aggregation from the viewpoint of an administrative role

It was verified that Fabasoft Folio 2009 supports the assignment of a standard retention and disposition schedule to a record type. Furthermore, retention and disposition schedules can be replaced by an administrative user role or added to an aggregation whenever required.

If an aggregation has several retention and disposition schedules which contradict each other, this potential conflict is recognised by Fabasoft Folio 2009 during initiation, and an administrative user is notified.

Fabasoft Folio 2009 supports disposal holds to the extent required.

Disposal holds can be placed on and removed from aggregations. It was verified that, both in cases of placing and removing of disposal holds, Fabasoft Folio 2009 stores the date, user, and reason for the respective action in the audit trail.

It was verified that Fabasoft Folio 2009 prevents aggregations which are subjected to a disposal hold from being deleted or being subjected to a disposition decision. Furthermore, a reason must be given to enable changing or deleting of retention and disposition schedules in Fabasoft Folio 2009. This reason is stored in the audit trail.

The fact that Fabasoft Folio 2009 supports reminders with regard to disposal holds is to be evaluated positively.

3.3.2 Review of Disposition Action

The review of disposition actions is supported in Fabasoft Folio 2009 to the extent required.

The review process represents both the affected aggregations and their metadata and disposition data. Furthermore, it was verified that the reviewer can select aggregations for further disposition actions within the framework of this process.

Furthermore, it was verified that a reason must be given for each review decision in Fabasoft Folio 2009. The review decision, the reason and the review date are stored in the history.

It was verified that records which were rendered to a different format from the source format remain linked to the original records in Fabasoft Folio 2009.

3.3.3 Transfer, Export and Destruction

Fabasoft Folio 2009 supports the export and transfer of records to the extent required. The export or transfer result comprises all or selected aggregations and records, their metadata information on retention, on disposition schedules and on access rights and their audit trail information. A corresponding report can be generated in Fabasoft Folio 2009.

Fabasoft Folio 2009 exports and transfers records in the format in which they were captured. Furthermore, it was verified that records which were rendered from the source format can be exported and/or transferred.

Fabasoft Folio 2009 supports export and transfer in XML format. This format conforms to the MoReq2 XML schemata.

It was verified that, after the transfer, a metadata stub remains. This metadata stub contains all required meta-information. In addition, Fabasoft Folio 2009 can be configured in such a way that additional meta-information remains as a metadata stub in the system.

3.4 Test Module 6 - Capturing and Declaring Records

3.4.1 Capture

The implementation of all mandatory requirements for capturing was verified in Fabasoft Folio 2009 by means of the executed tests.

Fabasoft Folio 2009 offers a structured capturing process.

It was verified that records and their components, as well as the associated metadata, can be captured.

Due to presentation and storage requirements, and from the viewpoint of long-term archiving, all records are converted into/rendered in PDF/A in Fabasoft Folio 2009.

It was verified that records made up of several components are administrated as one unit in Fabasoft Folio 2009. The required metadata for the components are captured. In addition, the format and version of a component are also captured as metadata. It was verified that the capture of records is even ensured if the application which created the record does not exist in Fabasoft Folio 2009.

Fabasoft Folio 2009 recognises different document versions and offers the required options as records within the framework of capturing.

The automatic capture of metadata is supported by Fabasoft Folio 2009 to the extent required. Furthermore, required information such as the date and time of capture is stored both in the metadata and in the audit trail. Meta-information on a record can be displayed whenever required. It was verified that captured metadata are linked to the record.

Fabasoft Folio 2009 ensures that metadata of records can only be changed by authorised user roles. If the capturing process requires the manual entry of metadata, this is indicated to the user by Fabasoft Folio 2009. The manual entry is validated.

It was verified that, in Fabasoft Folio 2009, each record is assigned to at least one aggregation. A keyword concept is available and can be used to the required extent in MoReq2.

It was demonstrated that the capturing process can be completed by several users. Fabasoft Folio 2009 permits the assignment of several languages to a record.

Fabasoft Folio 2009 supports users or user roles in the classification of electronic records to the extent required.

3.4.2 Bulk Importing

The implementation of all mandatory requirements of MoReq2 regarding bulk importing was verified in Fabasoft Folio 2009.

Bulk importing of data is also ensured through XML. Fabasoft Folio 2009 provides functions for the administration of input queues. Moreover, missing metadata can be supplemented manually during bulk importing.

All imported data are validated by Fabasoft Folio 2009. If Fabasoft Folio 2009 detects errors during validation, these are indicated to the administrative user role which carried out the bulk importing. In every case, the errors and actions are stored in the audit trail.

3.4.3 E-mail Management

The implementation of all mandatory requirements of MoReq2 for e-mail management was verified in Fabasoft Folio 2009.

Fabasoft Folio 2009 supports the e-mail capturing process by means of automated metadata extraction. The capture of e-mails is possible to the extent required, regardless of whether the e-mails are with or without attachments.

Metadata can be captured direct as a title and changed again afterwards. Manual capture of selected e-mails and e-mail series was also demonstrated. Fabasoft Folio 2009 can be configured such that e-mails can be captured in a multiple (inclusive) open format.

Furthermore, the capture of e-mails from the e-mail client is also possible. Switching to Fabasoft Folio 2009 is not necessary for this purpose. Dragging of e-mails into Fabasoft Folio 2009 from the e-mail client was also demonstrated. Microsoft Outlook 2007 was used as the e-mail client during the test.

3.4.4 Record Types

Record types are shown, configured, and administrated using categories in Fabasoft Folio 2009.

It was verified that each record has exactly one category and that only one category can be assigned. Only administrative users can configure and administrate categories.

3.4.5 Scanning and Imaging

Fabasoft Folio 2009 uses Kofax Capture for scanning. The scanning solution supports all requirements to the extent required. For example, both monochrome and colour scanning are possible in different resolutions. The created images were stored in TIFF, JPEG, or PDF/A format.

Based on the implemented tests, it was verified that the scanning solution can recognise stacks and scan them in a single process. Furthermore, the scanned images can be sent to a queue. Scanned images can also be inspected.

As stipulated in MoReq2, the scanning solution can scan parts of a document and automatically capture its values. The captured values can be interpreted and classification automatically carried out.

The scanning solution also supports the OCR (Optical Character Recognition) functionality, which is an optional requirement in MoReq2. The values recognised by OCR can be captured as metadata of a record, or even used to search for full text. Scanned images can be captured as a record. Fabasoft Folio 2009 also permits the optionally required presentation of scanned pictures as thumbnails.

3.5 Test Module 7 - Referencing

3.5.1 Classification Code

The implementation of all mandatory requirements for the classification code was verified in Fabasoft Folio 2009.

The assignment of a classification code and the fully qualified classification code to an aggregation or record is implemented continuously. Furthermore, it was verified that both the classification code and the fully qualified classification code are stored in the metadata of an aggregation and/or record (including its components). It was also verified that the assignment of a classification code or fully qualified classification code is retained even if, for example, aggregations or records are relocated.

3.5.2 System Identifiers

Fabasoft folio 2009 assigns a "COO address" as a system ID. Each available or newly generated object in Fabasoft Folio 2009 has a COO address. Objects in Fabasoft Folio 2009 are, for example, aggregations, records, redactions, or retention and disposition schedules.

Based on the implemented tests, it was verified that the COO address represents a unique assignment in the system. Furthermore, it was demonstrated that the COO address is not required for the execution of system functions by users or user roles, e.g. searching, creating records, deleting files, and that the COO address is not queried by Fabasoft Folio 2009.

3.6 Test Module 8 - Searching, Retrieval and Presentation

3.6.1 Search and Retrieval

Fabasoft Folio 2009 features a basic search function. Form-supported searching can thus be initiated.

The integration of Mindbreeze Enterprise Search version 4.0 in Fabasoft Folio 2009 is to be evaluated positively. Mindbreeze Enterprise Search is a search and e-discovery tool (a supplementary product for Enterprise Search and e-discovery; see Chapter 2.6.3). The Mindbreeze functionality makes searching across multiple storages possible. Individual or multiple search terms can be used to search in content, the metadata, or both.

The presentation of search results is clear and can be configured for greater detail. The presentation of search results can be configured in Fabasoft Folio 2009.

Fabasoft Folio 2009 permits saving and re-use of search results, as well as the indication of time intervals. Furthermore, a thesaurus can be used for searching. Search terms can be made available to other users. Fabasoft Folio 2009 supports searching using wildcards or Word Proximity Search, as well as searching in online, near-line, or offline storage.

It was verified that, even when searching, the access rights concept is complied with in Fabasoft Folio 2009.

3.6.2 Presentation: Displaying Records

The search results contain statements about whether a redaction belongs to a record. The redaction is retrieved directly to the user from the search.

Fabasoft Folio 2009 ensures that an administrative user role can configure the standard fields of a search. Fabasoft Folio 2009 permits searching during the process of capturing records.

Records and associated metadata are presented in an appropriate form. Fabasoft Folio 2009 converts all records into PDF/A.

3.6.3 Presentation: Printing

Both the content and the metadata of a record can be printed out. Fabasoft Folio 2009 supports the printing of records, aggregations, retention and disposition schedules, and administrative parameters. In the test, one printout was made as an example in each case.

Fabasoft Folio 2009 permits the printout of the complete classification scheme, parts of the classification scheme, or of the audit trail. Furthermore, records were printed out in one operation. Folio 2009 also supports the printing of the hit list. Furthermore, printing of components was demonstrated.

3.6.4 Presentation: Other

Fabasoft Folio 2009 supports the presentation of media records.

3.7 Test Module 9 - Administrative Functions

The implementation of mandatory requirements was verified in Fabasoft Folio 2009.

The user can search and display system parameters or settings in Fabasoft Folio 2009. The system administrator can assign users or functions to roles. Furthermore, the system storage space can be monitored. Tracking is actively supported by means of messages from the system, e.g. regarding insufficient storage space.

Fabasoft Folio 2009 supports the report functionality to the extent required.

Fabasoft Folio 2009 features a form search function. It was demonstrated that this functionality can be expanded by the configuration of customer-specific Use-Cases. In addition, Fabasoft Folio 2009 offers, by default, the possibility of selecting information and providing it for further evaluation in Excel (integrated productivity tool, see also Chapter 2.6.4).

Evaluations for aggregations and/or records were demonstrated. It was possible to aggregate, sort or graphically present information. The evaluation of production quantities (rates on captured records, etc.) in a certain time period is possible, as is the evaluation via specific actions (z. B. transfer, export, etc.) for aggregations and records.

It was verified that an administrative user role can carry out both evaluations regarding the audit trail and system storage space capacity and evaluations regarding the result of a transfer, export or disposition process.

The fact that Fabasoft Folio 2009 supports analysis and evaluation tools for retention and disposition schedules is to be evaluated positively. Properties of retention and disposition schedules can thus be compared, for example (see Figure 4)

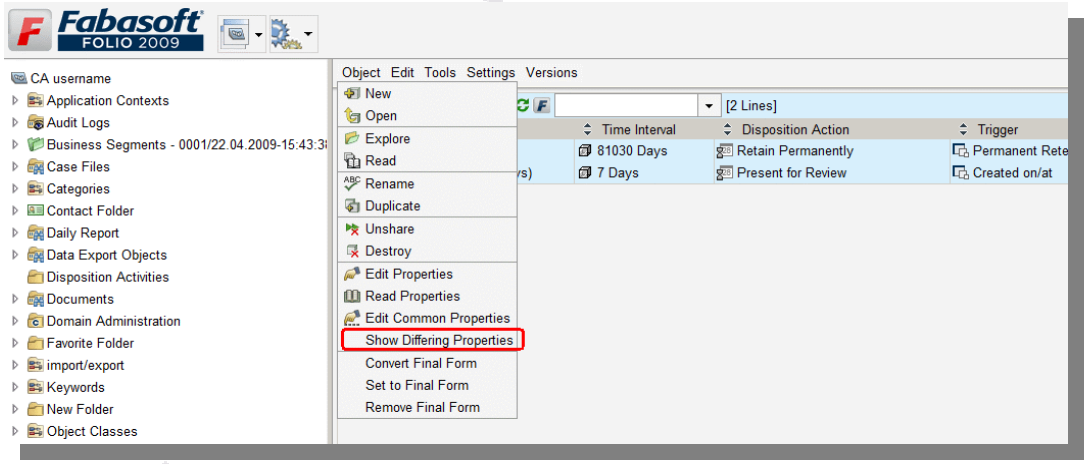

Figure 4: Display of properties of several retention and disposition schedules

It was demonstrated that administrative user roles can grant access rights to specific reports.

The fact that the tracking of Fabasoft Folio 2009 by means of app.strudl Software Telemetry 2009 (a supplementary product, see also chapter 2.6.3) is to be evaluated positively. app.strudl Software-Telemetry 2009 is a high-performance tool for application performance management. Performance bottlenecks can thus be identified quickly. Figure 5 shows the tracking of different Fabasoft Folio 2009 services in app.strudl Software-Telemetry 2009.

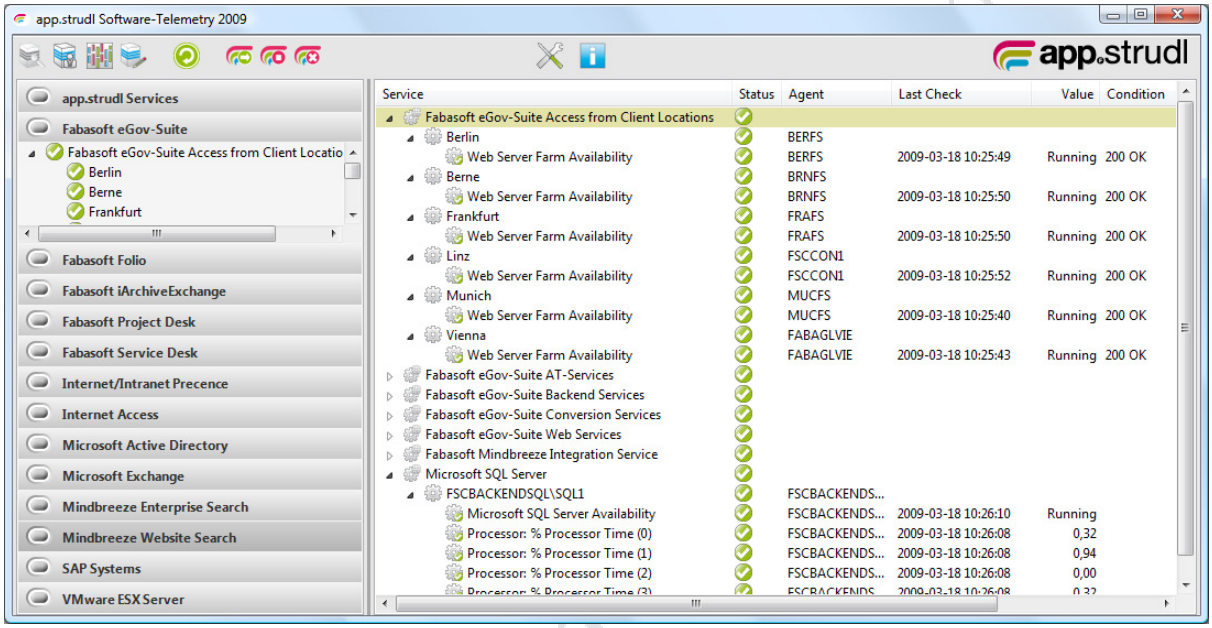

Figure 5: Tracking of Fabasoft Folio 2009 using app.strudl Software-Telemetry 2009

Fabasoft Folio 2009 supports the required options for "deleting" or "relocating" records. Depending on the configuration, records are hidden or deleted after executing Delete/Relocate and a metadata stub is retained. Figure 6 shows the "Deleted (Hidden)" state of deleted aggregations.

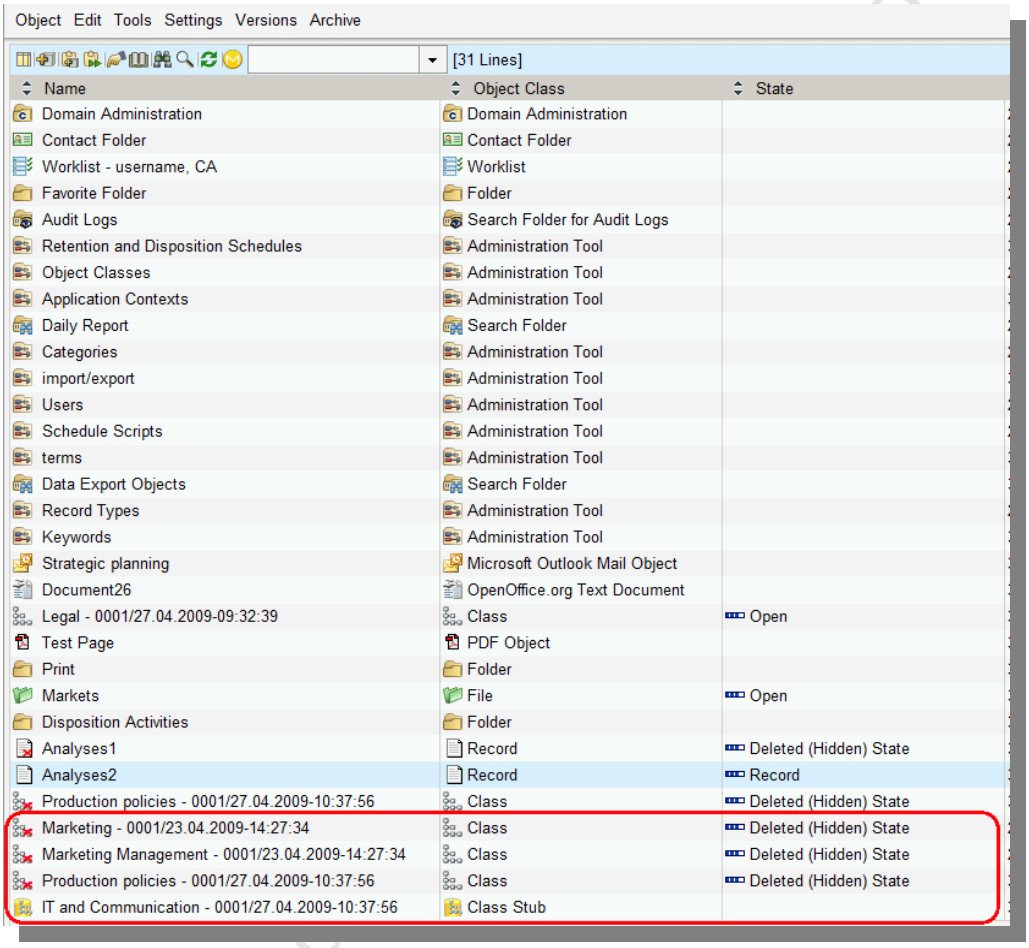

Figure 6: Deleted (Hidden) state of deleted aggregations

The deletion process is a structured and controlled process in Fabasoft Folio 2009. This process also includes a delete confirmation by administrative user roles.

It was verified that the system administrator can change metadata elements. All changes are stored in the audit trail.

Fabasoft Folio 2009 supports the creation of redactions to the extent required. One or several redaction(s) were generated by a record. Furthermore, it was verified that redactions can be searched for. The search result indicates the record to which the redaction is assigned. This record can be opened directly from the search result.

4 Evaluation of Optional MoReq2 Modules

4.1 Test Module 10.1 - Management of Physical (Non-electronic) Files and Records

Fabasoft Folio 2009 supports the management of physical files and records to the extent required.

Fabasoft Folio 2009 supports the storage of physical and electronic records in an aggregation. Physical records are managed in the same manner as electronic records.

It was demonstrated that physical and electronic files and records have a separate set of metadata in each case. Recording of metadata for physical aggregations and records was implemented to the extent required.

It was verified that authorised users can access meta-information of physical records to the same extent as meta-information of electronic records.

The fact that the user can distinguish between electronic and physical files and records by means of different symbol icons is to be evaluated positively.

It was verified that physical aggregations and records can be checked in and checked out. Fabasoft Folio 2009 also supports the tracking of check-out/check-in, which is an optional requirement in MoReq2. This is implemented via Business Uses Cases in Fabasoft Folio 2009. All information or changes were stored in the audit trail.

4.2 Test Module 10.2 - Disposition of Physical Records

The implementation of mandatory requirements regarding the disposition of physical records was verified in Fabasoft Folio 2009.

It was verified that administrative roles in Fabasoft Folio 2009 are notified when dispositions are initiated for physical units.

It was verified that the export or transfer of physical units is implemented in the same manner as the export and transfer of electronic units. The conclusion of a disposition of physical units must always be confirmed by an administrative user role.

4.3 Test Module 10.3 - Document Management and Collaborative Working

Fabasoft Folio 2009 supports document management and collaborative working to the extent required.

Fabasoft Folio 2009 supports the check-out of documents. Based on the executed tests, it was verified that access rights are complied with at all times. Documents which have already been checked out cannot be checked out by another user. For this purpose, Fabasoft Folio 2009 supports the function of hiding or showing the user who checked out the document.

As stipulated in MoReq2, the user can decide if a new version of the checked-out document is to be checked in or not. Versioning of the documents is implemented to the extent required.

Fabasoft Folio 2009 was configured in such a way that electronic documents can be captured as a record in one process, or they can be stored first and captured as a record at a later date. The fact that Fabasoft Folio 2009 permits the capturing of records from the EDMS functionality is to be evaluated positively.

The versioning concept for documents in Fabasoft Folio 2009 meets the requirements stipulated in MoReq2. The integrity of the EDMS functionality in Fabasoft Folio 2009 was verified in the executed tests.

Fabasoft Folio 2009 also supports the administration of electronic documents and records in one classification scheme, which is an optional requirement in MoReq2. The user can distinguish between records and documents in the classification scheme by means of different symbol icons.

4.4 Test Module 10.4 - Workflow

Fabasoft Folio 2009 supports the MoReq2 requirement regarding workflow to the extent required.

It was demonstrated that workflows can be pre-programmed in Fabasoft Folio 2009. Information about the creation and changing of pre-programmed workflows is stored in the audit trail. Furthermore, it was verified that the access rights concept is also complied with regarding the workflow functionality.

Fabasoft Folio 2009 supports the creation of workflows to the extent required. The fact that workflows can be versioned in Fabasoft Folio 2009 is to be evaluated positively. It is also to be evaluated positively that the user is supported by a graphical user interface (see Figure 7).

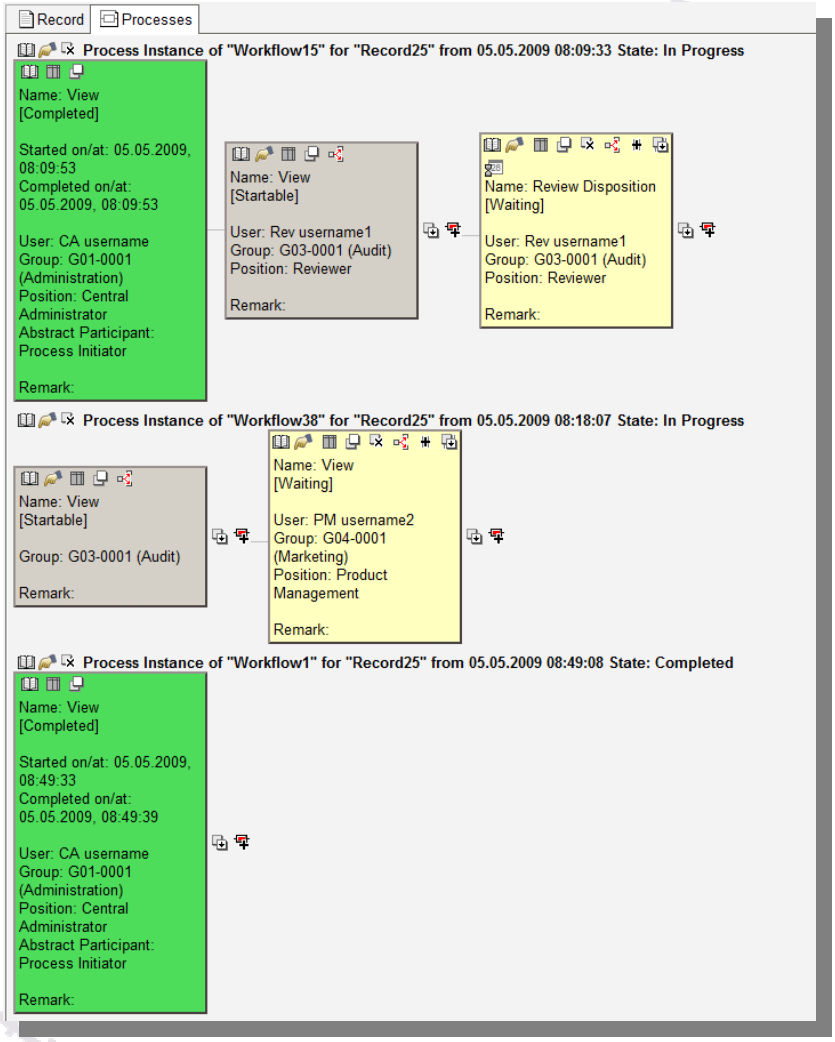

Figure 7: Graphical user interface for creating workflows

Furthermore, no limit to the number of steps in a workflow could be found. It was verified that Fabasoft Folio 2009 supports the configuration of different workflow roles. Fabasoft Folio 2009 also supports the creation of ad hoc workflows to the extent required.

Furthermore, it was verified that both electronic documents and electronic records can initiate workflows automatically. The workflow functionality of Fabasoft Folio 2009 recognises both users and user groups as workflow participants.

Fabasoft Folio 2009 supports the tracking of the workflow progress.

It was verified that the access rights concept is also complied with regarding the use of the workflows.

Fabasoft Folio 2009 also supports conditional workflows, which is an optionally required functionality in MoReq2 (see Figure 8).

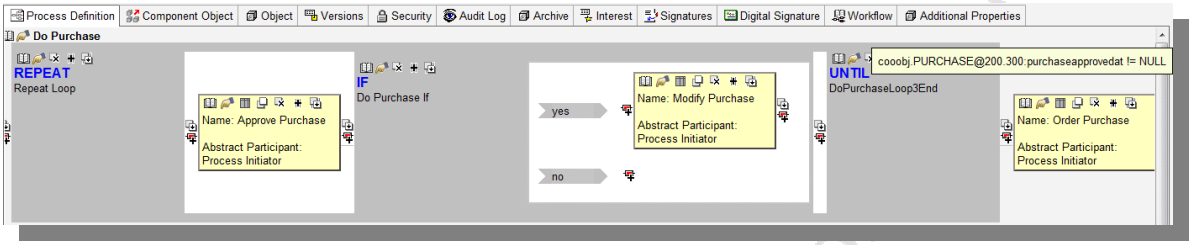

Figure 8: Presentation of a conditional workflow in Fabasoft Folio 2009

4.5 Test Module 10.5 - Casework

The implementation of mandatory requirements for the casework module was verified in Fabasoft Folio 2009.

Fabasoft Folio 2009 permits the configuration of "caseworker" roles and the associated access rights to casework classes. The fact that the optional mechanism for configuring a file title is supported is to be evaluated positively.

A case file ID can be assigned. Use of the case file ID for activities such as opening the case file was verified. Furthermore, it was demonstrated that specific metadata elements can be configured for each case file. Figure 9 shows the properties of a case file.

The evaluation of case files was implemented to the extent required.

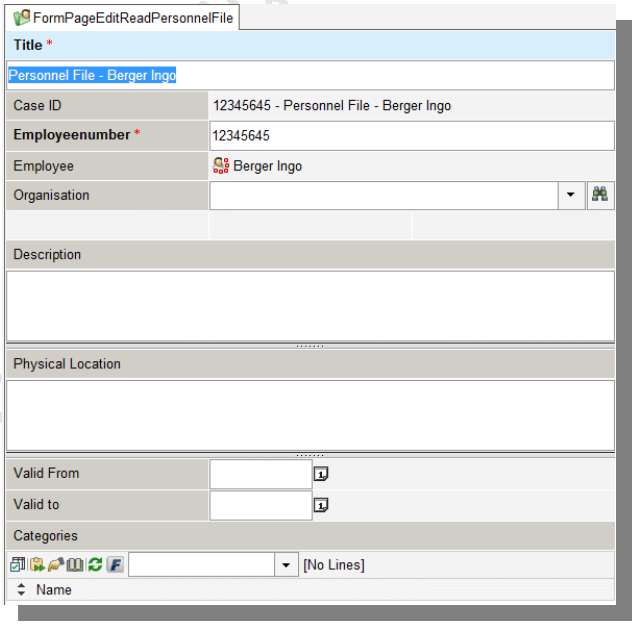

Figure 9: Properties of a case file

4.6 Test Module 10.10 - Distributed Systems

Fabasoft Folio 2009 supports the distributed systems functionality to the extent required. The Fabasoft Folio 2009 functionality is called “Multi Tenant Concept”.

With this concept, several repositories can be configured and managed. Fabasoft Folio 2009 also supports the workflow functionality across multiple location.

5 General Information

All information which is obtained by the certification tester during the MoReq2 certification is treated confidentially.

The individual test results are kept in the secure area of imbus AG and can only be viewed at imbus by persons authorised by the MoReq2 Governance. In this case, the vendor is informed of the situation and the name of this person prior to viewing the documents.

Within the framework of the MoReq2 project, the European Commission has approved the conformity tests of the MoReq2 test framework in version 1.0 without reservation, and released them for use in the MoReq2 Test Regime.

Conformity deviations regarding MoReq2 cannot be formally excluded (see explanation in Chapter 1.11 of the MoReq2 specification, Version 1.04).

End of the verification report.

Résumé

Vendor:	Fabasoft R&D GmbH Honauerstraße 4 4020 Linz AUSTRIA
MoReq2 Test Centre:	imbus AG Kleinseebacher Str. 9 91096 Möhrendorf GERMANY
Type of Certification:	Initial Certification
ERMS Under Test:	Fabasoft Folio 2009 Governance Spring Release (Version 9.0.3)
Verification Basis:	MoReq2 Specification Version 1.04 (including Appendix 9 Metadata Model) MoReq2 XML Schema Version 1.04.01 MoReq2 Test Framework Version 1.0
Verification Result:	In the course of the MoReq2 certification test, Fabasoft R&D GmbH has provided proof that the product Fabasoft Folio 2009 Governance Spring Release (Version 9.0.3) is in compliance with the MoReq2 core modules. In addition, Fabasoft had its product tested with regard of the following to 6 of 12 possible optional MoReq2 modules: ▪ T10.1 Management of Physical (Non-electronic) Files and Records ▪ T10.2 Disposition of Physical Records ▪ T10.3 Document Management and Collaborative Working ▪ T10.4 Workflow ▪ T10.5 Casework ▪ T10.10 Distributed Systems Fabasoft Folio 2009 Governance Spring Release (Version 9.0.3) has provided proof of compliance to these optional MoReq2 modules.
Certification Decision:	There are **no** objections to the awarding of Fabasoft Folio 2009 Governance Spring Release (Version 9.0.3) with the **MoReq2 Certificate Cores & Options**.

Möhrendorf	July 31th, 2009	Michael Sill
Place	Date	Signature Certification Tester

imbus
imbus AG
Kleinseebacher Str. 9
91096 Möhrendorf
DEUTSCHLAND
Tel. +49 9131 7518 - 0
Fax +49 9131 7518-50

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imbus AG
Kleinseebacher Strasse 9
91096 Möhrendorf
Germany
Phone: +49 (0)9131 7518-0
Fax: +49 (0)9131 7518-50
info@imbus.de
www.imbus.de