

FileSurf v7.50 by MDY Advanced Technologies, Inc. with NetApp NearStore and NetApp Filer, by Network Appliance, Inc., DataFort by Decru, Inc., and Documentum by Documentum, Inc

FileSurf/Documentum Summary Report

The Joint Interoperability Test Command (JITC) tested MDY Advanced Technologies, Inc.'s FileSurf v7.50, a stand-alone records management application (RMA) at the MDY Advanced Technologies, Inc.'s facility in Fair Lawn, NJ from 20 through 31 January 2003. The implementation was verified using version 6.8 of the Test Procedures and was compliant with DoD 5015.2-STD, dated June 2002. Follow-on testing conducted at Sierra Suites in Sierra Vista, Arizona, from 24 through 27 March 2003 resulted in the compliance verification of FileSurf's integration with Novell's GroupWise e-mail product.

JITC conducted a follow-on test on July 22 and 23, 2003, which resulted in compliance verification of:

- FileSurf's integration with KVS, Inc.'s Enterprise Vault v4.0 and EMC Corporation's EMC Centera v2.0
- FileSurf's integration with KVS, Inc.'s Enterprise Vault v4.0.

JITC conducted follow-on testing on September 16 and 17, 2003, which resulted in compliance verification of:

- FileSurf's integration with Network Appliance, Inc.'s NetApp Filer with Decru DataFort and NetApp NearStore with Decru DataFort
- FileSurf's integration with Network Appliance, Inc.'s NetApp Filer with Decru DataFort and NetApp NearStore with Decru DataFort and KVS, Inc's Enterprise Vault 4.0

JITC conducted follow-on testing on September 17 and 18, 2003, which resulted in compliance verification of:

- FileSurf's integration with Documentum's Documentum Desktop and Webtop, Network Appliance, Inc.'s NetApp Filer with Decru DataFort and NetApp NearStore with Decru DataFort

All mandatory requirements were satisfied.

TABLE OF CONTENTS

- Section 1. Product Identification
 - Section 2. Test Configuration
 - Section 3. RMA Mandatory Requirements
 - Section 4. Non-Mandatory Features Demonstrated
-

1. Product Identification

FileSurf v7.50, hereafter referred to as FileSurf, is a stand-alone RMA.

The FileSurf software package, as tested, consisted of the following component programs and utilities:

- FileSurf Administrator
- FileSurf Web Administrator
- FileSurf Desktop Client
- FileSurf Web Client

Documentum's Document Management System (DMS) provides document management for both the desktop through its Windows client and via the Internet using its Webtop interface. Documentum provides enterprise level document management.

1.1 Allocation of RMA Requirements

Table 1 identifies the mandatory functions required by the Standard and indicates which of those functions are performed by FileSurf, which are performed by Documentum, and which both products perform either jointly (both share the function) or separately (both perform the function independently).

Table 1. Mandatory Functions Allocation				
Para	DoD 5015.2-STD Requirement	FileSurf	Documentum	Comments
C2.1.1.	Managing Records	✓	✓	Jointly
C2.1.2.	Accommodating Dates and Date Logic	✓	✓	Separately
C2.1.3.	Implementing Standard Data	✓	✓	Separately, integrated
C2.1.4.	Backward Compatibility			Not Tested ¹
C2.1.5.	Accessibility	✓	✓	Separately, integrated
C2.2.1.	Implementing File Plans	✓		
C2.2.2.	Scheduling Records	✓		
C2.2.3.	Declaring and Filing Records	✓	✓	Jointly
C2.2.4.	Filing E-Mail Messages	✓		
C2.2.5.	Storing Records	✓	✓	Jointly
C2.2.6. Retention and Vital Records Management				
C2.2.6.1.	Screening Records	✓		
C2.2.6.2.	Closing Record Folders	✓		
C2.2.6.3.	Cutting Off Record Folders	✓		
C2.2.6.4.	Freezing/Unfreezing Records	✓		
C2.2.6.5.	Transferring Records	✓		
C2.2.6.6.	Destroying Records	✓	✓	Jointly
C2.2.6.7.	Cycling Vital Records	✓		
C2.2.6.8.	Searching and Retrieving Records	✓	✓	Jointly
C2.2.7.	Access Controls	✓	✓	Jointly
C2.2.8.	System Audits	✓		
C2.2.9.	System Management Requirements			Performed by the OS and DBMS

¹ This test was the first test for this system against this requirement. Test data from a previous system was not available.

2. Test Configuration

The baseline test configuration consisted of:

- One server running the Microsoft (MS) Windows 2000 Server (SP3) operating system (OS), MS SQL Server 2000 (SP2), and MS Exchange 2000.
- One server running the MS Windows 2000 Server (SP3) OS and IIS 5.0.
- One server running the MS Windows 2000 Server (SP3) OS and Lotus Notes Mail 5.08
- One client PC running MS Windows 2000 Professional (SP3). Installed software included MS Office 2000 (SP2), MS Outlook 2000, Lotus Notes Mail 5.10, Internet Explorer 6.0, FileSurf Administrator, and FileSurf Desktop Client.
- One client PC running MS Windows NT 4.0 Workstation (SP6a). Installed software included MS Office 2000 (SP2), MS Outlook 2000, Lotus Notes Mail 5.10, Internet Explorer 5.5, FileSurf Administrator, and FileSurf Desktop Client.
- One client PC running MS Windows XP. Installed software included MS Office XP, MS Outlook 2002, Lotus Notes Mail 5.10, Internet Explorer 5.5, FileSurf Administrator, and FileSurf Desktop Client.

In a subsequent configuration, JITC repeated the certification test using the Oracle 9i database.

The test configuration for the September 16 – 18, 2003 campaign was:

- One server running the MS Windows 2000 Server (SP4) OS, with MS Exchange 2000 Server (SP3), MS Internet Information Server (IIS) 5.0, MS SQL Server 2000 (SP3) and FileSurf 7.5 Server (SP1).
- One server running the MS Windows 2000 Server (SP4) OS, with Oracle 9i, Documentum 5.1 Content Server, and KVSA Enterprise Vault.
- One server running the MS Windows2000 Server (SP4) OS, with Documentum Administrator and RightSite Server.
- One workstation running the MS Windows 2000 Workstation (SP4), with Documentum Document Management System (DMS) Windows Client, Outlook XP, FileSurf 7.51 and Office XP (SP2)
- One workstation running the MS Windows XP Professional (SP1), with Documentum DMS Window's Client, Outlook XP, FileSurf 7.51 and Office XP (SP2)
- Three network appliances hosting the Decru DataFort, NetApp NearStore and the NetApp Filer.

3. RMA Mandatory Requirements

3.1 *Managing Records [C2.1.1.]*

FileSurf manages electronic, non-electronic, and e-mail records. It stores electronic records in its repository and maintains them in their original, native file format. Users maintain records stored on other media, such as paper, diskette, or tape by adding metadata through the user interface.

The September Documentum integration demonstrated records stored across several repositories. E-mail resided in the native FileSurf repository; Documentum's records were stored in the Documentum NTFS repository as well as in NearStore and Filer. The test environment was configured to direct different document types to different stores. For example, the FileSurf Correspondence document type was stored in Filer, while the FileSurf Report document type was stored in Documentum's NTFS.

Once Documentum documents were declared into FileSurf as records, Documentum marked the records as read-only. Record Managers and Privileged Users could edit metadata in FileSurf. File Surf then propagated the changes to the Documentum metadata set to keep the data sets synchronized.

3.2 Accommodating Dates and Date Logic [C2.1.2.]

FileSurf stores and displays dates using a 4-digit year format, and recognizes leap years including the year 2000. The product accepts user input of valid dates from current, previous, and future centuries.

Documentum's Windows Client and Web Client store and displays dates using 4-digit year format. They recognize leap years and accept user input of valid dates from current, previous, and future centuries.

3.3 Implementing Standard Data [C2.1.3.]

FileSurf provides the capability to implement standard data. Records managers create data entry templates. They can create pick lists for user-defined fields to assist the user in filling out the templates.

FileSurf can be configured with all the data elements as defined in DoD 5015.2-STD. The records manager can also configure FileSurf with additional fields for custom use. Custom fields are created in the FileSurf Desktop Administrator and added to the data entry templates using the FileSurf Web Administrator. Administrators can constrain the selection lists presented to users by using filters to partition access.

The test support technicians configured the Documentum metadata set to mirror the compliant FileSurf metadata set. Documentum fields mapped to their corresponding FileSurf fields to reduce the amount of data entry required of the user. Documentum supports pick lists and default values.

3.4 Backward Compatibility [C2.1.4.]

This is the first test for this product against version two of DoD 5015.2-STD², therefore test data was not available to verify backwards compatibility.

MDY did not increment the FileSurf version for the September 2003 testing, so backwards compatibility was not relevant.

3.5 Accessibility [C2.1.5.]

MDY provided the 508 Voluntary Product Accessibility Templates (VPATS) provided as Appendix C in the detailed test report.

3.6 Implementing File Plans [C2.2.1.]

FileSurf provides the required capabilities for creating and maintaining disposition instructions and file plans. Disposition instructions are created separately and assigned to record plan components when creating the file plan categories. Subcomponents under that level inherit the same disposition instruction unless another disposition instruction is specified for that lower level component.

Access to the associated FileSurf functions is granted/restricted through the assignment of privilege types to users. FileSurf provides support for multiple levels of file plan access. During the test "privileged" users were able to create and manage folders.

² Backwards Compatibility is a new requirement in the June 2002 version of DoD 5015.2-STD.

3.7 Scheduling Records [C2.2.2.]

FileSurf automatically tracks the disposition schedules for screening and disposition processing. Records managers reschedule files by assigning a different disposition instruction to the file or altering the retention period (which reschedules all records associated with that schedule).

3.8 Declaring and Filing Records [C2.2.3.]

FileSurf includes two user interfaces for filing records. Typical users file records directly into the FileSurf repository using the FileSurf web interface. They click on the "Add New" hyperlink, select a file code, complete the record metadata, and navigate through the file system to select an electronic file to upload.

Users can also use the Microsoft Office integration to file records to FileSurf from within MS Word, Excel, or Power Point.

Privileged users and records managers with access to the FileSurf Desktop Client can file paper and electronic records directly into the FileSurf repository by using the Insert menu.

At the time of filing, FileSurf assigns a unique record identifier and a date/time stamp to each record. The date/time stamp serves as the required Date Filed profile field. Users cannot modify either field.

During the September 2003 testing, testers filed by declaring Documentum documents as records from both the Windows Client and the Web Client. Both Documentum clients collected document metadata from the user and transferred mapped fields to FileSurf during the declaration process. Once the documents were declared as records, they could not be modified in Documentum and all FileSurf access permissions were enforced for Documentum users.

3.9 Filing E-mail Messages [C2.2.4.]

FileSurf provides the capability to file e-mail messages from MS Outlook, Lotus Notes Mail, and Novell GroupWise. FileSurf automatically captures message transmission and receipt data to populate the Author/Originator, Addressee(s), Publication Date, and Subject record profile fields.

When filing e-mail that has an attachment(s), FileSurf gives the user the following options:

- **E-mail Only.** Stores the e-mail and attachments as a single record. Users can save attachments to their hard drives and file them separately as any other electronic record if desired.
- **E-mail and Each Attachment as a Record.** Stores the e-mail only (which does not include the attachments) and, in addition, stores each attachment separately in its native file format.

FileSurf also allows users to file e-mail upon sending, if desired.

3.10 Storing Records [C2.2.5.]

FileSurf uses the server's NT File System (NTFS) for storing and preserving electronic records. The permissions assigned at the file, folder and document levels determine who has access to the records and what they can do with those records. Only users with appropriate access can delete records from the repository.

File plan and document profile data are stored separately from the actual records in a relational database. MS SQL Server 2000 and Oracle 9i provided the databases during the compliance tests.

When combined with the following,

- EMC Centera and Enterprise Vault
- Enterprise Vault
- NetApp Filer with Decru DataFort
- NetApp NearStore with Decru DataFort
- NetApp Filer with Decru DataFort and Enterprise Vault
- NetApp NearStore with Decru DataFort and Enterprise Vault

FileSurf users filed and retrieved electronic records from the appropriate repositories. The product combinations functioned as required during transfer and destruction processes.

The Documentum repository added to the configuration to support FileSurf report document types for the Documentum integration. Documentum metadata was stored in MS SQL Server 2000 only.

3.11 Screening Records [C2.2.6.1.]

Records managers perform screening functions using FileSurf's Disposition Processing template available from the Browse menu. From here, they design queries for information relating to folders or records that are qualified for disposition, including cutoff, transfer, accession, or destruction. Records managers can enter a future date to identify candidates for disposition for planning purposes.

3.12 Closing Record Folders [C2.2.6.2.]

FileSurf offers records managers and privileged users the ability to close folders by assigning edit privileges to folders. Privileged users can only close folders in the record categories to which they have been assigned folder management privileges.

3.13 Cutting Off Record Folders [C2.2.6.3.]

To cut off record folders, records managers use FileSurf's Disposition Processing template to search for folders due for Cutoff. A list of folders matching the criteria will display. Records managers select the folder(s) they wish to perform cutoff on and press the "Execute" button. By cutting off the folder, all records within that folder are cut off as well.

3.14 Freezing/Unfreezing Records [C2.2.6.4.]

FileSurf provides the capability to freeze and unfreeze records at all levels of the file plan. If a record series is frozen, all folders and documents in that series do not qualify for disposition. Additionally, the record profiles cannot be modified until the hold is released.

3.15 Transferring Records [C2.2.6.5.]

To transfer records, records managers use the Disposition Processing template to identify folders and/or records due for transfer or accession (referred to as Permanent Storage in FileSurf). In both cases, the records are removed from the repository; however, records managers can choose to retain the metadata of the transferred records by checking the appropriate box before executing the transfer. Additionally, records managers have the option of creating a backup of the records and their metadata by checking the appropriate box and specifying a directory. The extracted metadata is in text format.

FileSurf properly handled transfer of records from all repositories. Exported content was identical to the originally filed content.

3.16 Destroying Records [C2.2.6.6.]

To destroy records, the records manager uses the Disposition Processing template to search for folders and/or records due for destruction, selects them, and verifies that they should be destroyed. FileSurf then deletes the records from the repository and database.

Records cannot be reconstructed once they have been deleted.

FileSurf properly handled destruction from all repositories. Documentum requires a third party expunge application that completely removes the documents from NTFS storage. This application did not interfere with the expunge mechanism provided by the NetApps storage system/Decru DataFort encryption device.

3.17 Cycling Vital Records [C2.2.6.7.]

FileSurf provides the ability to gather records based on cycling dates and to do updates of cycle dates after records have been reviewed. During the test, MDY attached logic to the folder vital record review date fields that sent email to a specified records manager when the folders were due for vital records review.

3.18 Searching for and Retrieving Records [C2.2.6.8.]

FileSurf provides the required capability for searching for and retrieving records. Users can enter multiple values in search fields to perform nested searches. FileSurf allows users to export copies of the records to their hard drives.

FileSurf properly retrieved documents regardless of storage device. Documents retrieved from any store were identical to the documents originally filed.

3.19 Access Controls [C2.2.7.]

Records managers assign FileSurf functional access to files, folders and/or documents at the user and/or group level. Permissions are set at the record category or folder level to assign file and/or search and retrieve access to users/groups.

FileSurf supports multiple-user access. During much of the certification test, two users worked simultaneously performing various functions including filing system maintenance, record filing, record retrieval, reporting, and disposition activities.

FileSurf provided access control across all devices. Documentum users could not access records they did not have permission to see. All metadata editing was constrained to permissioned users via the FileSurf interface.

3.20 System Audits [C2.2.8.]

Administrators determine what events to log for FileSurf items by accessing the Actions tab from the Audits template in the FileSurf Desktop Client. Examples of audited events include insert, modify, delete, assign security, and update.

FileSurf collects the audit metadata specified in the Standard, however, it does not collect sufficient data to adequately reconstruct a user's attempt at unauthorized access.

3.21 System Management Requirements [C2.2.9.]

Operating systems (MS Windows 2000 Server) and database management systems (SQL 2000, Oracle 9i) provided the required system management capabilities.

4. Non-Mandatory Features Demonstrated

4.1 Interfaces to Other Software Applications [C3.2.3.]

FileSurf integrates with MS Office applications. Users can right click on any MS Word, Excel, or Power Point document and file it directly to the FileSurf repository. Alternatively, users can also file MS Office documents to FileSurf from within the application by clicking on the FileSurf menu located on the Office toolbar.

4.2 Retrieval Assistance Capability [C3.2.9.]

FileSurf has advanced searching tools for folders and documents, including full text searching capability.

4.3 Internal Viewer Capability [C3.2.14.]

FileSurf uses INSO viewers to view documents from within FileSurf. The Inso Viewer has the capability to view over 250 different document types. FileSurf can be configured to open records in their native application, or in the INSO viewer.

4.4 Web Capability [C3.2.15.]

The FileSurf Web Client allows users to file and search/retrieve records via a web browser. Users add new paper, electronic, or imaged records to the FileSurf repository and enter metadata to describe the records. Full searching capabilities are also available in the FileSurf Web Client, allowing users to view a record, view the metadata, or download a copy of a record to their workstations. Typical users requiring only file and search/retrieve capabilities can use the FileSurf Web Client exclusively.

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