

# RSD GLASS

# 1.0

FileNshare

## Management Guide and Technical Reference

English

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Manual: RSD GLASS® Governance Services for fileNshare version 1.0 - Management Guide and Technical Reference

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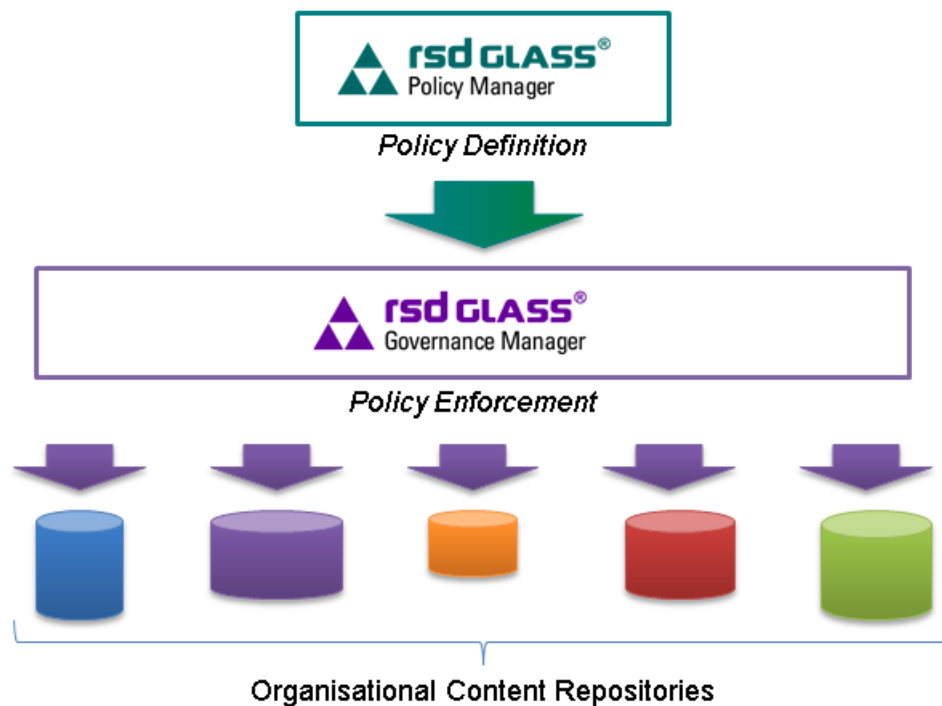
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# Introduction

## Overview of RSD GLASS®

RSD GLASS® is a platform that allows information governance policies to be defined and applied across the organisation. The same information governance policy can be applied to information content in different formats stored in different repositories. This is shown in the following diagram:

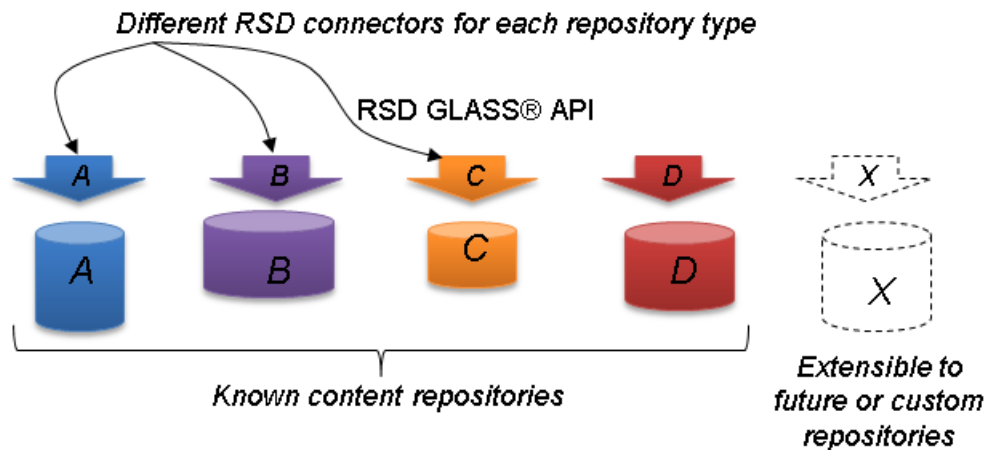


Corporate information repositories come in all shapes and sizes, from shared drives, to general purpose systems such as Microsoft SharePoint and IBM FileNet, to specialised business systems like SAP and Symantec Enterprise Vault, to cloud repositories such as Google Drive and Box.com. Each of these is an example of a content repository where the organisation may keep important information.

## What is an RSD GLASS® connector?

RSD GLASS® is designed to manage information assets in any repository. To do this for any given repository it needs to be able to connect to that repository, discover what information is held there and what policies should be applied to it and then manage the information lifecycle for that repository.

The piece that connects RSD GLASS® to any individual repository is called a connector. Each connector is different depending on the type of repository and its level of sophistication. But the RSD GLASS® side of the connector is always the same and based on the RSD GLASS® API. This is shown in the diagram below.



## How does an RSD GLASS® connector work?

Each RSD GLASS® connector works in a similar way:

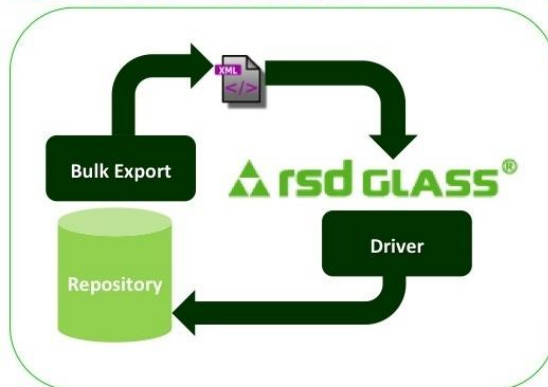
- It is able to capture information from the repository and upload it into RSD GLASS® using a process called, "Bulk Export".
- Following this bulk capture of information from the repository, the connector is able to apply RSD GLASS® policies to the information in the repository using the "Driver" process.
- For some more sophisticated repositories with additional capabilities some connectors (such as the RSD GLASS® SharePoint connector) are also able to provide some additional functionality.

There are four different levels of connector functionality depending on the type of repository. These levels are as follows:

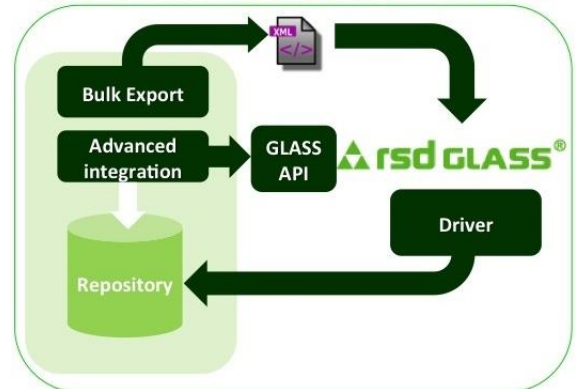
- Level 1 Access Only Connector – RSD GLASS® is able to capture information in the repository and access it through the connector (but cannot store or delete it).
- Level 2 Information Connector – RSD GLASS® is able to capture and access the information, store it and delete it but cannot guarantee immutability (that the information will not be changed by other external processes)
- Level 3 Basic RM Connector – RSD GLASS® is able to guarantee immutability of the information and can therefore confidently apply legal holds and records management level retention rules
- Level 4 Optimised RM Connector – RSD GLASS® is able to provide a rich interface to the content and provide additional and custom functionality to users

The following diagrams show how RSD GLASS® connectors work.

#### RSD GLASS® Connector – Levels 1-3



#### RSD GLASS® Connector – Level 4



For more information about RSD GLASS® connectors and how they work refer to the RSD GLASS® Connector Whitepaper.

The current implementation of the RSD GLASS connector for fileNshare is a level 4 Information connector.

# Overview of the fileNshare connector

## About fileNshare

fileNshare is a Cloud service that was developed and is operated by Perceptive Software Deutschland GmbH, a recognized leader in document management. fileNshare is an online service for companies to share, edit, and update important data and documents in collaboration with others using the device of your choice. It is a secure web-service for synchronizing and sharing files. All documents are stored in fileNshare without the possibility of revisions. Changes to the documents can be traced at any time. Older versions remain accessible and activity logs make it easy to see who shared what with whom and when. Only those who were explicitly approved receive access to documents allowing complete control over corporate knowledge at all times.

## Bulk Export functions

The fileNshare Bulk Export module is a standalone command line application which is delivered as a ZIP archive, which contains all executables and necessary libraries. This application can generate XML reference to the files from the fileNshare repository that will then be referenced from RSD GLASS after being imported by the RSD GLASS Bulk Import component.

Please refer to the RSD GLASS documentation for details on the 'RSD GLASS Bulk Import' functionality.

## Driver functions

The fileNshare governance driver allows RSD GLASS to govern the files stored in a fileNshare repository and make them visible and manageable under the RSD GLASS Governance Manager. The driver enables corporations to control content retention in the fileNshare repository through RSD GLASS which enforces the enterprise's policies. The driver provides common information governance functionality:

- Accessing the content from within the RSD GLASS platform.
- Performing disposition actions on the existing content items when their retention period is reached.
- Declaring content as a new record.
- Disposing of content.

## Advanced Integration functions

The fileNshare application extension with the RSD GLASS Governance Apps, that extend the default functionalities with new enhanced governance capabilities:

- Manual declaration of a record in RSD GLASS without leaving the fileNshare environment.



# Technical requirements

## Supported Versions

The current version of RSD GLASS Governance Services for fileNshare is compatible with the following RSD GLASS platform versions:

- RSD GLASS 3.3.0 and higher.

The supported version of fileNshare REST service API is 1.

## System Requirements

Requirements for the RSD fileNshare driver and application extension with the RSD GLASS Governance Apps:

- No special system requirements are needed, the same applies as for the RSD GALASS application

## Configuration Requirements

To access the fileNshare repository from RSD GLASS it is required to have the user name, password and the URL of the target instance of the fileNshare cloud service. The firewall must be set to allow HTTP traffic between this fileNshare instance and the RSD GLASS server.

# Installation and configuration

## RSD fileNshare Governance Driver

### Driver distribution

The driver is delivered as a zip archive called "RSDGLASS\_GS-fileNshare-Driver.zip" which contains:

- A Java Archive named "*RSDGLASS\_GS-fileNshare-Driver.jar*"
- Additional libraries in the lib folder

### Application server configuration

The driver requires a set of additional Java libraries available in the lib folder of the distribution. These JARs must be added to the CLASSPATH of the application server:

- on Apache Tomcat,
  - The driver *RSDGLASS\_GS- fileNshare-Driver.jar* must be added to the "%TOMCAT\_HOME%\glass\_dir\connectors\"
  - The JARs libraries must be added to the "%TOMCAT\_HOME%\glass\_dir\connectors" directory.
  - the %TOMCAT\_HOME%\conf\catalina.properties file must be adjusted with the following line: *shared.loader=\${catalina.base}/glass\_dir/connectors/\*.jar*

### RSD GLASS configuration

Once correctly deployed, an RSD GLASS administrator will be able to create repositories and virtual repositories pointing to fileNshare.

To verify that the deployment of the driver is successful, verify in the RSD GLASS Governance Manager if 'FileNshare' appears in the driver list.

Content Repositories		Virtual Content Repositories		Activate	Manage	Startup	Available acti	Used Connect	Idle Connecti
fns		FileNshare		✓	✓	✓		0	2

Add/Update Entry

Driver

FileNshare
FileNshare
Google Drive
Java Content Repository
Local File System
Microsoft SharePoint Online

Unique code id \*
Minimum number of connections \*
Maximum number of connections \*
Heartbeat \*
Comments

Activated ☒

\* Connection
Capabilities

User name \*
Password \*
Domain URL \*

\* indicates required field.

## fileNshare specific content repository parameters

There are three parameters needed to configure the fileNshare repository.

**User name** – user name for the fileNshare tenant service managed by RSD GLASS

**Password** – password for the fileNshare tenant service managed by RSD GLASS

**Domain URL** – domain URL of the fileNshare service instance (for example <https://filenshare.saperion.com/fns-service>)

Please refer to the RSD GLASS Governance Manager documentation for more details about RSD GLASS repositories and virtual repositories.

For integration with RSD GLASS Governance Apps please refer to the RSD GLASS Governance Apps Installation and Implementation guide.

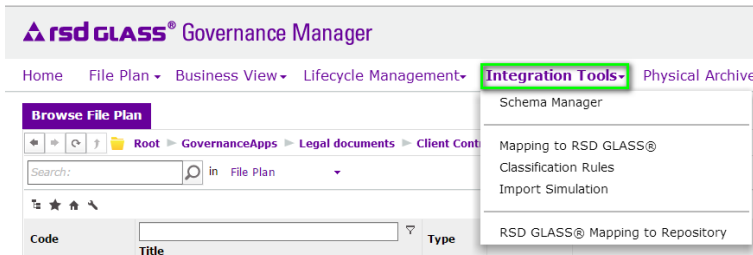
## RSD Governance App for fileNshare

Installation of the separate RSD GLASS Governance App is a prerequisite if you intend to make use of features included in the level 4 driver user interface integration. See the 'RSD GLASS Governance App Installation and Implementation Guide' for further information.

## Mapping and classification rules

Governance Apps in default presentation mode works only when all required metadata are mapped correctly inside RSD GLASS. For more details please refer to RSD GLASS Governance Manager User Guide.

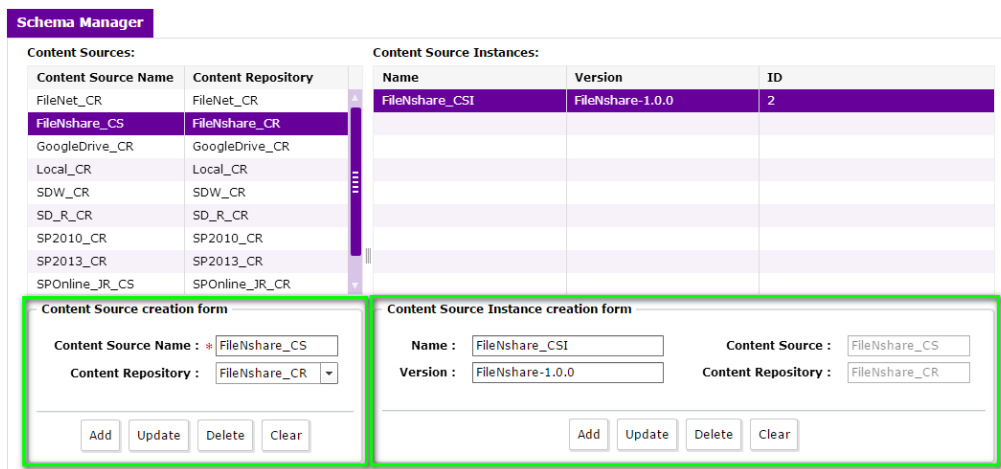
Mapping and classification rules in RSD GLASS Governance Manager are defined in the 'Integration Tools' menu:



## XSD schema generation and upload

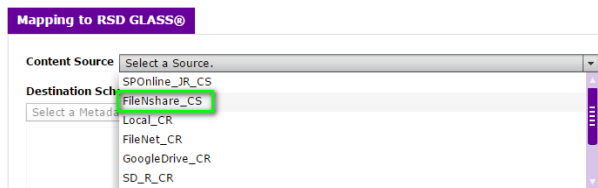
First you need to export the schema using the bulk export functionality of the FileNshare driver package. As a result an XSD schema is generated.

In the second step you need to create a new Content source (CS) and Content source instance (CSI) as shown in the picture below. During creation of the CSI you need to upload the generated XSD schema file.

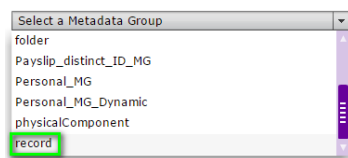


## Mapping to the RSD GLASS definition

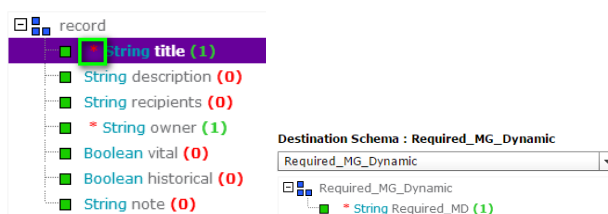
First you need to select the content source created in the previous step (in this example "FileNshare\_CS"):



Then you need to select a metadata group (for Governance Apps it is necessary to create a mapping for the record and required custom metadata):



Then you need to create the mapping for all asterisked values for the record and required custom metadata:



If you do not define, or incorrectly define, metadata, the Governance App is not working. You will receive the following message:

**Validation error** Invalid Metadata!

For the import to work correctly a component metadata group needs to be defined. However, Governance Apps automatically does this for you so you do not need to define it yourself.

The result of the mapping is highlighted below:

Record

Code: 0000000002

Full-qualified code: /0000000007/5000/6040/0000000001/0000000002

Version: 2

Version of the life cycle: 2

Title: client contract 1.pdf

Owner: Authenticated Users

Record date: 09/11/2014

Declare Date: 09/11/2014 12:06:32

Declaration reason: 09/11/2014 00:00:00

Disposition Date: 09/11/2014 00:00:00

Record format: ERCD

Vital: False

Historical: False

Creator: Glass Administrator

Creation date: 09/11/2014 12:06:14

Last modified date: 09/11/2014 12:06:32

Closed: True

Disposal Hold: False

Required\_MG\_Dynamic

Required\_MD: Governed by Governance Apps

## Classification rules definition

First you need to select the content source from the dropdown menu as shown below:

Content Source: FileNshare\_CS

Add new rule

Order Name

1 Default

FileNshare\_CS

Local\_CR

FileNet\_CR

GoogleDrive\_CR

SD\_R\_CR

SDW\_CR

Then you need to click on the 'Add new rule' button and create a rule based on preferences, e.g. in this example all documents will be governed to one folder (highlighted below):

**Classification Rules**

Content Source: FileNshare\_CS

Add new rule

Remove rule(s)

Order Name

1 Default

**Selected Rule**

Rule Name: Default

Source: FileNshare\_CS

Order: 1

**Conditions**

Add new condition (no condition added yet, the rule will always match)

**Results**

Add new result

RSD Glass® Results:

/0000000007/5000/0000000001

**Arشد GLASS® Governance Apps**

0000000003 - FP-FitNesse

0000000004 - FP-FitNesse2

0000000006 - FP-GovernanceAppsDemo

0000000005 - FP-New

0000000001 - FP-SPOnline

0000000002 - FP-WizardGovernanceApps

0000000007 - GovernanceApps

5000 - Legal documents

0000000001 - Client Contracts

It does not mean that you cannot later change place (folder or record class) in Governance Apps, it just means that the default position will be set here.

This is a very basic setup, but it is possible to define rules based on any metadata from the XSD scheme (as you can see the 'Add new condition' button above, e.g. if documentName contains CV, then document is classified directly to the CV folder of the Human resources record class and so on.

**Metadata selector**

export

document

String documentName

String documentPath

String contentId

String parentId

String version

**Conditions**

Add new condition

Metadata Criteria: Operator: Value:

/export/document/documentName contains CV

# Bulk Export

## Requirements for Bulk Export

JAVA 1.6 is required to run the Bulk Export tools. Verify that a JRE is correctly installed on your computer.

## Bulk Export distribution

The fileNshare bulk export is delivered as a zip archive called "RSDGLASS\_GS-fileNshare-Export.zip", which contains all executables and necessary libraries.

## Bulk Export usage

Extract the *RSDGLASS\_GS-fileNshare-Export.zip* file into a folder and run the following commands:

### Glass schema:

```
java -jar RSDGLASS_GS-fileNshare-Export.jar <configFile> schema <outputFile>
```

This command can generate the XSD files that represent FileNshare content types so that these can then be used to create the proper mapping to RSD GLASS Record Classes via the RSD GLASS mapping capabilities.

### Bulk export:

```
java -jar RSDGLASS_GS-fileNshare-Export.jar <configFile> export <outputFile> [<queryFile>]
```

This command can generate XML reference files from FileNshare content that will then be referenced from RSD GLASS after being imported by the RSD GLASS Bulk Import component.

Please refer to the RSD GLASS Operations Guide for details on the 'RSD GLASS Bulk Import' functionality.

## Config file

Create a regular text file that contains the following elements:

```
### fileNshare config file ###  
  
repo.driver.class=com.rsd.glass.driver.fileshare.FileNshareDriver  
  
UserName=<user name for the fileNshare service>  
  
Password=<password for the fileNshare service>  
  
DomainUrl=<domain URL for the fileNshare service>  
  
exclude.metadataas=Declared, Cataloged, Holds
```

## Exclude documents with certain metadata

To exclude Declared, Cataloged and documents with Holds applied use the configuration property **exclude.metadataas** in the **config file**.

**Declared** – exclude documents that have been Declared.

**Holds** – exclude documents with at least one Hold applied.

**Cataloged** – exclude documents that are marked as Cataloged.

You can omit the property or leave the value empty to include all the documents.

## Query file

This file is optional. It contains parameters used to filter the results of the bulk export. Example file:

```
### query file ###
```

```
searchQuery=name:test,modificationDate>2014-08-22T21:33:09Z&limit=100&offset=0
```

Search query is used to limit the results of the bulk export. You can limit using the fields "name", "description", "tags", "contents", "ownerId" and "ownerName". It is also possible to filter using 'modificationDate' and 'creationDate'. Date values must be given in ISO8601 format. To concatenate multiple rules use the ',' character. The valid operators are:

'=' equals

'<' less than

'>' more than

':' contains

Limit and offset are used for paging the search results. Default paging is **offset=0, limit=25** (if no paging parameters are given). **Offset must be 0, the same or a multiple of limit.**

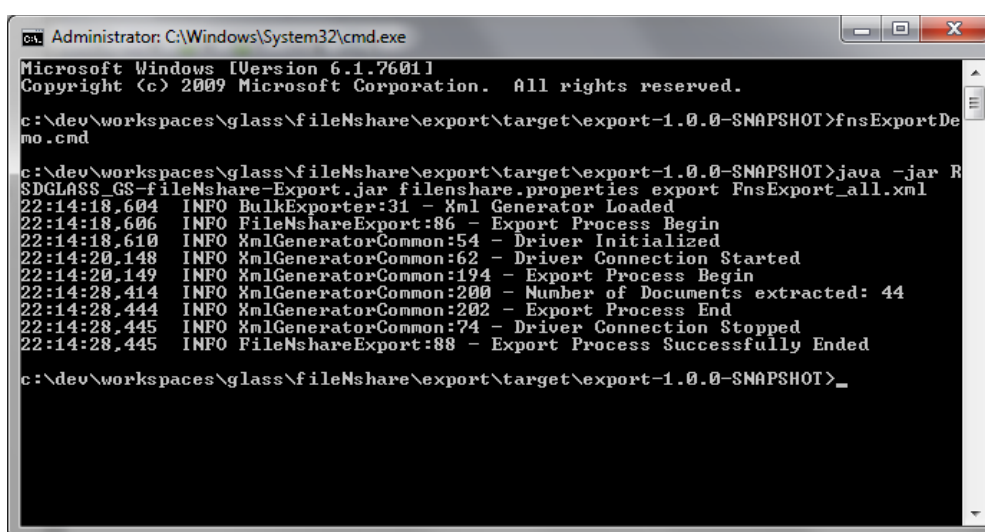
As a shortcut, also the page parameter is supported.

Example: **page=4&limit=50**

A combination with limit is possible. A combination with offset is not supported - 400 Bad Request.

If limit is given, the page-size is the limit-value. If limit is not given, the page-size is the default-limit (25)

## Bulk Export example



```
Administrator: C:\Windows\System32\cmd.exe
Microsoft Windows [Version 6.1.7601]
Copyright (c) 2009 Microsoft Corporation. All rights reserved.

c:\dev\workspaces\glass\fileNshare\export\target\export-1.0.0-SNAPSHOT>fnsExportDe
mo.cmd

c:\dev\workspaces\glass\fileNshare\export\target\export-1.0.0-SNAPSHOT>java -jar R
SDGLASS_GS-fileNshare-Export.jar fileNshare.properties export FnsExport_all.xml
22:14:18.604 INFO BulkExporter:31 - Xml Generator Loaded
22:14:18.606 INFO FileNshareExport:86 - Export Process Begin
22:14:18.610 INFO XmlGeneratorCommon:54 - Driver Initialized
22:14:20.148 INFO XmlGeneratorCommon:62 - Driver Connection Started
22:14:20.149 INFO XmlGeneratorCommon:194 - Export Process Begin
22:14:28.414 INFO XmlGeneratorCommon:200 - Number of Documents extracted: 44
22:14:28.444 INFO XmlGeneratorCommon:202 - Export Process End
22:14:28.445 INFO XmlGeneratorCommon:74 - Driver Connection Stopped
22:14:28.445 INFO FileNshareExport:88 - Export Process Successfully Ended

c:\dev\workspaces\glass\fileNshare\export\target\export-1.0.0-SNAPSHOT>
```

The XML output has been generated successfully:

```
<?xml version="1.0" encoding="UTF-8"?>
<export>
  <document>
    <documentName>search_1408985850908.arc</documentName>
    <documentPath>null</documentPath>
    <contentId>rBFqmgacLEvzqxuNScV1mXGBHIIjjaT8sYsKk-HabCoePHpOGc3dS-xF3fbyl78Ldq6xE00-sK0sQLKWgF_EVg</contentId>
    <parentId>EWWQ3c3U3GbyL6Mm8yPvimwda2CPfXKN3b7j_xU0LIkePHpOGc3dS-xF3fbyl78Ldq6xE00-sK0sQLKWgF_EVg</parentId>
    <version>1</version>
    <type>document</type>
    <description></description>
    <ownerId>14062</ownerId>
    <ownerName>L.Ladislav@rsd.com</ownerName>
    <createDate>2014-08-25T06:57:47</createDate>
    <updateDate>2014-08-25T06:57:48</updateDate>
    <size>24</size>
    <pages>0</pages>
    <hash>e8f6b4e78c7933a3e6219bf7c9f5a127</hash>
    <mimeType>application/octet-stream</mimeType>
    <spaceId>EWWQ3c3U3GbyL6Mm8yPvimwda2CPfXKN3b7j_xU0LIkePHpOGc3dS-xF3fbyl78Ldq6xE00-sK0sQLKWgF_EVg</spaceId>
    <states>
      <state>LOCKED</state>
      <state>METADATA</state>
    </states>
    <tags>
    </tags>
    <allMetadata>
      <metadata>
        <Id>metadata</Id>
        <fields>
          <Declared>rBFqmgacLEvzqxuNScV1mXGBHIIjjaT8sYsKk-HabCoePHpOGc3dS-xF3fbyl78Ldq6xE00-sK0sQLKWgF_EVg</Declared>
          <Holds>rBFqmgacLEvzqxuNScV1mXGBHIIjjaT8sYsKk-HabCoePHpOGc3dS-xF3fbyl78Ldq6xE00-sK0sQLKWgF_EVg</Holds>
          <Holds>rBFqmgacLEvzqxuNScV1mXGBHIIjjaT8sYsKk-HabCoePHpOGc3dS-xF3fbyl78Ldq6xE00-sK0sQLKWgF_EVg</Holds>
        </Holds>
        </fields>
      </metadata>
    </allMetadata>
  </document>
</export>
```

Now the file can be imported into RSD GLASS using the Bulk Import process.



# User Guide

## Functions described in the Governance Apps User Guide

The functions contained in the RSD GLASS Governance App for fileNshare are listed here. Please note that most of these are described in detail in the RSD Governance Services Governance Apps User Guide.

- "Viewing information using the Governance App" - see the Governance Apps User Guide.
- "Create a folder" - see the Governance Apps User Guide.
- "Govern a document" - see the Governance Apps User Guide.
- "Catalog or Govern multiple documents in bulk" - see the Governance Apps User Guide.
- "Correlating information" - see the Governance Apps User Guide.
- "Understanding Error messages" - see the Governance Apps User Guide.
- "Mapping and Classification Rules" - see below.

# Operating Procedures

## Checking the driver status

To check the driver status, go to the Content Repositories menu in RSD GLASS Governance Manger. The Activated, Managed, Startup columns should have green checkmarks for the fileNshare configuration. If not, try to check the configuration parameters and restart the repository connections via the actions available.