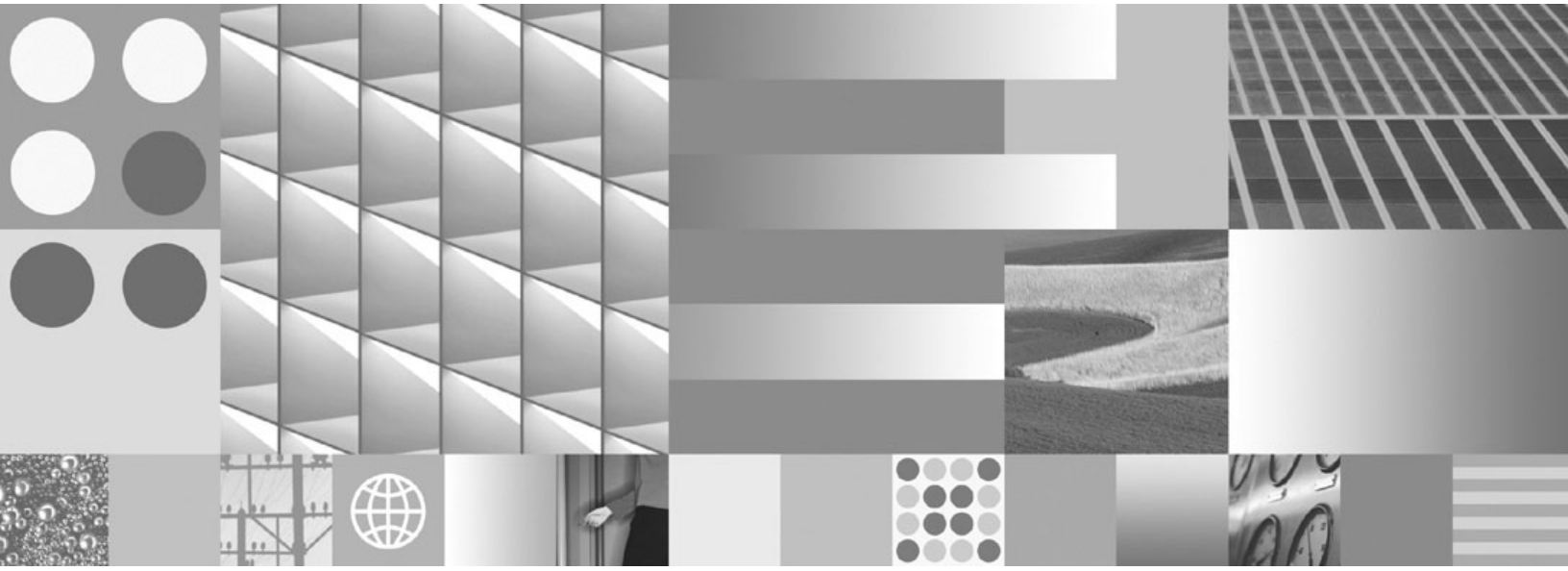
IBM FileNet Image Services

4.1.2



Implementing Enhanced LDAP Security

SC19-2678-00

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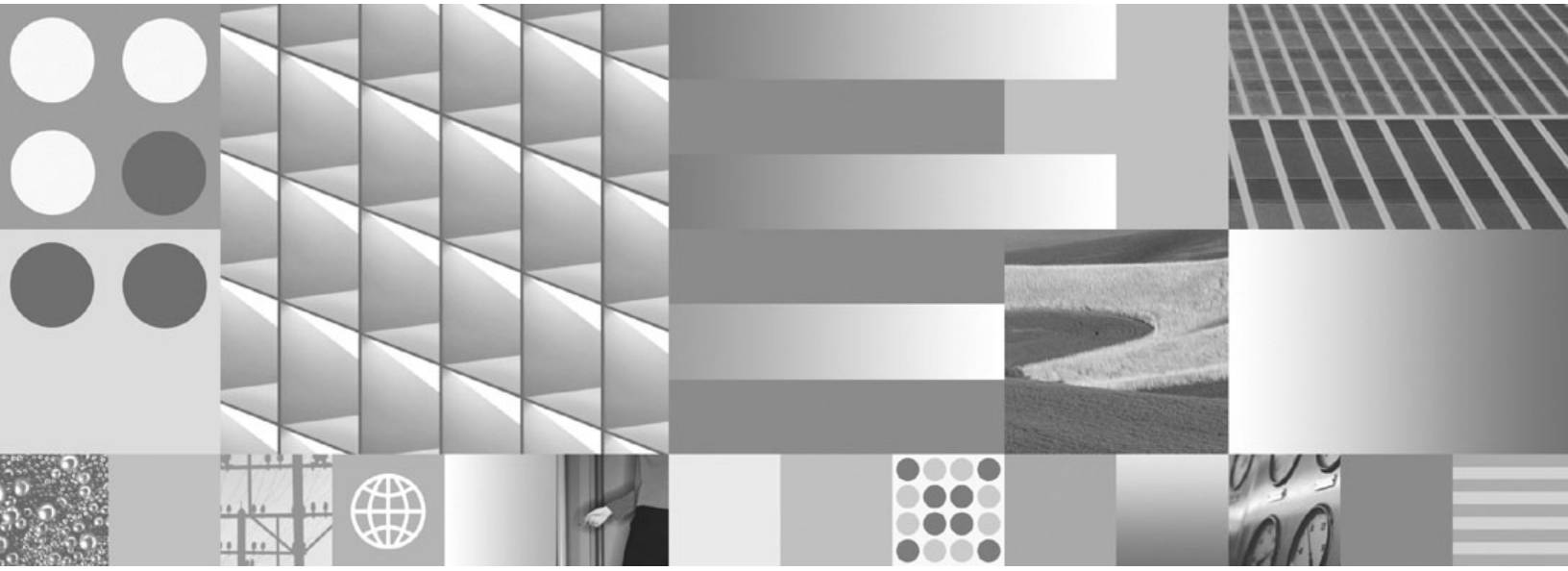
4.1.2



Implementing Enhanced LDAP Security

SC19-2678-00

Note
Before using this information and the product it supports, read the information in "Notices" on page 17.

This edition applies to version 4.1.2 of IBM FileNet Image Services (product number 5724-R95) and to all subsequent releases and modifications until otherwise indicated in new editions.

Contents

Implementing Enhanced LDAP Security

This document provides instructions for exporting user and group information from an LDAP (Lightweight Directory Access Protocol) server and re-importing it into an Image Services system.

Because information technologies are constantly advancing, security has become one of the major areas that require constant improvement. Image Services tools that export and import LDAP data have been enhanced to keep pace with these demands.

The algorithm that creates LDAP passwords has been redesigned to provide greater security. This improvement, along with other security-related enhancements, ensures that Image Services software continues to provide a solid, robust, high level of security to its customers.

This latest enhancement adds two columns of data to the Image Services security database table. One column contains the name of the LDAP Server and the other contains the IP address of the LDAP Server. Adding these columns provides the ability to import users from multiple LDAP servers.

Audience

Everyone who accesses Image Services through LDAP unified logon needs to follow this procedure to implement enhanced LDAP security.

You do not need to continue with this procedure if you do not use LDAP unified logon or have not implemented the LDAP unified logon environment.

Document revision history

IS version	Date	Comment
4.1.2	Nov. 2008	Initial release.

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The survey will take approximately 30 minutes to complete and must be completed in a single session; there is no option to save a partially completed response.

Starting Points

For this upgrade, your IS system must already be running one of these releases of Image Services:

- **IS 4.0 SP5 FP2 or higher**
- **IS 4.1.1 or higher**
- **IS 4.1.2 or higher**

These releases of Image Services contain the updated versions of the **cranuser**, **fn_ldif_xfer**, and **LDAP_import** tools, which are used in the following procedure.

Backward Compatibility

Due to the potentially large number of servers and clients involved, you might need an extended period of time to accomplish this update. Because of this, the IS server software is compatible with both the old and new client passwords. During this transition phase, IS will allow LDAP users to log on using either their old or new password.

When all servers and clients have been updated, you can easily turn off the backward compatibility feature.

Back Up the System

Before implementing Enhance LDAP Security, make a complete backup of your system configuration. For complete information on making system backups refer to:

- *Image Services System Administrator's Companion for UNIX*
- *Image Services Enterprise Backup and Restore User's Guide*
- *Image Services Third-Party Backup/Restore Guidelines*

To download these documents from the IBM support page, see **"Accessing IBM FileNet Documentation" on page 8**.

Update the Image Services System

On the Image Services server, re-export and re-import all LDAP users using the LDAP tools. During the re-import process, you must specify the **f** option to force the password to be recalculated and updated. This process needs to be done only once.

If you are an ISRA (Image Services Resource Adapter) customer who supports anonymous logon, you must recreate the IS anonymous user using the **cranuser** tool. You must specify the **s** and **a** options.

If you used the **fn_ldif_xfer** tool to create the XML input file, you must run **fn_ldif_xfer** again for all LDAP users. You must also specify the **s** and **a** options.

Stop the Image Services Software

As the FileNet software user, such as **fnsw**, stop all Image Services processes by entering:

WIN

```
initfnsw -y stop
killfnsw -D -y
```

UNIX

```
initfnsw -y stop
killfnsw -DAy
```

Upgrade the System to the Appropriate IS Fix Pack

You must install the appropriate Image Services Fix Pack that is referenced in **“Starting Points” on page 10**. The Fix Pack installs modules that are essential for implementing the security upgrade. At this time, download the latest Fix Pack.

Recreate ISRA Anonymous Users

ISRA users who support anonymous logons must recreate the IS anonymous users using the **cranuser** tool. Refer to the description of **cranuser** in the *IS System Tools Reference Manual*. To download this document from the IBM support page, see **"Accessing IBM FileNet Documentation" on page 8**.

For example:

WIN

cranuser /hidm1 /sldaphost /a10.55.14.25

UNIX

cranuser -hidm1 -sldaphost -a10.55.14.25

The LDAP server name and its IP address will be used in the recalculation of the encrypted password.

Export the LDAP Users

Export the LDAP users using the ldap_exp tool, the tool that exports users, groups, and group memberships from an LDAP-based directory service, such as Microsoft Active Directory. Refer to the description of the **ldap_exp** tool in the *IS System Tools Reference Manual*. To download this document from the IBM support page, see **"Accessing IBM FileNet Documentation" on page 8**.

Convert LDIF Files to XML Format

IS users who used the **fn_ldif_xfer** tool to create the XML input file, must run **fn_ldif_xfer** again for all LDAP users. Refer to the description of the **fn_ldif_xfer** tool in *IS System Tools Reference Manual*. To

download this document from the IBM support page, see **"Accessing IBM FileNet Documentation" on page 8**.

For example, as the FileNet software user, such as **fnsw**, the command you enter might look like this:

WIN

```
fn_ldif_xfer  /imy.ldif  /ofilenet.xml  /tmsft  /sWinter   /a10.14.5.63
```

UNIX

```
fn_ldif_xfer  -imy.ldif  -ofilenet.xml  -tsun  -sSunspot  -a10.14.5.66
```

Import the LDAP Users

Import the LDAP-based security information into the IS Security Service. This step takes the XML formatted input file and updates the Image Services security database. Refer to the description of the **LDAP_import** tool in the *IS System Tools Reference Manual*. To download this document from the IBM support page, see **"Accessing IBM FileNet Documentation" on page 8**.

For example, as the FileNet software user, such as **fnsw**, the command you enter might look like this:

WIN

```
LDAP_import   /h<server1>  /i<userlist>.xml  /f
```

UNIX

```
LDAP_import  -h<server1>  -I<userlist>.xml  -f
```

The **f** option forces the password encryption to be recalculated and updated with a stronger algorithm.

Update the Client Systems

After the IS server has been updated, you can upgrade all of the client systems, either as a group or one at a time. Due to a potentially large number of client systems, the installation of the updated client applications may require an extended period of time. Because of this concern, the IS server has backward compatibility. The client can log on using either the old or new password. During this transition phase, IS will allow LDAP users to log on using either password.

It is also possible that you may have a large number of IS servers to support. Fortunately, all the enhancements made in IS software are de-coupled from the client enhancements. This means that a mixture of old and new client applications will work with a mixture of old or new IS root servers at the same time.

Your client application suite can be one of the following:

- ISRA
- IDM Desktop, WebServices, Open Client
- Siebel Connector
- eProcess

Back Up the System

When the Image Services update is finished, make a complete backup of your system configuration. For complete information on making system backups refer to:

- *Image Services System Administrator's Companion for UNIX*
- *Image Services Enterprise Backup and Restore User's Guide*

- *Image Services Third-Party Backup/Restore Guidelines*

To download these documents from the IBM support page, see **"Accessing IBM FileNet Documentation" on page 8**.

Important It's especially important to make a backup after this update to the MKF Security database. Earlier backups cannot be restored after the database has been modified.

Return to Production Mode

Now that you've finished updating the MKF Security database, you can place your Image Services system back in normal operation. There should be no change in operation or performance at your current Image Services release level.

Disable Backward Compatibility

After all IS servers and client applications have been upgraded to use the enhanced LDAP security, you can disable the backward compatibility support.

Log onto the Image Services Root/Index server as a member of the fnsw group, such as **fnsw**,

Then use the touch command to create the following trigger file. For example:

touch /fnsw/local/noldapfb.trg

The existence of this trigger file will prevent LDAP users from using their old passwords.

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Program Number: 5724-R95

Printed in USA

SC19-2678-00