

Laserfiche Account Conversion Utility

White Paper

January 2015

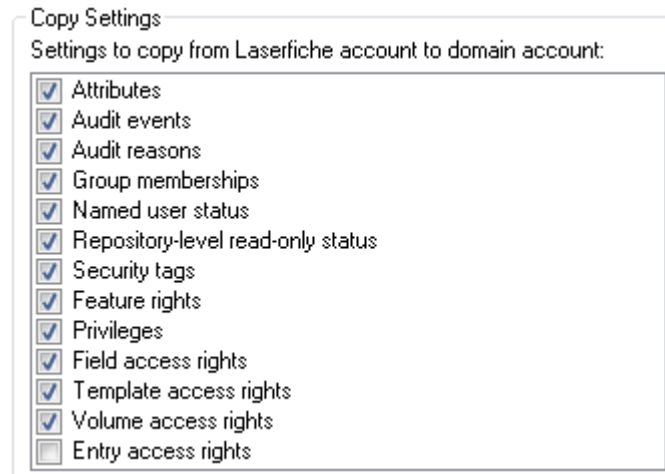
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Summary

The Laserfiche Account Conversion Utility copies virtually all Laserfiche settings and security assigned to a Laserfiche user to a matching domain account. The utility, which can be run in batch, is designed to help administrators transition from using Laserfiche trustees to domain accounts, which, in most cases, is highly recommended.

Matches are made based on the name of a Laserfiche user and one of the following Microsoft Active Directory (AD) attributes: SAM-Account-Name, Common-Name, or Display-Name. For example, a Laserfiche user named JDoe could be matched with a domain account using the same SAM-Account-Name. Alternatively, if Laserfiche users have been linked to Windows accounts using the "Domain Accounts" option, that information can be used to look up matches instead.

The following screenshot of the utility's user-interface shows all the possible settings that can be copied from Laserfiche users to their matching domain accounts:



Why are Windows trustees preferred?

If your organization uses AD, it is significantly easier for both users and administrators to use domain accounts instead of Laserfiche users.

For users, they can sign into a repository without entering a Laserfiche-specific username or password, as they are authenticated using only their Windows credentials, which is a "single sign-on" authentication method.

For administrators, they are not required to create and maintain a Laserfiche-specific account for each repository user. Instead, the administrator need only trust existing domain accounts into a repository, and then assign Laserfiche settings/security to them (optionally, the trusted domain accounts can be added to Laserfiche groups, to apply Laserfiche settings/security in batch). In addition, for Laserfiche Rio and Avante systems, adding a domain account to

a Named Users List allows the same user to log in to multiple repositories with a single license.

Tip: For more information on the benefits on Rio, Avante, and named user licensing, see [Laserfiche Rio: Frequently Asked Questions](#) and [Laserfiche Avante: Frequently Asked Questions](#) on the Laserfiche Support Site (log in required).

Note: Unlike Laserfiche users, the use of Laserfiche groups is recommended.

Who is this utility for?

In Laserfiche 7 and earlier, Laserfiche users were required in order to assign Laserfiche settings/security to trustees, as well as to provide Windows authentication. Though this is no longer the case in Laserfiche 8 and above, in many cases, repositories that were migrated continue to use or maintain Laserfiche users, because of the amount of time it would take to manually convert them to domain accounts. This utility offers administrators a quick and easy way to automate the process.

In addition, since domain accounts are especially recommended when using Avante/Rio, this utility can help you transition from Team/United to these systems.

Note: The utility does not require that you migrated from a pre-8 version of Laserfiche. It will work for all situations where administrators want to transition from Laserfiche to domain accounts.

Note: In some instances, it may still be necessary to use some Laserfiche users. For example, if you want to create a user that runs your workflows, it is easier to create a Laserfiche user for this. Or, if you need to provide repository access to a user that, for whatever reason, isn't in AD, a Laserfiche user would suffice.

What are the AD attributes I can match on?

Matches can be made based on the name of a Laserfiche user and one of the following Active Directory attributes: SAM-Account-Name, Common-Name, or Display-Name.

If you are unsure of which AD attribute you should match on, we recommend browsing your AD server using Active Directory Explorer (ADE), which can be downloaded for free from Microsoft.com. Once you have opened and authenticated into ADE, browse through the relevant Domain Content (DC) and Organizational Unit (OU) nodes until you see a list of the appropriate domain accounts. Select an account in the left pane to display its attributes in the right pane. Review the SAM-Account-Name, Common-Name (cn), and

Display-Name values for various users to determine the best attribute to match on.

Alternatively, if your existing Laserfiche users have already been assigned linked Domain accounts, you can instead select "Find AD Users that match domain accounts on LF users" - this will migrate all Laserfiche users that have been assigned domain accounts (any Laserfiche account that has not been given a linked Domain account will be ignored), and will use that information to find the Windows users to create.

How do I install the utility?

Before installing the utility, ensure the following pre-requisites are present:

- .NET 3.5. Available from Microsoft.
- Microsoft Visual C++ 2008 SP1 Redistributable Package: If this component is not installed, you will receive an error similar to the one shown in the screenshot below when attempting to run the program. Available from Microsoft.



Important: Ensure you install the SP1 version of this component, as other versions may not work. Also, note that there is a 32-bit and a 64-bit version.

- Oracle Client (version 11.1.0.7.0 or higher): This is only a requirement if you wish to copy entry access rights from Laserfiche users to their matching domain accounts and your repository uses an Oracle database. Available from Oracle.

Note: The utility was tested using the Administrator version of the 11.1.0.7.0 Oracle client, with a tnsnames.ora file in C:\app\<username>\product\11.1.0\client_1\network\admin that defined a connect descriptor to the Laserfiche repository database.

In addition, we recommend running this utility from a 32-bit machine running Windows XP, Windows Vista, or Windows 7.

After satisfying all pre-requisites, run Account Conversion Utility.msi and complete the installation wizard.

How should I prepare to run the utility?

Keep in mind the following points before running the utility:

- The utility should only be run by an experienced Laserfiche administrator who understands the system.
- It is highly-recommended that you either run the utility on a copy of the repository's production database, or perform a complete database backup before running the utility (the database is the only repository component that will be modified). After the utility has completed running, log in to the repository and test out the changes.
- If you are running the utility on the production database, it should not be run during normal business hours, when users are attempting to access the repository.
- The utility only supports repositories that are on Laserfiche 8.0 and above.
- Features in the utility that are specific to named licensing models (Avante and Rio) do not apply to concurrent licensing models (Team and United). For example, attempting to use the utility to copy the named user status from Laserfiche users to domain accounts or remove Laserfiche users from the named user list will not succeed on Team and United. If you attempt to do this, below are some of the possible warning messages that will be written to the log file (if it is enabled):
 - The named user database could not be found or was not opened correctly.
 - This server does not support the requested property.
 - No response received from the server.
- The utility can only be used to copy settings from Laserfiche users to domain accounts. It cannot be used to copy settings from Laserfiche groups to domain accounts.
- Only Microsoft Active Directory domain accounts are supported, not pure LDAP.
- The AD attribute you chose to match on should contain unique values. For example, if you choose to match on SAM-Account-Name, there should not be more than one AD user that shares the same SAM-Account-Name.

Note: If the utility finds multiple matches, it will match the Laserfiche user with the first domain account that AD returns.

Note: If the utility matches a Laserfiche user with a domain group, it will copy settings to the group. Ensure none of your Laserfiche usernames matches those of a relevant AD attribute.

- If the utility matches a Laserfiche user with a domain account that is already associated with the repository, settings/security will be copied on top of any existing settings/security already defined for the domain account.

Note: This may result in duplicate audit reasons and attributes being set on the domain account.

- The utility can copy entry access rights. If this option is selected, for each user, the utility gets a list of all entries in the repository the user has been explicitly assigned rights to, and duplicates those rights to the matching domain account. While choosing to copy entry access rights will always increase the amount of time it takes the utility to run, for most users the result will not be drastic. However, if a user has a large number of unique rights, processing time could be significantly increased. For example, when we examined our internal Laserfiche repository, we noted that 186 of our 198 Laserfiche users had less than 1,000 unique rights assigned to them (i.e., we had 12 outliers). As a result, we configured the utility to skip copying entry access rights for a user if they had more than 1,000 rights (this is an option in the utility's user interface). Using this setting, the utility finished running in just over 38 minutes, and all settings were copied except for the entry Access rights for the outliers. Alternatively, if we had chosen to include outlier entry access rights, the utility would have taken multiple days to finish. Instead, the better option to handle the outliers was to either manually redefine their entry access security from scratch (which would likely lead to a more streamlined security profile for each), or use the utility's "skip all users except x" feature, which allows you to process one user at a time.

Important: We recommend configuring the utility to skip copying entry access rights for a user if they have more than 1,000 rights. If you choose this option, the utility will copy all other specified settings/security for the user (i.e., only the user's entry access rights will be skipped). The log file will note which user's rights were skipped, so you can handle them later.

Note: Previous versions of Laserfiche supported a propagation feature which enabled you to push entry access rights assigned to a parent object down to its children. In most cases, users with more than 1,000 entry access rights are the result of propagation.

- As seen in the screenshot below, while the utility is running, it will show its current processing action, its progress on that action, and its

overall progress. If a specific action is taking a long time to complete, the utility allows you to skip the action and proceed to the next one. The log file will note which actions were skipped, so you can handle them later.



- If you click Cancel during processing, the utility will finish its current processing action, finalize the current user, and then stop running. Regardless of whether you cancel or let the utility finish processing on its own, the log file will note all repository modifications that were made.

How do I run the utility?

After installing the utility, follow the steps below to run it:

1. Click the Windows “start” button.
2. Select All Programs.
3. Select Laserfiche.
4. Select Account Conversion Utility.
5. Select Account Conversion Utility Program.
6. On the Authentication tab, in the Microsoft Active Directory (AD) section, enter the domain associated with your Active Directory server.

Note: The Windows credentials associated with the user running the utility will be used to authenticate to the AD server. Ensure this account has rights to query AD.

7. In the Laserfiche section, specify a Laserfiche Server, repository, and repository authentication information.

Note: The utility must authenticate as a user with various Laserfiche privileges, depending on the types of settings/security you chose to copy (see below). If the user you specify lacks a necessary privilege, you will be notified after clicking OK.

Tip: To ensure the utility is able to copy all possible settings/security, we recommend authenticating as a user that has been granted all Laserfiche privileges.

8. On the Copy Settings tab, in the section by the same name, specify the Laserfiche settings/security that should be copied from Laserfiche users to their matching domain accounts.

Note: If you choose to copy field, template, and/or volume access rights, both specific and default rights will be copied.

Note: If you are unfamiliar with any of the items in the list, search the Laserfiche Administration Console help files for more information.

Note: the option to copy named user status will be ignored on Rio systems, as named user status for Windows accounts under Rio licensing is controlled by the license manager rather than at the repository level.

Note: If you chose to copy entry access rights, for each user the utility will directly connect to your repository's database in order to retrieve a list of entries to copy rights from (the direct, read-only connection is made to save on processing time). As a result, the Database Authentication section of the utility must be configured (see the next step).

9. Conditionally: If you chose to copy entry access rights, in the Database Authentication section, specify how the utility should authenticate to your repository's database (the user you specify must have sufficient rights to read from the database):

- Chose My Windows Credentials for the utility to authenticate using the Windows credentials associated with the user running the utility. This option should not be selected for Oracle databases.

- Chose SQL/Oracle Credentials for the utility to authenticate using a specified SQL/Oracle username and password, which you must provide. In addition, for Oracle databases only, enter a TNS Service Name that points to a connect descriptor defined in a tnsnames.ora file on the current machine.

Note: For Microsoft SQL Server databases, it is not necessary to define the machine hosting the database or the database name. These properties will be automatically identified by the utility.

10. On the Options tab, in the Match Type section, select the AD attribute that should be used to match Laserfiche users with domain accounts, or select "Find AD users that match domain accounts on LF users" to process Laserfiche users that have been linked to domain accounts.
11. Optional: In the Account Modifications section, specify what actions should be taken on the original Laserfiche users after settings are copied to their matching domain accounts:

- Delete: Laserfiche users will be permanently deleted and cannot be recovered.
- Add Email Attribute: the utility will pull the email attributes from Windows users created by this utility, then apply the [Workflow]E-mail attribute to the accounts so created.
- Disable New Accounts: the utility will mark the new Windows accounts it creates as disabled by default (useful for testing).
- Disable: Laserfiche users will be unable to log into the repository using their original username and password. Instead, they will be forced to use their Windows credentials.

Note: We recommend enabling this option, then manually deleting the relevant Laserfiche users after you have tested the utility's changes.

- Remove from Named users list: If you chose to copy named user status from Laserfiche users to their matching domain accounts, we highly recommend enabling this option. The Laserfiche user will be removed from the Named Users list directly before the matching domain account is added to the list, ensuring you do not run out of available named user seats while the utility is running.

Note: This option is primarily aimed at Avante users. Rio users, depending on their setup, may have to manually modify their Laserfiche License Manager Server's Named User list for the relevant domain accounts to receive repository access. For more information, search the License Manager help files for "Registering Windows or LDAP Named Users."

Note: All of the above settings only apply to users that were successfully matched with a domain account.

12. Optional: In the Skip Options settings, choose any of the following options:

- Skip all users except: Enables you to only run the utility on a specific Laserfiche user. Enter a Laserfiche username.

Note: This feature is designed for situations where a specific user has a large number of settings/security (e.g., entry access rights), and, as a result, was skipped during the first time the utility ran. Using this feature, you can return later and process only this user, which gives you more control over processing.

- If a user has more than ___ entry access rights, don't copy them: Enables you to skip the processing of entry access rights for a user with more than a specific number.

Tip: We recommend that you skip copying entry access rights for a user if they have more than 1,000. If you choose this option, the utility will copy all other specified settings/security for the user (i.e., only the user's entry access rights will be skipped). The log file will note which user's rights were skipped, so you can handle them later.

- Skip disabled users: Users currently set to disabled will not be processed.

13. In the Log Settings section, specify whether logging should be enabled and, if so, where the .txt log file should be saved to.

Tip: It is highly recommended that you enable logging, as doing so provides you with a complete report of all repository modifications that were made and which actions were skipped.



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Author: Jonathan Powers, Adam Field

Description:

This white paper explains how to use the Laserfiche Account Conversion utility.

Laserfiche
3545 Long Beach Blvd.
Long Beach, CA 90807
U.S.A

Phone: +1.562.988.1688
www.laserfiche.com

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