

# Laserfiche Rio 9.1: Deployment Guide

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**Laserfiche®**

## Table of Contents

How Laserfiche Licensing Works .....	4
Types of Licenses .....	4
Named User Licenses .....	5
WebLink Public Portal Licenses .....	6
Forms User Licensing.....	7
License Interaction in the Repository.....	7
License Allocation and Repository Authentication .....	7
License Allocation and Security .....	8
License Allocation and Auditing.....	9
License Manager .....	10
Install License Manager .....	10
Register Your License Server.....	12
Firewall and Communication Considerations.....	12
Create a Licensing Database.....	12
Manage License Administrators .....	13
Register Directory Named Users .....	14
Register Devices .....	15
Register Your Laserfiche Servers.....	16
Register Your Other Applications .....	19
Laserfiche Client, Administration Consoles, and Snapshot.....	20
Laserfiche Workflow .....	20
Web Access, Import Agent and ScanConnect.....	20
Other Products.....	20
Generate a License .....	22
Register Repository Named Users.....	23
Active Directory Group Synchronization.....	25
Configure Users for WebLink Public Portal Access .....	29
Laserfiche Server .....	31
Install the Laserfiche Server .....	31
Upgrade the Laserfiche Server.....	31
Create, Register or Migrate a Repository .....	32

Grant Repository Access to Named User Windows Accounts.....	32
Other Considerations .....	33
Installing Other Products .....	34
Laserfiche Client and Snapshot .....	34
Laserfiche Administration Consoles .....	34
Workflow Suite .....	34
Web Access.....	35
Laserfiche Distributed Computing Cluster (Preview Release) .....	35
Other Applications.....	35
Forms .....	36
WebLink.....	36
Quick Fields.....	37
Agenda Manager .....	37
Laserfiche SDK .....	37
Plus .....	38
Import Agent.....	38
ScanConnect .....	38
Laserfiche Rio Maintenance .....	39
Back Up Your Licensing Database.....	39
Update a Master License .....	40
Update an Application License .....	40
Move Your License Server and Database .....	41

Laserfiche Rio is an enterprise edition of Laserfiche that combines the Laserfiche Server's content management with Laserfiche Workflow's business process management. Laserfiche Rio includes unlimited Laserfiche Servers and repositories at no additional cost. It also includes Web Access, a Web-based client that makes your information available to users anywhere in the world, and Web Admin, which allows administrators to flexibly manage your installation through a browser. Laserfiche Rio gives you powerful, flexible tools for working with your information at large, multi-server sites where many users will be accessing your data.

Laserfiche Rio's named user licensing ensures that users who should have access will always be able to log into the repository without fear of the site's licenses being taken up, allows you to set up computer kiosks for more general access, and provides new flexibility for sites that use WebLink for public portal access.

Laserfiche Rio includes the Laserfiche Server and Client, the Web Administration Console and Advanced Audit Trail (which are installed with the Laserfiche Server), E-mail Plug-in and Snapshot (which are installed with the Laserfiche Client), and Laserfiche Workflow and Web Access (which are separate installations). In addition, Laserfiche Rio includes support for unlimited Laserfiche Server installations and unlimited repositories.

Laserfiche Rio includes License Manager, an administrative tool through which you will register your applications, generate individual installation licenses, and determine which users should have named user access to the repository. These steps need to be performed before the rest of the Laserfiche suite can be installed.

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**Note:** Laserfiche Rio 9.1 is fully compatible with License Manager 8.3. You do not need to upgrade License Manager to use it with Laserfiche Rio 9.1.

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Deploying Laserfiche Rio has several steps:

- Install the Laserfiche License Manager Server and Administration Console.
- Register your License Manager Server and create a licensing database.
- Activate your installation to retrieve the master license for your licensing database.
- Allocate named user licenses to Windows domain or LDAP directory accounts.
- Allocate device licenses.
- Register your Laserfiche Server or Servers.
- Register other applications. Optionally, set up Active Directory group synchronization to automatically monitor changes to Windows groups

and allocate named user licenses accordingly. Do not manually allocate named user licenses to Windows user accounts if you decide to configure Active Directory group synchronization rules.

- Install the Laserfiche Server.
- Grant Trusted access to directory named users on a per-repository basis.
- Create any Laserfiche users you want to use, and grant them repository named user licenses.
- Install other Laserfiche applications.

Each of these steps will be explained in detail in this deployment guide.

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**Important:** This guide will refer to both the License Manager Server and the Laserfiche Server, and to both the License Manager Administration Console and the Laserfiche Administration Console. It is important to note that these are different installations and can be on different computers. When you are instructed to perform a task, be sure to read carefully to determine which server the action should be performed on.

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## How Laserfiche Licensing Works

Laserfiche products must be properly licensed both to install and to run. This section discusses licensing for products that are included with Laserfiche Rio, and for other products you may license.

Licensing with Laserfiche Rio relies on a *master license*—a file containing the licensing information for all products—that determines how many named user and public portal licenses you have. You will also use this master license to generate individual installation licenses for the products you are licensed for. In most cases, you will obtain your master license using an activation key, which allows you to immediately retrieve the most up-to-date version of the license from Laserfiche.

For information about generating specific product licenses, see [Registering Your Laserfiche Servers](#) and [Register Your Other Applications](#).

## Types of Licenses

There are two basic types of licenses that can be used with Laserfiche Rio: named user licenses and public portal licenses. Named user licenses reserve a connection for a particular user or device, and can be used with any Laserfiche products. Public portal licenses are used only with Laserfiche WebLink, and allow you to provide public read-only access to your repository.

## Named User Licenses

Named user licenses are the most common way for Laserfiche users to access the Laserfiche repository. Each named user license is allocated to a single user or device. The named user license is reserved for this user or device—they will always have access to the repository.

Each named user license may be associated with only one Windows account, LDAP account, Laserfiche user or device. Named user licenses cannot be associated with groups; they must be associated with individual users, and cannot be shared.

A single named user license can support up to four simultaneous connections. This means that, for example, a single user could have the Laserfiche Client, Quick Fields, Workflow and an integration script running at the same time, using a single named user license.

Named user licenses may be either full or retrieval licenses. A full license permits a user to both view and modify information in the repository. A retrieval license only permits a user to view information in the repository; a user with a retrieval license cannot make changes to repository contents or add new contents to the repository. All three types of named user licenses, below, may be either full or retrieval.

There are three types of named user licenses:

A **Directory Named User** license is assigned to a Windows Account or LDAP user. It can be used to connect to any Laserfiche Server or repository at your site. For example, if the Windows user DOMAIN/JSmith has been allocated a Directory Named User license and you have two Laserfiche Servers, each of which have two repositories, the user can use that single license to log in to any of those repositories on any of the Laserfiche Servers. You do not need to allocate Directory Named User licenses by Server; one Directory Named User license can be used with any Laserfiche Server at your site.

A **Repository Named User** license is assigned to a single Laserfiche user. A Repository Named User license must be allocated to a specific Laserfiche Server, and then must be assigned to a single user in a single repository. It is not shared between repositories, because the user object to which it is assigned only exists in one repository. For example, if the Laserfiche user JDoe exists in two repositories, and you want that user to be able to log in to both, you will need to allocate two Repository Named User licenses, one for each repository. This is true even if they are both on the same Laserfiche Server.

A **Named Device** license is tied to a particular computer; any user may log in from that computer, but the license will not be available when accessing the repository from any other computer. Like Directory Named User licenses, Named Devices are not specific to a single repository. For example, if you have a scan station that will be used by multiple scanner operators to scan

into two different repositories on two different Laserfiche Servers, you can allocate one Named Device license to that scan station for access to both. Note that Named Device licenses cannot be used with Laserfiche Web Access, WebLink, or Web Administration Console.

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**Tip:** Because they offer the most flexibility, can be used with multiple repositories across your installation, and do not need to be reserved for specific Laserfiche Servers, we strongly recommend using Directory Named Users or Named Devices whenever possible. Repository Named Users should only be used when it is not possible to use a directory account or reserved device.

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Full and retrieval licenses make up two distinct license pools. Once you have allocated all your full licenses, you cannot allocate any more even if you still have retrieval licenses to allocate, and vice versa. However, within those license pools, the licenses can be allocated however you like. You can allocate a full named user license to a directory named user, a repository named user, or a named device. If you have allocated a full license to a directory named user, you can later remove it from that user and allocate it to another user or device. The same is true for retrieval licenses.

### WebLink Public Portal Licenses

A public portal license is a license type that allows public users to access the Laserfiche Server through Laserfiche WebLink. Because a WebLink installation may be accessed by the public, it is not feasible to allocate named user licenses to everyone who will need to access the repository through WebLink. With a public portal license, you can make your repository available for public access using WebLink.

Public portal licensed connections are read-only, meaning they can be used to view documents but not modify them. Public portal licenses may only be used with WebLink; they are not available for other applications. They are linked to the specific Laserfiche Server with which they will be used.

Public portal licenses vary depending on how many connections to WebLink they allow. Some allow access to a specific number of connections; others allow unlimited connections, although large numbers of connections will eventually affect server performance. You can allocate your available public portal licenses to your Laserfiche Servers during Server registration. If you are using unlimited public portal licenses, you must allocate one public portal license for each CPU on the Laserfiche Server computer that WebLink will connect to. For instance, a Laserfiche Server with two processors would need to be allocated a dual-CPU public portal license (or two single-CPU public portal licenses) for unlimited access. (Note that a dual-core processor does not count as two processors.)

Public portal licenses are always read-only.

## Forms User Licensing

There are three ways that a user can access Laserfiche Forms.

**Full named users** can log in using the same user account they use to log in to a Laserfiche repository. These users have full access to Forms, although you can use security settings to restrict their access. Retrieval named users cannot use their named user accounts to log in to Forms.

**Authenticated participant users** are allocated per Forms instance when the instance is registered, and can log in to Forms to start process instances and perform user tasks (again, you can use security settings to further restrict their access). Authenticated participant users cannot create or administer business processes. Since participant users are only used with Laserfiche Forms, they are assigned to individuals on the Forms System Security page for your Forms installation.

If your Forms instance is a **Forms Portal**, public anonymous users can submit publicly published forms. If you are licensed for a limited number of Forms Portals, you should specify whether a given Forms instance should be allocated a Forms Portal license when you register it. If you are licensed for Enterprise Forms Portal, all of your Forms instances can be used as Forms Portals.

For more information, see [Installing Laserfiche Forms](#), [Forms Licensing](#), and [Forms Security](#) in the Laserfiche Forms help files.

## License Interaction in the Repository

For the most part, license allocation has no effect on other settings in your Laserfiche repository. Allocating a license to a user does not grant them any rights to the repository, nor does it affect their auditing or other settings. By itself, license allocation does not even grant them the rights to log in. It simply indicates that they are capable of connecting to a Laserfiche Server.

This section contains more information on the interaction between license allocation and repository settings.

## License Allocation and Repository Authentication

In order for a user to log in to the repository, they must have both a valid license and a user account in the repository that has been granted trusted access. The license may be a named user license allocated to that user, a computer with a named device license that can be used to log in, or access to a WebLink installation that has an associated public portal license. The user account may be a Windows user or LDAP user that has been granted Trusted access to the repository, or a Laserfiche user created in that repository.

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**Note:** A WebLink installation configured to automatically log users in may appear to log them in without a user account. However, users who are automatically logged in are still

accessing the repository as a particular account, they are simply not prompted to specify the account name. See the [Automatically Log In](#) topic in the WebLink Administration and Configuration Guide for more information.

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Because repository authentication is not the same thing as license allocation, you can specify which users should be able to log in to which repositories. Simply allocating a named user license does not bypass the authentication step. A Windows domain or LDAP directory user must have Trusted authentication (either on their own account, or inherited from one of their groups) in order to log in. Without that authentication, they will not be allowed to log in to the repository. See [Windows and LDAP Authentication](#) for more information.

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**Example:** Joe has a Windows domain account (DOMAIN\Joe) that has been granted a named user license. His company has three repositories: Sales, Account Information, and HR. Joe should be able to access the Sales and Account Information repositories, but he should not be able to log in to the HR repository at all. His administrator verifies that he has inherited Trusted authentication to the Sales repository because of his membership in the DOMAIN\Sales domain group, and that he has been granted Trusted authentication to the Account Information repository. The combination of his Trusted authentication status and his named user license will allow him to log in to both of those repositories. However, since he has not been granted Trusted access to the HR repository, he cannot log in to that repository at all, even though he has a named user license.

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Because Laserfiche users are specific to each repository, you can simply remove or disable a user who should not be able to log in. This will not affect other repositories. (If the Laserfiche user only exists in one repository, they will automatically be unable to log in to other repositories.)

## License Allocation and Security

Regardless of the type of license used to log in—named user, named device, or public portal—users log in as a particular trustee, as mentioned above. Laserfiche security can be configured for those users and the groups to which they belong as usual. License allocation has no effect on security settings.

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**Important:** Even users who do not have a named user license allocated to them specifically will still log in as a particular user, and their security settings depend on their user settings, not their license. For example, if two users with different security access the repository using the same Named Device, they will have different access to information in Laserfiche. Similarly, if two

users with different security both log in to WebLink using a public portal license, they will have different access to entries.

### License Allocation and Auditing

As with security, auditing is configured and reported by trustee, not by license. Thus, if two different users log in using the same Named Device but as different trustees, they will be audited separately. Similarly, if two different users log in to WebLink using the same public portal license, they will be audited separately.

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**Note:** If you have configured WebLink to automatically log public users in as a particular trustee, they will all be audited collectively. However, this is not because they are using a public portal license. Instead, they are audited collectively because they are all logging in using the same trustee.

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# License Manager

The first step in deploying your Laserfiche Rio installation is installing License Manager. License Manager allows you to load a master license, generate individual licenses for individual instances of your software, and specify which Windows domain account users should have named user license access to your repository. It is important to install and configure License Manager before installing your other Laserfiche products. Without License Manager, you will not be able to generate the licenses that will allow you to install your other applications.

There are several steps to configuring License Manager and generating licenses:

- Install License Manager.
- Register your License Server.
- Create a licensing database.
- Add a master license to your licensing database.
- Do one (or more) of the following:
  - Allocate your named user licenses.
  - Allocate any device licenses.
  - Register your Laserfiche Server or Servers, and allocate any repository named users or Public Portal licenses you want to use with each Server.
  - Register your other Laserfiche applications. Optionally, configure Active Directory group synchronization rules to automatically monitor changes to Windows groups and allocate named user licenses accordingly. Do not manually allocate named user licenses to Windows user accounts if you decide to configure Active Directory group synchronization rules.

## Install License Manager

The License Manager Administration Console requires Microsoft .NET 3.5 and Microsoft Management Console 3.0. The installation should install .NET 3.5 for you if it is not detected on your computer. Microsoft Management Console (MMC) 3.0 is available in Windows XP Service Pack 3, or as a hotfix from Microsoft's Web site.

The License Manager installation includes two components: the License Manager Server and the License Manager Administration Console. These need not be installed on the same computer, although both components must be installed to use License Manager. You should install only one License

Manager Server for your Laserfiche Rio installation, but you can install multiple License Manager Administration Consoles to manage the License Manager Server.

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**Note:** Laserfiche Rio 9.1 is fully compatible with License Manager 8.3. You do not need to upgrade License Manager to use it with Laserfiche Rio 9.1.

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### **To install License Manager:**

1. Launch the installation from the Laserfiche Rio autorun, or by locating the setup.exe file in the License Manager directory of the installation package.
2. The Laserfiche License Manager installation will launch and display the **Welcome** screen. Click **Next** to continue.
3. From the **License Agreement** step, read the license agreement. Accept it by selecting the **I accept the terms in the License Agreement** option. Click **Next** to continue.
4. In the **Custom Setup** option, select what components you wish to install. You can install the License Manager Server and Administration Console together or separately.
5. In the **Install directory** options, specify the location on the hard drive where you want to install the product. Click **Next** to continue.
6. In the **Laserfiche Service Settings** option, specify which user account the License Manager service will use. This account must have sufficient Windows permissions to write to the folders containing your licensing database and License Manager log file. By default, License Manager will run as the built-in **Local Service** account. Specify a domain account and password if you want to configure Active Directory group synchronization rules. Select the **Create Windows Firewall** exception option for the installation to create a Windows Firewall exception for the ports used by License Manager.
7. In the **Ready to Install** step, click **Install** to begin installing the License Manager. If you want to create a shortcut to the License Manager Administration Console on your desktop as part of the installation, select **Create desktop shortcuts**.
8. When the installation is complete, you will be prompted to start the License Manager service. Click **Run** to do so, then click **Next** to continue.
9. Click **Finish** to complete the installation. Optionally, select **View the Readme** file to automatically open the readme.

Once License Manager has been installed, you can launch it by opening the Start menu, selecting All Programs and then Laserfiche, and clicking

Laserfiche License Manager Administration Console, or by double-clicking the desktop shortcut if you chose to create it.

## Register Your License Server

You will need to register your License Manager Server in the License Manager Administration Console before you start using it. Registering the License Manager Server will make it available for you to configure and manage in the Administration Console.

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**Note:** If you open the License Manager Administration Console on the same computer on which the License Manager Server is installed, the Server will automatically be available.

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### To register a license server:

1. Open the Laserfiche License Manager Administration Console.
2. Select the Laserfiche License Manager node, and either right-click the node or open the **Action** menu. Select **Register License Server....** This will open the **Register License Server** dialog.
3. Type the name of your license server in the **License Server Name** option. This will be the same as the name of the computer on which you installed the License Manager Server. Be sure to type the name accurately, as License Manager will be unable to check whether the server name is valid, and you will not be able to work in License Manager if you type an invalid server name.
4. **Optional:** Select **Use SSL** to connect to the License Server using the Secure Sockets Layer (SSL) protocol.
5. Click **OK**.

## Firewall and Communication Considerations

The License Manager Server will communicate using the port specified in the license server's properties. By default, this is port 5048, with SSL access available over port 5049. If you have enabled notifications, the License Manager Server will also communicate with the Laserfiche Server on a regular basis, to update licensing information. The default notification port is 5055.

If you have a firewall in place, you will need to configure the firewall such that the License Manager Server can communicate using these ports.

## Create a Licensing Database

After you install the License Manager Server, you will need to create a licensing database to store information about your Laserfiche Rio system. This database will be associated with a single master license, which tells the license manager how many users and features are enabled on your Laserfiche Rio system.

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**Important:** The Licensing Database is distinct from the databases associated with Laserfiche repositories.

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### To create a licensing database:

1. Open the Laserfiche License Manager Administration Console.
2. Expand the Laserfiche License Manager node, and select your License Server. Either right-click the node or open the **Action** menu. Select **Create Licensing Database...** to open the dialog box.

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**Note:** If the License Manager Server does not yet have an associated licensing database, you will automatically be prompted to create or attach one when you select your License Server

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3. In the **Database name** option, enter a name for your licensing database. This is the name that will be used to identify this database name in License Manager, as well as when registering applications during installation.
4. In the **Database location** option, enter a folder where License Manager will store the licensing information, or click the browse button (...) to browse to it. If the folder does not exist, Laserfiche will create it for you.
5. In the **Master License** section, determine how the Licensing Database will obtain its master license.
  - To retrieve the master license over the Internet, select **Request the master license from Laserfiche** and enter your activation key in the **Activation key** field. Optionally, you can save a copy of the master license locally by selecting **Save a copy of the received master license**.
  - If you have a copy of the license, you can use that instead. Select **Import the master license from a file**. In the **License file** option, type or browse to the location of the master license you want to use.
6. Click **OK**. Your license database will be created.

### Manage License Administrators

License administrators are Windows users who can modify the licensing database. By default, the administrators on the computer where the License Manager Server is installed will be listed as license administrators; this group cannot be removed from the license administrators group. Users who are not license administrators will be able to see the name of the licensing database, but will not be able to access or modify it.

## To add a new license administrator:

1. Open the Laserfiche License Manager Administration Console.
2. Expand the Laserfiche License Manager node, and select your License Server.
3. Select your licensing database.
4. Select the License Administrators node and either right-click the node or open the **Action**. Select **Register New Administrator(s)...** This will open the **Select Users or Group** dialog box.
5. In the **From this location** option, verify that the domain that contains the user you want to add is selected. If it is not, click **Locations...** and choose the domain or subdomain you wish to search.
6. In the text box, type all or part of the user name you wish to locate and click **Check Names**.
7. If there are multiple search results, select the user or users to add.
8. Click **OK**.

## Register Directory Named Users

Allocating a named user license to a Windows or LDAP account registers that user as a directory named user. The user has a license reserved for them and will always be able to use that license to connect to all repositories at your site. (See [Named User Licenses](#), above, for more information.) This allows you to give those directory accounts access to specific Laserfiche repositories. Once they have been granted Trusted status for a repository, they will be able to log in to that repository using the license.

Directory named users are not Server- or repository-specific. If a directory user has been granted a named user license, they can use that license to log in to any Laserfiche Server or repository on the system—as long as they also have appropriate rights to do so. Therefore, if you have users who will be regularly logging in to more than one Server or repository, directory named user accounts are the most efficient way to administer those users. In addition, using directory named users allows you to take advantage of other benefits of using domain and directory accounts with Laserfiche. See [Benefits of Domain and Directory Groups](#) for more information.

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**Tip:** If you are currently using Laserfiche trustees for authentication in your repository, and you want to move to Windows trustees so that you can take advantage of directory named users, you may be interested in the [Laserfiche Account Conversion Utility](#). This utility automates conversion of Laserfiche trustees to Windows trustees.

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You can select either Windows or LDAP directory users or groups to register. If you select a directory group, each member of that group will be added as an individual named user. License Manager will not dynamically manage this group: if users are added to or removed from the group, you will need to add or remove them manually. (If you are using Windows domain groups, you can configure License Manager to automatically add and remove group members. See Active Directory Group Synchronization for more information.)

### To register directory named users

1. Open the Laserfiche License Manager Administration Console.
2. Expand the **Laserfiche License Manager** node, and select your License Server.
3. Select your licensing database.
4. Select the **Named Users and Devices** node.
5. Either right-click the node, or open the **Action** menu. Select **Register New Named User(s)...** This will open the **Register New Named User(s)** dialog box.
6. In the **Select from this location** option, verify that the domain that contains the user you want to add is selected. If it is not, click **Locations...** and choose the domain or subdomain to search.
7. In the **Name** option, type all or part of the user or group name you wish to locate and click **Find Now**.
8. In the **Search Results** box, select the user or users to add.
9. In the **License Type** option, specify whether these should be **Full** or **Retrieval** named users.
10. Click **OK**. The user will be added. If you selected a group, all members of that group will be added. (Note that the list of named users may be inaccurate, or may list some users twice, until you refresh the pane.)

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**Note:** Adding a Named Account to the Named Users and Devices list does not automatically add that account to your Laserfiche repository. If a Windows domain user or LDAP user has been added to the Named Account list but has not been granted access to the repository, they will not be able to log in. You will need to also grant that user access to your repository in the Laserfiche Administration Console. See the Laserfiche Administration Guide for more information.

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### Register Devices

Registering a computer in the Named Users and Devices list allows you to assign a license to that specific computer, instead of to a specific Windows account. Any user logging in from that computer using a valid Laserfiche

account will be able to connect to the Laserfiche Server. Take care when adding named devices not to add the same device more than once accidentally, as this will reduce the number of device licenses available to you.

### To register a device:

1. Open the Laserfiche License Manager Administration Console.
2. Expand the **Laserfiche License Manager** node, and select your License Server.
3. Select your licensing database.
4. Select the **Named Users and Devices** node.
5. Either right-click the node, or open the **Action** menu. Select **Register Named Device....** to open the **Register Named Device** dialog box.
6. In the **Computer Name** option of the **Register Device** dialog, enter a name for the device.
7. In the **Host ID** field, type the host ID for the specified computer, or click **Lookup Host ID** to retrieve it automatically.
8. **Optional:** In the **Description** option, specify a description of this device. For instance, if the named device will be a Quick Fields scan station, you could type that in the description.
9. In the **License type** option, specify whether you want to allocate a **Full** or **Retrieval** license.
10. Click **OK**.

## Register Your Laserfiche Servers

Once you have registered your License Manager Server, created a licensing database, and added a master license, you can begin registering your Laserfiche Servers.

There are two ways to register a Laserfiche Server. You can register the Laserfiche Server during installation, by specifying the License Manager Server and database you want to register it with. You can also register the Laserfiche Server in advance through the License Manager, and then provide the resulting license file during Laserfiche Server installation. The two processes have the same result, and you can use whichever you prefer, or combine the two.

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**Note:** The ability to register the Laserfiche Server directly during its installation was introduced with Laserfiche 8.2. If you are installing a prior version of the Laserfiche Server, you must manually register it in License Manager.

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If you will be installing more than one Laserfiche Server, you do not need to register and install all of them at one time. However, since Laserfiche Server licenses are specific to the computer the registration was performed for, you cannot use the licenses interchangeably. You must register each Server separately, whether through the Laserfiche Server installation or through License Manager.

To register the Laserfiche Server during its installation, see [Installing the Laserfiche Server](#) in the Laserfiche Administration Guide for complete instructions. If you want to register the Laserfiche Server in advance through the License Manager, follow the instructions below.

### To register a Laserfiche Server installation

1. Open the Laserfiche License Manager Administration Console.
2. Expand the Laserfiche License Manager node, and select your License Server.
3. Select your licensing database.
4. Expand the **Registered Application Instances** node.
5. Select the **Laserfiche Enterprise Server** node. Either right-click the node or open the **Action** menu. Select **Register New Application Instance....** This will open the **Register Application Instance** dialog box to the **General** tab.
6. In the **Computer Name** option, type the name of the computer on which you will be installing the Laserfiche Server.
7. In the **Hardware Fingerprint** option, type the hardware fingerprint of the computer on which you will be installing the Laserfiche Server, or click **Look Up Hardware ID** to retrieve the information automatically. (The **Look Up Hardware ID** button will only be available once you have typed a computer name.) If you are working offline, you will need to type the information manually, but in most cases you should use the **Look Up Hardware ID** button.
8. In the **Application Version** option, type the version of the application you will be installing. This should be by major version, with one number after the decimal point (for example, 9.1 or 8.2).
9. To generate a license immediately, select **Save license as** and click the Browse button (...) to browse to a location to save the file.
10. If you do not need to allocate repository named user or public portal licenses or modify notification settings, click **OK** to save your changes. If you do, proceed to the next section.

## To allocate repository named user licenses

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**Important:** Repository named user allocation is only necessary if you wish to reserve licenses for Laserfiche trustees on this Laserfiche Server. Licenses do not need to be allocated for directory named users; the Laserfiche Server can draw from the entire license pool for directory named users.

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1. In the Laserfiche Server's **Register Application Instance** dialog box, select the Repository Named Users tab.
2. In the **Retrieval repository named users** option, select the number of retrieval licenses you want to allocate to repository named users for this Laserfiche Server.
3. In the **Full repository named users** option, select the number of full licenses you want to allocate to repository named users for this Laserfiche Server.

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**Important:** Licenses allocated for repository named users on this Server cannot be used for directory named users, or for repository named users on other Servers. It is important to only allocate as many repository named user licenses as you need.

---

4. If you do not need to allocate public portal license or modify notification settings, click **OK** to save your changes. If you do, proceed to the next section.

## To allocate public portal licenses

If you have purchased public portal licenses and will be using them to allow access to this Server instance via WebLink, you will need to allocate those licenses. See [Public Portal Licenses](#) for more information. This tab will not be visible if you do not have any public portal licenses.

Note that users can connect to a repository via WebLink using named user licenses regardless of whether the associated Laserfiche Server has been allocated public portal licenses.

1. In the Laserfiche Server's **Register Application Instance** dialog box, select the **Public Portals** tab.
2. Select one of the following:
  - **Processors:** Select this option if you have individual processor licenses for this Server. Specify the number of public processor licenses to allocate. Note that the number of licenses must match the number of processors on the Server computer.
  - **Dual Processor License.** Select this option if you have a dual processor license and you wish to use it with your dual processor Server.

- **Multiprocessor License.** Select this option if you have a multiprocessor license and you wish to use it with your Server.
  - **Users.** Select this option if you have one or more blocks of individual public portal users that you want to allocate to this Server. Select an available block size.
  - **None.** Select this option if you do not want to allocate any public portal licenses to this Server.
3. If you do not need to modify notification settings, click **OK** to save your changes. If you do, proceed to the next section.

### **To modify notification settings:**

Notifications are enabled by default. You only need to modify this tab if you want to change the port, or if you want to disable notifications. Notifications allow the Laserfiche Server to receive updates on named user license changes from the License Manager in real-time. Note that if you disable this option, the Laserfiche Server will retrieve changes to the licensing database only when the Laserfiche Server service is restarted.

1. In the Laserfiche Server's **Register Application Instance** dialog box, select the **Notifications** tab.
2. To enable notifications, select **Subscribe to updates from the license server**.
3. Select either **Use the computer name as the host name** or select **Specify a hostname or IP address** and then fill in the host information. In most cases, you should use the first option. Specify your hostname or IP address only if you gave your instance a name other than the Laserfiche Server computer name.
4. Specify the port that should be used in the **Port** option. The default is 5055.
5. Click **OK** to save your changes.

### **Register Your Other Applications**

Within the Registered Application Instances node of the License Manager Administration Console, you will find a list of other applications that you can register and generate licenses for.

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**Note:** If the computer you are authenticating is on another domain than the License Manager server, the License Manager server service must run as a user with administrative access to that computer.

---

## **Laserfiche Client, Administration Consoles, and Snapshot**

The desktop Laserfiche Client, desktop Administration Console, and Web Administration Console, along with the other components included in the Laserfiche Client, do not require a license for installation as of version 8.2 and later. You will not be prompted to provide a license when installing them.

Laserfiche Snapshot and the E-mail Plug-in are installed with the Laserfiche Client, but licensed through the Laserfiche Server. This means that they can be installed anywhere and will not prompt you for a license, but can only be used with repositories hosted by Laserfiche Servers that are licensed for them. Laserfiche Avante Servers all include licensing for Laserfiche Snapshot and the E-mail Plug-in.

If you install a legacy Client of version 8.1 or before, you will need a valid license for the version you want to install. (This is why you may see a Client node in your list of available products even though you do not need a license for recent versions of the Laserfiche Client.) You do not need to register each instance. You can generate one license and use it as many times as needed.

## **Laserfiche Workflow**

Laserfiche Workflow 8.3 and later does not require a license if you are installing it for use with a Laserfiche Rio or Laserfiche Avante Server. You will not be prompted for a license when installing or configuring the Workflow Designer or the Workflow Server with Laserfiche Rio.

If you install a legacy Workflow Server of a version prior to 8.3, you will need to register the installation and generate a license.

See the [Workflow documentation](#) for more information on installing and configuring Laserfiche Workflow.

## **Web Access, Import Agent and ScanConnect**

Like the Laserfiche Server, Web Access, Import Agent and ScanConnect all allow you to register to License Manager during the product installation. You can also register your installations of those products in License Manager before you install. See the relevant product help files for information on registering during installation.

## **Other Products**

Other products, such as Agenda Manager, are licensed by installation, and require you to register each instance of the application that you will be installing in License Manager before you can install them.

## **To register Laserfiche applications in License Manager**

1. Open the Laserfiche License Manager Administration Console.

2. Expand the Laserfiche License Manager node, and select your License Server.
3. Select your licensing database.
4. Expand the Registered Application Instances node.
5. Select the node for the application type you want to install.
6. Either right-click the node, or open the **Action** menu. Select **Register New Application Instance....** This will open the **Register Application Instance** dialog box.
7. In the **Computer Name** option, type the name of the computer on which you will installing the application.
8. Perform one of the following, depending on the product:
  - a. In the **Hardware Fingerprint** option, type the hardware fingerprint of the computer on which you will be installing the application, or click **Look Up Hardware ID** to retrieve the information automatically. (The **Look Up Hardware ID** button will only be available once you have typed a computer name.) If you are working offline, you will need to type the information manually.
  - b. In the **Host ID** option, type the host ID of the computer on which you will be installing the application, or click **Look Up Hardware ID** to retrieve the information automatically. (The **Look Up Hardware ID** button will only be available once you have typed a computer name.) If you are working offline, you will need to type the information manually.
9. In the **Application Version** option, type the version of the application you will be installing. This should be by major version, with one number after the decimal point (for example, 9.1 or 8.2).
10. **Agenda Manager Only:** Perform the following:
  - a. In the **Retrieval users** option, specify the number of read-only users to allocate to this Agenda Manager installation.
  - b. In the **Full users** option, specify the number of full users to allocate to this Agenda Manager installation.
  - c. In the **Agenda Manager profiles** option, specify the number of Agenda Manager profiles to allocate to this Agenda Manager installation.
11. To generate a license immediately, select **Save license as** and click the Browse button (...) to browse to a location to save the file.
12. Click **OK** to save your changes.

## Generate a License

Before generating a license to install an application, you need to register the application. See Registering an Application, above, for more details. Note that you can also generate a license for an instance during the registration process, or at the time of installation for certain products; if you already generated a license, you don't need to do it again, and can skip these instructions.

### To generate a license for a single application

1. Open the Laserfiche License Manager Administration Console.
2. Expand the Laserfiche License Manager node, and select your License Server.
3. Select your licensing database.
4. Select the **Registered Application Instances** node.
5. Expand the product and select the instance you want to generate a license for.
6. Either right-click the instance, or open the **Action** menu, and select **Generate License**. (If the product you are generating a license for does not require registered instances, you can perform this on the product node instead.)
7. You will be prompted for a location to save the license file. Navigate to the desired location and click **Save**.

### To generate a license for more than one application at once

1. Open the Laserfiche License Manager Administration Console.
2. Expand the Laserfiche License Manager node, and select your License Server.
3. Select your licensing database.
4. Select the **Registered Application Instances** node. Either right-click the node, or open the **Action** menu, and do one of the following:
  - To generate one or more licenses for current products, select **Generate License**.
  - To generate one or more licenses for legacy Laserfiche applications, select **Generate Legacy Format License**.
5. The **Generate an Application License** dialog box will open, displaying your products and the registered instances of those products.
6. In the **Generate an Application License** dialog box, expand the applications and select the installations to generate licenses for. (If the product you are generating a license for does not require registered instances, you can select the product node instead.)

7. Click **Generate...** You will be promoted for a location to save the license file. Navigate to the desired location and click **Save**.

---

**Note:** This option generates a single license file even when you select multiple instances. The generated license file will contain information for all the selected instances. You can copy the file and use it to install on all of the specified instances.

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## Register Repository Named Users

A repository named user is a named user license that is linked to a single Laserfiche trustee rather than to a Windows domain or LDAP directory account. This allows you to take advantage of Laserfiche Rio named users even if your users will not all have accounts on your directory service. For instance, you might want to grant access to your repository to someone who isn't a member of your organization—such as a contractor—and who therefore doesn't have an account on your domain.

Each Laserfiche user that should have a named user license reserved for them must be allocated a repository named user license. As you add trustees to the repository, you can allocate repository named user licenses to those trustees. You can also allocate repository named user licenses to existing Laserfiche users. This is done in the Laserfiche Administration Console.

Before you will be able to assign named user licenses to Laserfiche users, you must allocate the licenses as repository named users to the Laserfiche Server on which they will be used. See Register Your Laserfiche Server for more information. You must allocate as many licenses as you will be using; you will not be able to assign more Laserfiche named users than you have allocated licenses.

---

**Important:** Licenses allocated as repository named users for a specific Laserfiche Server cannot be used by directory named users or device licenses, or by repository named users on other Laserfiche Servers. They will be reserved solely for repository named users for that specific Laserfiche Server. You should not allocate more repository named user licenses than necessary. If you allocate too many licenses, you can update your Laserfiche Server license to free those licenses and make them available for use by other named user types.

---

Repository named users are repository-specific. When you add a user to the Laserfiche named user list, the user will be able to log in to that repository only. If you have two repositories on a Laserfiche Server, and want to allow a Laserfiche user to log in to both, you would need to allocate two licenses to that Server—one for the user in each repository. If you want to allow a user to log in to multiple repositories using only one named user license, consider setting them up as a Windows or LDAP user.

---

**Note:** Laserfiche groups cannot be added to the named user list.

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### To allocate a named user license to a new Laserfiche user

1. Open the Laserfiche Administration Console and log in as a user with the Manage Trustees privilege. (You must also be logged in as a [System Manager](#).)
2. Select your Laserfiche Server.
3. Select your repository.
4. Perform one of the following:
  - a. In the desktop Laserfiche Administration Console, expand the **Users and Groups** node and select the **Users** node.
  - b. In the Web Administration Console, select **Laserfiche Users/Groups**.
5. In the desktop Administration Console, right-click or open the **Action** menu and select **New User**. In the Web Administration Console, click the **Add** button.
6. Configure the user. See the [Security](#) chapter of the Laserfiche Administration Guide for more information about the options available when adding a user.
7. Before saving the trustee, ensure that the **Repository Named User** option at the bottom of the **New User** dialog is listed as **Full** (to grant the user a full named user license) or **Retrieval** (to grant the user a retrieval named user license). Selecting **False** will remove the user from the named user list.

### To add an existing user to the Laserfiche Named Users list

1. Open the Laserfiche Administration Console and log in as system manager.
2. Select your Laserfiche Server.
3. Select **Repository Named Users**.
4. In the desktop Administration Console, right-click, or open the **Action** menu, and select **New Named Account** to open the dialog. In the Web Administration Console, click the Add button.
5. In the **Repository** option, select the repository that contains the Laserfiche trustee. Note that the Laserfiche user you want to add must already be created in this repository.
6. In the **Name** option, type the name of the user you want to add.
7. **Optional:** To allocate a retrieval license to this user, rather than a full license, select **Retrieval**.

8. Click **OK** to save your changes.

## Active Directory Group Synchronization

If you use Windows domain accounts for your named user handling, you can take advantage of Active Directory group synchronization in License Manager to automatically handle allocating and removing licenses based on group membership. With Active Directory group synchronization, the License Manager server will poll your Active Directory server for changes to membership of the groups you specify, and then will automatically grant or remove licenses according to your rules.

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**Important:** For License Manager 8.3 and later, we have streamlined the active directory synchronization options to make them easier to use and to optimize the most frequently-used functionality. If your process requires using synchronization features that are no longer supported in License Manager 8.3 and later, such as monitoring a container for added or removed devices, you can continue to use License Manager 8.2. However, if possible, we strongly recommend upgrading to the most recent version of License Manager to take advantage of enhancements to the user experience. Note that if you upgrade to License Manager 8.3 or later, you will need to re-create your synchronization rules, as they are not migrated from prior versions.

---

Active Directory group synchronization rules have two parts: a Windows group that will be monitored, and an action that will be performed on members of the group. The group can be any group in your domain. The action will be one of the following: assign a full license, assign a retrieval license, or remove licenses.

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**Example:** A rule is configured for the group Managers, with the action **Assign full license**. When the synchronization process runs, the group will be polled, and each group member will be allocated a full license, if they do not have one already.

---

You will need to set up an Active Directory group synchronization rule for each Windows group you want to monitor. This means that you can monitor several groups and handle them differently. For example, you might want to always allocate full licenses to members of the Scanner Operators group, and always allocate retrieval licenses to your Remote Access group. You could do so using two different rules.

Rules are performed in the order that they are listed in License Manager. This order makes a difference in the final result: if a rule removing a license from a user is followed by a rule allocating a license to the user, the user will have a license. If a rule allocating a license is followed by a rule removing the license, the user will not have a license. Similarly, since a user may only have one type of license at one time, if a rule allocating a full license to a user is

followed by a rule allocating a retrieval license, the user will have a retrieval license at the end. Therefore you should plan your synchronization rules to ensure that they are processed in the proper order.

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**Example:** An installation has four Active Directory synchronization rules. The first allocates full licenses to all members of the Employees group. The second allocates retrieval licenses to the Remote Access group (a subset of the Employees group). The third removes access from the Administration group (also a subset of the Employees group). The fourth allocates full licenses to the Managers group (a subset of the Administration group).

Bob is a member of the Employees group, but is not a member of any of the other groups. He is allocated a full license, and is unaffected by the other rules.

Sally is a member of the Remote Access group. She is allocated a full license by the first rule, but then that license is replaced with a retrieval license by the second rule. The other two rules do not affect her. In the end, she has a retrieval license.

Joe is a member of the Administration group. He is allocated a full license by the first rule and is unaffected by the second rule. His full license is then removed by the third rule. The fourth rule does not affect him. In the end, he has no license.

Mary is a member of the Managers group. She is allocated a full license by the first rule and is unaffected by the second rule. Her full license is removed by the third rule, but restored by the fourth rule. In the end, she has a full license.

Note that reordering the rules would drastically change the outcome. For example, if the first rule was moved to last, all the above users would be granted licenses, because the rule granting full licenses to all members of the Employee group would run after all the rules removing their licenses or granting retrieval licenses.

---

It is important to note that, unlike in prior versions of License Manager, Active Directory synchronization does not keep track of named users that you manually add in the Named Users and Devices node of the License Manager Administration Console. Users who have been manually allocated licenses are not excluded from active directory synchronization. If you manually allocate a full license to a user, and they belong to a group whose licenses are removed by an Active Directory synchronization rule, then that user's license will be removed as well. Similarly, if you manually allocate a full license to a user, and that user does not belong to any groups monitored by a synchronization

rule, that user's license will still be removed. Being manually configured does not exempt them from the synchronization rule.

If the sum of your synchronization rules allocates more licenses than are available, License Manager will not modify the list of named users. For example, if you have two synchronization rules that allocate full licenses to two groups: Managers and Administrators, where Managers has 5 members and Administrators has 6 members (with no overlap of members), and there are ten full licenses available for allocation, License Manager will not allocate any licenses.

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**Note:** Active Directory group synchronization only adds and removes users from the Named Users list, it does not grant them access to your repository or repositories. You will also need to make sure that the user has Trusted authentication status in the Laserfiche Administration Console to allow that user to log in to the repository. However, you can grant the Trusted status to an entire group; its users will inherit that setting even if they have not been manually added.

---

Before you can configure a rule, you must subscribe to a domain controller that contains the groups you want to monitor.

### **To subscribe to a domain controller**

1. Open the Laserfiche License Manager Administration Console.
2. Expand the **Laserfiche License Manager** node, and select your License Server.
3. Select your license database.
4. Select the **Active Directory Group Synchronization** node.
5. Right-click or open the **Action** menu and select **Subscribe to a domain controller**. This will open the **Add a domain controller for subscription** dialog box.
6. Type the fully-qualified domain name of your domain controller.
7. **Optional:** Select **Use SSL** to connect using the Secure Sockets Layer (SSL) protocol.

Once you have subscribed to a domain controller, you can create group synchronization rules for that domain controller.

### **To create a group synchronization rule**

1. Open the Laserfiche License Manager Administration Console.
2. Expand the **Laserfiche License Manager** node, and select your License Server.
3. Select your license database.

4. Select the **Active Directory Group Synchronization** node.
5. Select your domain controller.
6. Right-click or open the **Action** menu and select **Add rule**. This will open the **Choose Group and Synchronization Operation** dialog box.
11. In **Group Name** option, type all or part of the group name you wish to locate and click **Find Now**.
7. Select the group you want to monitor with this rule.
8. In the **Action** option, select the action you want to perform on members of this group:
  - **Assign full license:** Assign a full named user license to members of this group.
  - **Assign retrieval license:** Assign a retrieval license to members of this group.
  - **Remove license:** Remove any assigned licenses from members of this group.
9. Click **OK** to save your rule.

Because Active Directory group synchronization rules are run in order, and therefore order matters, you can reorder your rules in the list.

### **To move a rule up or down in the list**

1. Open the Laserfiche License Manager Administration Console.
2. Expand the **Laserfiche License Manager** node, and select your License Server.
3. Select your license database.
4. Select the **Active Directory Group Synchronization** node.
5. Select your domain controller.
6. Select the rule you want to move up or down.
7. Right-click the rule, or open the **Action** menu, and select **Move rule up** or **Move rule down**.

By default, License Manager does not automatically run any synchronization rules. The Active Directory Group Synchronization node will be a gray icon.

### **To enable Active Directory Group Synchronization:**

1. Open the Laserfiche License Manager Administration Console.
2. Expand the **Laserfiche License Manager** node, and select your License Server.
3. Select your license database.

4. Select the **Active Directory Group Synchronization** node.
5. Right-click the node or open the **Action** menu, and select **Enable Active Directory Group Synchronization**.

By default, active directory rules are synchronized every hour. If you want to synchronize rules right away for testing purposes or to resolve an issue, you can do so. (You can also change the synchronization interval; see the License Manager documentation for more information.)

### To force Active Directory synchronization

1. Open the Laserfiche License Manager Administration Console.
2. Expand the **Laserfiche License Manager** node, and select your License Server.
3. Select your license database.
4. Select the **Active Directory Group Synchronization** node.
5. Right-click, or open the **Action** menu, and select **Synchronize now**.

### Configure Users for WebLink Public Portal Access

If you have allocated public portal licenses to one or more of your Laserfiche Servers, any user on that Server (whether a repository user, a Windows user, or an LDAP user) who has been marked as a Read-Only user in the Laserfiche Administration Console will automatically use a public portal license when connecting to the repository via WebLink. If that user has been allocated a named user license, the Laserfiche Server will attempt to connect them using the public portal license first. If the public portal license is a limited license and all connections are in use, the Laserfiche Server will then connect them using their allocated named user license.

---

**Important:** The Read-Only flag on the user's properties is independent of licensing. A user who has been allocated a Retrieval license is not the same as a user who has been configured as Read-Only, and the two will not behave the same. If you want a user with a Retrieval license to connect using a public portal license, you will also need to mark that user as Read-Only.

---

If a user accessing WebLink has not been marked as Read-Only in the Administration Console, they will not be able to connect using the public portal license. If the user has a named user license, that license will be used when logging in to WebLink. If the user does not have a named user license, they will not be able to log in.

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**Note:** Users with the Manage Trustees privilege cannot log in with a public portal license because the privilege overrides the Read-Only setting.

---

If you have configured one or more trustees for anonymous public access (for instance, if you have your WebLink installation configured to automatically log visitors in as a particular Laserfiche user), you can enable public portal access for those users by marking them as Read-Only.

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**Note:** For information on configuring users with WebLink, including instructions for configuring automatic anonymous login for public users, see [Administration](#) in the WebLink Administration and Configuration Guide.

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### Marking a user as read-only

1. Start the desktop or Web Administration Console.
2. Select your Laserfiche Server.
3. Select your Laserfiche repository.
4. Log in as any user with the Manage Trustees privilege.
5. Perform one of the following:
  - In the desktop Administration Console, expand the Users and Groups node and select one of the following:
    - i. Windows accounts: Select **Windows Accounts**.
    - ii. LDAP accounts: Expand the **LDAP Management** node and select the **LDAP Accounts** node.
    - iii. Laserfiche users: Select **Users**.
  - In the Web Administration Console, select one of the following under Accounts:
    - i. Windows Accounts: Select **Windows Users/Groups**.
    - ii. LDAP Accounts: Select **LDAP Users/Groups**.
    - iii. Laserfiche users: Select **Laserfiche Users/Groups**.
6. Select the account you want to mark as read-only. In the desktop Administration Console, right-click or open the **Action** menu, and select **Properties**. In the Web Administration Console, click the group name.
7. Perform one of the following:
  - In the desktop Administration Console, select **Only allow read-only access**.
  - In the Web Administration Console, in the **Access Type** option, select **Read-only**.
8. Click **OK** to save your changes.

# Laserfiche Server

Once you have installed License Manager, registered your Laserfiche Server, generated a server license, and allocated some of your named users, you can install the Laserfiche Server. You will also need to configure the Laserfiche Server so that users you have allocated named licenses to can log in to the repository.

Laserfiche Rio installations supports an unlimited number of Laserfiche Servers, and up to 15 repositories per Server. You should repeat these steps for as many Servers and repositories as you would like to add.

## Install the Laserfiche Server

Launch the Laserfiche Server installation from the autorun of your installation DVD or downloaded installation package and follow the instructions in the installation wizard. See [Laserfiche Server Installation](#) in the Laserfiche Administration Guide for more information.

The Laserfiche Server can be registered to License Manager directly through its installation. You will need to provide your License Manager information during the installation process (You can also register a Laserfiche Server installation and generate a license manually, but it is no longer necessary to do so.)

If your Laserfiche Server is a version earlier than 8.2, it must be registered and have a license generated before it can be installed. When prompted for a license, provide the license you generated in License Manager for that instance. Be sure to provide the license you generated for that computer instance; do not provide your master license, or the license generated for another instance.

Your Laserfiche Server license will contain any Server add-ons included in your master license. For instance, if your master license indicates that you are licensed for Oracle, it will be included in the generated license. The number of Laserfiche named users you allocated will also be included. If you license additional features in the future, or if you want to allocate additional Laserfiche named users to that particular Server, you will need to re-generate your Server license. (See [Updating an Application License](#), below, for more information.)

## Upgrade the Laserfiche Server

If you are installing the Laserfiche Server as an upgrade rather than as a fresh installation, you can simply re-register your Server during the installation. Be sure to select **Use existing registration** during the registration process and choose the Laserfiche Server computer from the list. This will use the same

registered installation, with the same allocation of repository named users and public portal licenses.

## **Create, Register or Migrate a Repository**

Once you have installed your Server, you will need to configure the repositories you will be using with it. You can create a new repository, register an existing Laserfiche 9 repository, or migrate a Laserfiche 6 or 7 repository to 9 and then register it. Creating a repository requires either the desktop Laserfiche Administration Console or the Web Administration Console; see [Laserfiche Administration Consoles](#) for more information. For more information on creating, registering or migration a repository, see [Creating a Repository](#), [Registering/Unregistering a Repository](#) or [Migration from Laserfiche 6 or 7 to Laserfiche 9](#) in the Laserfiche Administration Guide.

Named user licenses in Laserfiche Rio must be allocated to Windows domain users, who must then be added to the repository in the Laserfiche Administration Console. Both steps—allocation of a user license, and granting the user access to Laserfiche—must be performed before the user can log in.

However, when you begin implementing Laserfiche Rio, you must be able to log in to the Administration Console and to the Client in order to set up the first Windows Accounts users. In order to facilitate this, Laserfiche Rio allows two administrative connections to the Laserfiche Repository in order to set up the initial users.

Once named user licenses have been allocated and the Laserfiche Server and Administration Console have been installed, an administrator must log in to the Laserfiche Administration Console. In new repositories, they will be automatically logged in as the ADMIN user; in migrated repositories, they will be able to log in as any Laserfiche user who has the **Manage Trustees** or **Set Trustee Privileges** privilege. This administrative connection is to allow them to add the Windows Accounts necessary for the allocated named users to log in.

For more information on adding Windows Accounts to your repository, and granting them rights, see the [Security](#) chapter of the Laserfiche Administration Console help files.

## **Grant Repository Access to Named User Windows Accounts**

Once you have activated your named user licenses by associating them with Windows accounts, you will need to ensure that users can access the repository. For more information, see the [Windows and LDAP Authentication](#) section of the Laserfiche Administration Guide.

Each named user must be represented in the Windows Accounts node, and must either have Trusted access or have Inherited access and belong to a group that has Trusted access. However, it is not necessary to add each Windows Account individually. You can add Windows Account groups to

Laserfiche; Windows domain users within those groups will inherit access from their parent groups. Once you have added Windows Accounts users and groups to your repository, you can configure security for those Windows Accounts, add them to groups, set up auditing for them, and so on.

Unlike named users, named device licenses and Public Portal licenses do not require a one-to-one correspondence between a named user account and a Windows Account. If users will be connecting using named devices, or using Public Portal licenses for WebLink, you can allow them to authenticate to Laserfiche using either Windows Accounts or Laserfiche trustees.

---

**Note:** If you are using read-only named users with Laserfiche Rio, the Laserfiche Administration Console's list of licenses for your Laserfiche Server will not include the read-only named user license count. This does not affect the number of licenses available to you.

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## **Other Considerations**

Laserfiche Rio installations of the Laserfiche Server include Snapshot, Advanced Audit Trail and E-mail Plug-in, and support Microsoft SQL Server. Oracle and Records Management Edition can also be licensed but are not included by default with Laserfiche Rio. Unlike prior editions of the Laserfiche Server, Servers on Laserfiche Rio do not require unique serial numbers, and so you may notice that your licenses are generated with the same serial. This allows you to use one client instance to connect to more than one Server.

Laserfiche Rio does not limit the number of Laserfiche Servers you can install or repositories you can create. (A single Server has a technical limit of 15 repositories for performance reasons.)

# Installing Other Products

Along with the Laserfiche Server, Laserfiche Rio includes the Laserfiche Client and Snapshot, Workflow Suite and Web Access. In addition, if you are licensed for other Laserfiche products, you will be able to generate licenses for most of them using License Manager. In all cases, make sure you are using a generated application license, not the master license. For products other than the Client and the Server, which support generic licenses, you will also need to make sure that you are using the correct license for your application.

## Laserfiche Client and Snapshot

The Laserfiche Client does not require a license to install or run. The Laserfiche Snapshot license is included as part of the Laserfiche Server license—as long as your Laserfiche Server supports Snapshot, Laserfiche client applications connecting to that Server will also support Snapshot.

If you are installing a version of the Laserfiche Client and Snapshot prior to Laserfiche 8.2, you will need a license. The Laserfiche Client and Snapshot support ‘generic licenses’—rather than needing to register each instance of the Client and generate a license for each of the instances, you can generate a single Client and Snapshot license and use that license to install as many instances of the Client and Snapshot as you want.

For more information, see [Laserfiche Client Installation](#) in the Laserfiche Administration Guide.

## Laserfiche Administration Consoles

There are two Laserfiche administration consoles: the desktop Laserfiche Administration Console, which is installed on each workstation individually, and the Web Administration Console, which is installed centrally and can be accessed via a browser. The desktop Administration Console is part of the Laserfiche Client installation, whereas the Web Administration Console has its own installation. Neither product requires a license to install or run. Note that, as it is a web product, the Web Administration Console cannot be used in conjunction with a named device license.

For more information, see [Laserfiche Client Installation](#) and [Laserfiche Web Administration Console Installation](#) in the Laserfiche Administration Guide.

## Workflow Suite

Laserfiche Workflow 8.3 and later does not require a license if you are installing it for use with a Laserfiche Rio or Laserfiche Avante Server. You will not be prompted for a license when installing either the Workflow Designer or the Workflow Server with Laserfiche Rio.

If you install a legacy Workflow Server of a version prior to 8.3, you will need to register the installation and generate a license. You can either create individual license files for each instance, or generate all Workflow Suite licenses into a single file and use that file for all installations. In either case, however, you will only be able to install Workflow Suite on computers that have been registered for Workflow in License Manager. There is no limit to the total number of Workflow Suite instances you can install. Workflow Suite can be used with named user and device licenses.

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**Note:** The Workflow Server itself does not require a named user license. However, a user logging in to the Workflow Designer must have a full named user license.

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For more information, see [Laserfiche Workflow Installation and Setup](#) in the Workflow documentation.

## Web Access

Like the Laserfiche Server, Web Access allows you to register to License Manager during the product installation. You can also register your installations of Web Access in License Manager before you install, but it is not necessary to do so.

Web Access does not support device licenses. Users can only access Web Access using named users whose accounts have been granted access.

For more information, see [Laserfiche Web Access Installation](#) in the Web Access Administration and Configuration guide. Web Access includes Web Accelerator, Laserfiche Mobile, and the Laserfiche SharePoint integration. For more information, see [Web Accelerator](#), [Laserfiche Mobile](#), and [SharePoint Integration for SharePoint 2010](#).

## Laserfiche Distributed Computing Cluster (Preview Release)

The preview release of Laserfiche Distributed Computing Cluster allows you to register to License Manager during the product installation. You can also register your installations of Distributed Computing Cluster in License Manager before you install, but it is not necessary to do so.

For more information, see [Getting Started with Laserfiche Distributed Computing Cluster 9.1 Preview](#).

## Other Applications

The following applications are not included as part of Laserfiche Rio. However, if you are licensed for them, they will be included in the master license and therefore can be managed through License Manager.

## Forms

You can register a Forms instance to License Manager during the product installation, or in License Manager before you install. There are two ways that Forms can be installed. Standard Forms can be installed an unlimited number of times and requires users to have either a named user license or an authenticated participant license. Forms Portal allows for public, anonymous access, but may be limited in number of instances.

The number of instances of Forms Portal you can install depends on the number of Forms Portal licenses in your master license; Enterprise Forms Portal allows you unlimited Forms Portal installations. To install a particular Forms instance as Forms Portal, select the Forms Portal license block when registering Forms. (If you have Enterprise Forms Portal, any Forms instance you create will be a Portal instance without any additional configuration.)

For more information on named users and participant users in Forms, and on Forms Portal, see [Forms User Licensing](#).

Like other web products, Forms does not support device licenses.

For more information on installing and configuring Forms, see [Installing Laserfiche Forms](#), [Forms Licensing](#), and [Forms Security](#) in the Laserfiche Forms help files.

## WebLink

WebLink is compatible with public portal licenses, which allow unlimited access to a single CPU. Public portal access is read-only and is linked to the Laserfiche Server that WebLink will be connecting to. If your Laserfiche Server has a public portal license, users who are marked as Read-Only will connect using that public portal license. See [Configure Users for WebLink Public Portal Access](#) for more information.

Public portal licenses may support either a specific number of concurrent connected users, or unlimited users. If your public portal license is unlimited, you must have as many public portal licenses as you have CPUs on the Laserfiche Server that WebLink connects to; you can either license individual processors, or license dual processors or multiprocessor licenses. Note that large numbers of connections can affect server performance. If your Laserfiche Server requires an additional CPU to handle this load, an additional public portal license will be needed.

You can generate WebLink licenses through License Manager, and will need to provide the generated license when prompted during the installation. WebLink supports unlimited installations. However, in order to log in, either the user must have a named user license or the Laserfiche Server must have been allocated a public portal license. See [Public Portal Licenses](#) for more information.

For more information, see [Laserfiche WebLink Installation](#) in the Administration and Configuration guide.

## Quick Fields

You can generate Quick Fields licenses through License Manager, and will need to provide the generated license when prompted during the installation. Your Quick Fields license will contain the Quick Fields add-ons included in your master license; for instance, if your master license indicates that you are licensed for Forms Processing, it will be included in the generated license. (If you are licensed for multiple Quick Fields instances with different sets of features, you will need to be sure to generate the correct license for a particular installation.) If you license additional features in the future, you will need to re-generate your Quick Fields license. (See [Updating an Application License](#), below, for more information.) Quick Fields is licensed by seat; it does not allow unlimited installations. Quick Fields can be used with both device and named user licenses.

For more information, see [Laserfiche Quick Fields Installation](#) in the Quick Fields documentation.

## Agenda Manager

You can generate Agenda Manager licenses through License Manager, and will need to provide the generated license when prompted during the installation. Agenda Manager is licensed by seat; it does not allow unlimited installations. Agenda Manager can be used with both device and named user licenses.

For more information, see [Installing Agenda Manager](#) in the Agenda Manager documentation.

## Laserfiche SDK

The Laserfiche SDK allows you to register to License Manager during the product installation. You can also register your installations of the SDK in License Manager before you install, but it is not necessary to do so.

Applications and integrations created with the Laserfiche SDK must authenticate to Laserfiche, as in prior versions of the SDK. With Laserfiche Rio, you can either configure a Windows domain user for the application to log in as, and configure a named user for the user that the integration is running as, or you can designate the computer that the application or integration will run on as a named device. In either case, the SDK will respect the connection limitations of the license type—if more than four simultaneous connections are needed for your applications and integrations, you will need to specify additional named users.

## **Plus**

You can activate Laserfiche Plus through License Manager, or using Plus' native activation tool. Either process will successfully activate your Plus installation. Laserfiche Plus is activated by seat; it does not allow unlimited installations. Plus can be used with both device and named user licenses.

## **Import Agent**

Like the Laserfiche Server, Import Agent 8.3 and later allows you to register to License Manager during the product installation. You can also register your installations of Import Agent in License Manager before you install, but it is not necessary to do so.

Import Agent is licensed by seat; it does not allow unlimited installations. Import Agent can be used with both device and named user licenses.

## **ScanConnect**

Like the Laserfiche Server, ScanConnect 8.3 and later allows you to register to License Manager during the product installation. You can also register your installations of ScanConnect in License Manager before you install, but it is not necessary to do so.

Using ScanConnect does not take up any additional licenses than those already used during the scanning process. ScanConnect is licensed by instance; it does not allow unlimited installations.

# Laserfiche Rio Maintenance

Once you have your Laserfiche Rio installation running, you may need to perform certain maintenance operations on it. For instance, it is a good idea to back up your license database. You may need to update your master license to reflect new products or features you have licensed. Or you may need to move your License Manager Server and database to a new computer. This section will discuss how to perform those operations.

## Back Up Your Licensing Database

You can back up your Laserfiche License Manager database from within the License Manager Administration Console, even if your License Manager Server is still running. This backup will preserve information about your installation, including your master license, your list of application instances, and your named user and device lists.

Note that this is the only supported way to perform a live backup of your License Manager database. Other methods of live backup will not work, and may result in corrupted backups, even if they are performed using software intended for backing up active files.

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**Note:** When you attach a backed-up copy of a license database, you will need to provide a master license for that database. While the database itself is not computer-specific, the master license is registered to a particular License Manager Server on a particular computer. This means that you must deactivate your original license, then re-activate to generate a new license specific to your new License Manager Server location.

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### To back up your License Manager database:

1. Open the Laserfiche License Manager and log in as a License Administrator.
2. Expand your License Server and select your license database.
3. Right-click, or open the **Action** menu, and select **Create Backup**. This will open the **Back Up Licensing Database** dialog box.
4. In the **Backup file path** option, type the path where you want to save the database file, including the database file name. For instance, to save the file at C:\Backups\ with the name “MyLicenseDatabase.db”, you would type “C:\Backups\MyLicenseDatabase.db”. Alternately, click the Browse (...) button and browse to a location, and then type the desired file name and click **Save**.
5. Click **OK**. You will receive a notification when the backup is complete.

## Update a Master License

If you license additional features for your site—such as additional named user licenses, additional public portal licenses, new products, or new product features—you will need to update your master license to ensure that newly-generated licenses contain those new features.

### To update a master license:

1. Open the Laserfiche License Manager Administration Console.
2. Expand the Laserfiche License Manager node, and select your License Server. Select your licensing database.
3. Select the Master License node and either right-click the node or open the **Action** menu. Select **Add Master License....** This will open the **Add Master License** dialog.
4. Specify how to add your license:
  - To retrieve the master license from Laserfiche, select **Request the master license from Laserfiche** and enter your activation key in the **Activation Key** field. To immediately update the license in your license database, select **Renew license in database**. Optionally, you can save a copy of the master license locally by selecting **Save a copy of the received master license** and specifying a path.
  - If you have a copy of the license on hand, you can use that instead. Select **Import the master license from a file**. Click the browse button (...) and browse to the master license you want to use.
5. Click **OK** to use the license. If you chose to save a copy of the license, you will be prompted to select a location to save it to.

## Update an Application License

You may need to update the information for a particular application instance and generate a new license. For example, you might want to add a license feature that you recently added to your master license, or you might need to generate a new license to update a product to the next version.

### To update an application license:

1. Unregister the application instance you want to modify.
  - a. Open the Laserfiche License Manager Administration Console.
  - b. Expand the Laserfiche License Manager node, and select your License Server.
  - c. Select your licensing database.

- d. Select the Registered Application Instances node.
  - e. Expand the node for the type of application you want to unregister an instance of.
  - f. Select the application instance you want to unregister. Either right-click the node, or open the **Action** menu. Select **Delete**.
2. Verify that your master license is up to date. For instance, if you licensed a feature such as Oracle support, verify that those new attributes are present in the master license. If they are not, update your master license. See [Update a Master License](#), above, for more information.
  3. Register the application instance again using the new settings you want for the license. See [Register Your Laserfiche Server](#) or [Register Your Other Applications](#), above, for more information. When you do so, generate a new license.
  4. On the computer on which the application you want to update is installed, replace the existing license file (lf.licx or lf.lic) with the new one.
  5. Restart the application. (If the application runs as a service, you will need to restart the service.) The new license features will not take effect until the application or service has been restarted.

## Move Your License Server and Database

In some cases—for instance, if you are upgrading your hardware, or moving your installation to a new site—you may need to move your License Manager Server to a different computer. To do so, you will need to detach and unregister your license database, install the License Manager Server in the new location, and then attach and activate the database to the new location. The following steps will guide you through the process.

### To move a License Manager Server to a new computer:

1. On the original computer, detach the license database you want to move:
  - a. Open the Laserfiche License Manager Administration Console.
  - b. Expand the Laserfiche License Manager node, and select your License Server.
  - c. Select your license database.
  - d. Right-click, or open the **Action** menu, and select **Detach Licensing Database**.
  - e. Confirm that you want to detach the database. The database will be detached in place, and the .db file will remain in its current location.

2. Move the detached license database (it will be a .db file) to the computer you want to install the License Manager Server on.
3. Install the License Manager Server on the new computer. See “Install License Manager,” above, for more information on this step.
4. Attach the license database to the new License Manager installation:
  - a. Open the Laserfiche License Manager Administration Console.
  - b. Expand the Laserfiche License Manager node, and select your License Server. Either right-click the node or open the **Action** menu. Select **Attach License Database**. This will open the **Attach Licensing Database** dialog.
  - c. In the **Database name** option, enter the name of the licensing database you want to attach.
  - d. In the **Database path** option, enter the folder where your licensing database is stored.
  - e. In the **Master License** section, determine how the Licensing Database will obtain its master license.
    - To retrieve the master license from Laserfiche, select **Request the master license from Laserfiche** and enter your activation key in the **Activation Key** field. Optionally, you can save a copy of the master license locally by selecting **Save a copy of the received master license**.
    - If you have a copy of the license on hand, you can use that instead. Select **Import the master license from a file**. Click the Browse button (...) and browse to the master license you want to use.
  - f. Click **OK**.

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**Note:** Deactivation and activation of the license database should happen automatically when you detach and attach it; when you attach, you will need to provide your activation key or master license again. Uninstalling the License Manager Server will also deactivate the license databases that are attached to that Server. If deactivation and reactivation do not complete successfully, contact Support for assistance.

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Laserfiche Rio 9.1 Deployment Guide  
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Description:

This guide explains the way that Laserfiche licensing works, including the various license types available with Laserfiche Rio. It also walks you through the process of setting up your Laserfiche Rio installation, whether you are upgrading an existing repository to Laserfiche Rio or implementing an entirely new installation.

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